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Introduction
This notebook is designed to help you as a 4-H clothing & textiles leader do the best job that you can to make the clothing project a fun, interesting, and valuable experience for the 4-H youth that you teach. The Clothing & Textiles project is one of several projects within the Family Living 4-H Curriculum Division. It is important to 4-H, because several thousand members annually are attracted to the Clothing & Textiles project. The Clothing & Textiles project, then, becomes the vehicle through which we can teach appropriate consumer, textile science and clothing construction practices and necessary life skills to the youth who enroll. Other 4-H project areas such as marketing, computer, and health and safety are incorporated where appropriate.

OBJECTIVES
The objectives of the Clothing & Textiles project are as follows:
1. Build self-confidence and poise by developing a positive self concept and the ability to make the most of one’s personal attributes.
2. Gain consumer and business skills in selecting, producing, storing, and maintaining clothing, accessories, home textile products for self and others.
3. Gain business and consumer skills in purchasing and using equipment related to clothing production and care.
4. Develop decision-making skills and creativity to plan an holistic wardrobe that expresses their ethnic and individual lifestyle.
5. Acquire knowledge of fibers, yarns, fabrications and the finishing and dyeing of textiles.
6. Explore textile/clothing related careers and leisure therapy.
7. Acquire the ability to use fibers and fabrics to maximize their use life and minimize management problems through reducing, reusing and recycling.
8. Practice leadership, take part in community affairs and demonstrate environmental stewardship in a global community.
9. Learn to use accepted practices for mental, physical and emotional health, and to respect self and others.

MAJOR CONCEPTS
To help meet the above objectives, 5 general clothing and textile concepts were identified by the Design Team. Each of the specific lesson plans fall under one of these major 5 concepts--Me and My Body, Creating with Fabrics and Fibers, Textile Science, Care and Maintenance, and Wardrobe Planning.

This new Clothing and Textiles Curriculum includes much more than traditional clothing construction and purchased garment consumerism and presentation. The learning matrix is multidimensional, as seen in Figure A. The first dimension is age and skill appropriate learning, as presented through Levels I through IV, described in this section under “Ages and
KANSAS 4-H CLOTHING & TEXTILES LEARNING MATRIX

FIGURE A

Dimension I: Age and skill appropriate levels
Level I–ages 7, 8; Level II–ages 9, 10, 11; Level III–ages 12, 13, 14; Level IV–15 and older

Dimension II: Lifecycle issues
Self
Select
Maintain
Discard

Dimension III: Subject matter
Me & My Body (building self-confidence)
Textile Science
Care & Maintenance
Creating with Fabrics & Fibers
Wardrobe Planning

Dimension IV: Social Issues
Careers
Ethics
Economic/Financial
Environmental
Ethnic/Global

Dimension V: Experiential, small group learning using varied teaching strategies

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Stages.” The second dimension describes lifecycle issues of self-physical, mental and emotional health and safety—and the three components of the clothing and textile lifecycle—select, maintain, and discard. The third dimension includes the five general subject matter concepts outlined above. Dimension four incorporates national and societal issues such as ethnic/global, environmental, economic or financial, ethics, and career decisions. The fifth dimension focuses on the use of experiential, small group learning environments using varied teaching strategies of demonstration, discussion, video, computer assisted-learning, and member activity sheets and handouts. Not every lesson includes components from every dimension, yet over a period of time, participating youth using this material would receive a very integrated, holistic approach to clothing and textiles.

**LIFE SKILLS**

Kansas 4-H life skills have been articulated to help define the youth development outcomes of our 4-H program. It is the goal of 4-H to develop youth who are contributing, productive members of society. Youth may achieve this goal when these five life skills are developed and applied.

1. Positive self-concept
2. Sound decision-making
3. Positive interpersonal relationships
4. Desire for lifelong learning
5. Concern for community

These five life skills are incorporated throughout the lesson plans and in the educational design of the project meetings. The “Dialogue for Critical Thinking” Section leads the group through the experiential learning process.

**AGES AND STAGES**

Leaders can best achieve these desired outcomes with their members when they have well-prepared leader material and understand how to structure a stimulating learning environment for the age of youth they are leading. We know and believe that each child is unique, yet we also know that there are generalities about certain age groups that help us program more effectively.

These lesson plans have been developed to target four general age groups:
- Level I—ages 7 and 8
- Level II—ages 9, 10, 11
- Level III—ages 12, 13, 14
- Level IV—ages 15 and older

A review about the physical, mental, social and emotional characteristics of these age groups will prepare the leader for a successful project experience. It should be understood by the leader that the levels are also based on corresponding skill levels of youth. Thus, a 12-year-old youth enrolling
in Clothing & Textiles for the first time should probably begin with lessons in Level I, and not take Level III until the member has mastered some basic knowledge and skills.

**Ages 7 and 8**
Physical growth can be described as slow and steady. Mastering physical skills is important to self-concept. This includes everything from printing with a pencil to large muscle skills like catching a ball. Activities need to be just that—active! Provide opportunities to practice skills, but use projects that can be completed successfully and quickly by beginners.

Typical second or third graders think in concrete terms. If they have never seen it, heard it, felt it, tasted it, or smelled it, they have a hard time thinking of it. Leaders should show and tell, rather than giving instructions verbally. Early elementary children are learning to sort things into categories. This makes collecting things important and fun at this age. Most are more interested in the “process”—what? why? how?—than in the resulting product.

As children move away from dependence on parents at this age, they need to transfer that dependence to another adult, so the leader may become very important in their eyes. Building friendships occurs easily and generally by the end of this period, boys prefer playing with boys and girls with girls. Some of the leader notes will suggest when it is appropriate to separate boys and girls for some of the activities. Peer opinion now becomes very important. Small group activities are effective, but children still need an adult to share approval.

Seven and 8-year-olds need and seek the approval of adults, because they are not yet confident enough to set their own standards. Play or making believe is one way they increase their ability to imagine what other people think and feel. Rules and rituals are important, but it is very hard for children this age to lose. This is why success needs to be emphasized, even if it is small. Failures should be minimized. Cooperative games and activities are especially enjoyable. When an activity fails, the leader should help children interpret the reasons behind the failures, which teaches that failing is not always bad. Learning to cope with problems is a skill the 4-H leader can encourage for all members. The usual practice of awarding competitive ribbons should be minimized or avoided for this age. For this reason, younger members are encouraged to participate in the noncompetitive mini style show at the State Fair.

**Ages 9, 10, 11**
Physically, most children at this age are in a holding pattern, although puberty may be starting for some very early-maturing girls. Activities should encourage physical involvement, because 9- to 11-year-olds are anything but still and quiet.

Hands-on involvement with objects is helpful. Children this age like field trips, but only if they are not expected to stay confined or to do one thing for a long period of time. Upper elementary children need opportunities to
share their thoughts and reactions with others. They are still fairly concrete thinkers and will give more attention if they are seeing and doing things.

Children at this stage are beginning to think logically and symbolically and are beginning to understand abstract ideas. As they consider ideas, they think it is either right or wrong, great or disgusting, fun or boring. There is very little middle ground.

The role of the leader is most crucial at this stage, as these children look to the adult for approval and follow rules primarily out of respect for the adult. Individual evaluation by adults is preferable to group competition where only one can be the best. They want to know how much they have improved and what they should do to be better next time. Encouragement from an adult can have remarkable accomplishments.

This is the age of the “joiners.” They like to be in organized groups of others similar to themselves. If you have both boys and girls of this age in your project groups, you will do best if small group work is done in same-sex groups. This will be especially important for some of the measuring activities and lessons from the major concepts of Me & My Body. They generally are concerned with immediate self-reward; however, the satisfaction of completing a project comes from pleasing the leader or parent rather than from the value of the activity itself.

Toward the end of this age range, children are ready to take responsibility for their own actions. Giving these youth opportunities to make decisions should be encouraged. Leaders should move from dictating directions to giving reassurance and support for members’ decisions. In most cases, multiple patterns are given in lessons. This is an excellent time to allow youth to make their own individual or collective decision about what to make or do.

Nine, 10- and 11-year-olds have a strong need to feel accepted and worthwhile. School and other pressures become demanding. Successes should continue to be emphasized. Comparison with the success of others is difficult for these children. It erodes self-confidence. Instead of comparing children with each other, build positive self-concepts by comparing present to past performance for the individual.

**Ages 12, 13 and 14**

This is a time of developmental variety among peers. Growth spurts beginning with adolescence occur at a wide range of ages, with girls maturing before boys. These rapid changes in physical appearance may make teens uncomfortable. Slower developing teens may also be uneasy about the lack of changes. This characteristic may be most pronounced in the Clothing & Textile project, as changing body forms vary with physical maturity. The leader should be sensitive to these feelings.

Young teens move from concrete to more abstract thinking. Playing with ideas is as much fun as playing sports. Ready-made solutions from adults
often are rejected in favor of finding their own solutions. Leaders who provide supervision without interference will have a great influence on these youth.

Small groups provide the best opportunity for young teens to test ideas. Justice and equality become important issues. Judging of projects is now viewed in terms of what is fair, as well as a reflection of the self-worth of the individual.

These youth enjoy participating in activities away from home as they begin to develop independence. Opinions of peers become more important than opinions of parents or other adults. Close friendships begin to develop, and group experiences provide opportunity for social acceptance.

As puberty approaches, emotions begin a roller coaster ride. Young teens begin to test values and seek adults who are accepting and willing to talk about values and morals. This period seems to present the biggest challenge to a young person’s self-concept. These youngsters face so many changes that they hardly know who they are. Adults can help by providing self-knowledge and self-discovery activities such as the “dialogue for critical thinking” portion of these lesson plans.

Continue to avoid comparing young people with each other, being careful not to embarrass them. They want to be a part of something important that provides opportunity to develop responsibility.

**Ages 15, 16 and 17**
Most teens of this age know their own abilities and talents. In most cases, they have adjusted to the many body changes by now. Many develop athletic talent and devote hours to training and competition. Learning to drive a car further moves the teen from family into the community as independent people.

Mid-teens begin to think about their future and make realistic plans. Their vocational goals influence the activities they select. Teens set goals based on feelings of personal need and priorities. **Any goals set by others are generally rejected.** As they master abstract thinking, they can imagine new things in ways that sometimes challenge adults.

These teens can initiate and carry out their own tasks without supervision. A leader can be helpful by arranging new experiences in areas of interest to teens, but must be sure to allow for plenty of input from them. Leader-member relations should change from director/follower to that of advisor/independent worker.

Mid-teens tend to be wrapped up in themselves. Relationship skills are usually well-developed. Dating increases and acceptance by members of the opposite sex is now of high importance. Sports and clubs are important, but these teens now want to be recognized as unique individuals within that group.
Two important emotional goals of the middle-teen years are independence and identity. Time is precious. If activities are perceived as busywork, teens soon will lose patience and interest. Middle teens are learning to cooperate with others on an adult level. They will pride themselves on increased ability to be responsible in the eyes of themselves, peers, and adults.

**Ages 18 and 19**
These young adults are completing their 4-H careers and moving on to college, jobs, marriage, and other adult responsibilities. If continuing involvement at the local level, they will be self-directed learners or assume adult leadership roles.

This information on child development has been taken from the North Central Regional Extension Publication No. 292, *Ages and Stages of Child and Youth Development: A Guide for 4-H Leaders*, written by Jeanne Karns, graduate assistant and Judith Myers-Walls, Extension Specialist, Human Development, Purdue University.

**YOUTH AT RISK**
Some child development specialists and educators have noted every child of the ’90s is at “some risk” because of the complex social forces affecting our country since the early 1950s. In 1991, The National Commission on Children estimated that fully one-quarter of all children are “at severe risk” in relation to substance abuse, school failure, delinquency, etc., and another quarter are “moderately at risk.” H. Stephen Glenn and Jane Nelsen document these changes in their book, *Raising Self-Reliant Children in a Self-Indulgent World*. Four major factors necessary for the development of capable young people have been identified that are generally missing from our culture—networks, meaningful roles, on-the-job training, and parenting resources. 4-H project meetings can help restore these vital missing pieces.

Glenn’s definition of a network, in the simplest sense, defines the 4-H project meeting: “two or more individuals who engage in dialogue about the world and the life they are living and who occasionally collaborate to achieve some mutually desirable end.” The dialogue for critical thinking portion of these lesson plans directly address this definition.

Many youth today are growing up in families and communities without any significant role to play. They just don’t seem needed until they become an adult. Research indicates that a primary cause of decline in motivation, discipline, and achievement is this perceived lack of need or value. Glenn and Nelsen challenge us to deal with youth actively in ways that affirm their contributions. **We must treat youth as contributors and assets rather than passive objects to be done for or to.** As 4-H project leaders, when we listen to members, take them seriously and treat them as significant, we will begin to restore the dialogue and collaboration necessary to link youth with the larger society.
On-the-job training with “hands-on” involvement has been the cornerstone of 4-H project work. It is important for youth to have this opportunity because that is where they learn patience, personal initiative, hard work, and deferred gratification. If they don’t learn about real life in this way, they receive its impressions passively from the media, generally through five hours of television each day.

“Learning by doing” is one of the primary reasons why 4-H has been recognized in the field of informal education. If we, as parents or leaders, think we are helping when we do their work for them, we need to stop and consider that, “The best way to destroy self-esteem and a sense of worth in young people is to do too much for them. This robs them of a sense of personal capability. The greatest gift of all is to help them validate themselves as agents in their own lives.” (Glenn and Nelsen, pg. 47)

Today’s parents need all the help they can get. According to the Ewing Marion Kauffman Foundation report, *Reweaving the Tattered Web—Socializing and Enculturating our Children*, by Basil J. Whiting in June 1993, “Three generations and extended families in the same house are not so common. Grandparents and aunts and uncles live longer distances away, and often alone (only five percent of American children now see a grandparent regularly)…. Divorce is common. Half of those who remarry will experience a second divorce. Half of all children will spend some of their childhood with a divorced parent.” As a 4-H project leader, you become a parent resource, both to the child and the child’s parent.

Today’s parents are concerned and fearful for their children. Why? Dr. Bruce Baldwin, nationally known psychologist and author says, “They wonder if their kids have what it takes to succeed as they have. Parents know that in the future, even menial positions will require well-developed cognitive skills: reading, writing, math, computer literacy, and the ability to process information quickly and efficiently.” (*TEAM, The Early Adolescence Magazine*, Vol. IV, No. 5, May-June 1990)

The same magazine noted that a large metropolitan education trust reported the types of requirements for employees comparing the past with the future:

<table>
<thead>
<tr>
<th>PAST</th>
<th>FUTURE</th>
</tr>
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<tbody>
<tr>
<td>Doers</td>
<td>Thinkers</td>
</tr>
<tr>
<td>Single repetitive functions</td>
<td>Quality circle approach</td>
</tr>
<tr>
<td>Individual piecework</td>
<td>Team centered</td>
</tr>
<tr>
<td>Autocratic</td>
<td>Participatory</td>
</tr>
<tr>
<td>Single job in lifetime</td>
<td>Flexible learners</td>
</tr>
<tr>
<td>Familiar with simple machines</td>
<td>Technology knowledgeable</td>
</tr>
<tr>
<td>Single task orientation</td>
<td>Information processors</td>
</tr>
</tbody>
</table>
The January 1990, issue of Prevention Forum magazine offers hope for today’s youth when it reports that research on youth who have become healthy adults in spite of adversity have had the opportunity, somewhere in their lives, to experience a caring, nurturing environment that encourages their active participation in problem-solving, decision-making, planning, goal-setting, and helping others in meaningful activities.

According to the Kauffman Foundation report, “child and youth development by natural osmosis is no longer an effective strategy. We can rely no longer on child development to occur as a natural by-product of family and community functioning because too many families and communities no longer function the way they used to.

This means reweaving the web to do what the family and community no longer do, and perhaps no longer can do adequately. It means constructing new institutions and new ways for children and youth to sustain relationships with a variety of caring adults…. Yet this must be supplementation, not replacement. We dare not leave out strands of parent-strengthening services in the many ways and places where traditional parenting is, at bottom, the still-to-be-preferred approach.”

The project lesson plans contained in this leader’s notebook have been designed to incorporate the components critical to the development of capable, contributing young people. By following these plans, leaders will help prepare their members to function and live productively in the world which they will soon inherit and direct. They are also designed to help you, as the leader, quickly and easily prepare for the lesson, conduct the activity, and facilitate the discussion and dialogue.
EXPERIENTIAL LEARNING MODEL

1. **Experience**
   - the activity; perform, do it

2. **Share**
   - the results, reactions, observations publicly

3. **Process**
   - discuss, look at the experience; analyze, reflect

4. **Generalize**
   - to connect the experience to real-world examples

5. **Apply**
   - what was learned to a similar or different situation; practice

Example questions used to complete the Experiential Learning Model

**A. Share**
1. What did you do?
2. What happened? What did you see? Hear? Touch? Taste?
3. How did you feel?
4. How did it feel to . . . ?
5. What was most difficult? Easiest?

1. What problems or issues seemed to occur over and over?
2. What similar experiences have you had?
3. What was most important?
4. Why was that significant?
5. Why do you think it happened?
6. What caused you to feel that way?

**B. Process**

**C. Generalize**
1. What did you learn about yourself through this activity?
2. What did you learn about a life skill?
3. How do the major themes or ideas relate to real life and not just the activity?
4. How did you go about making your decision?

**D. Apply**
1. How can you apply what you learned (life skill) to a new situation?
2. How will the issues raised by this activity be useful in the future?
3. How will you act differently in the future as a result of this activity?
4. How can you do it differently for different results?
APPLYING THE EXPERIENTIAL LEARNING PROCESS

Hands-on involvement (learning by doing) is the most effective method for learning this material. It helps youth learn personal initiative, hard work, patience and deferred gratification. By doing the work for the youth, parents, teachers and leaders may destroy the young person’s self-esteem and sense of worth. They may rob youth of learning by trial and error, practicing skills and becoming competent and capable. The greatest gift leaders can give is to help youth validate themselves as capable people. These lessons were designed using a model known as the experiential learning process which was adopted as the national curriculum development model for Extension Youth Development in 1992.

Experiential learning takes place when a person is involved in an activity, looks back and evaluates it, determines what was useful or important to remember, and uses this information to perform another activity.

The Experiential Learning process encourages youth involvement through dialogue and strengthens adult-child relationships. To enhance the goal of learning an atmosphere of friendliness, trust, and unconditional acceptance is required.

In each lesson, the “Dialogue for Critical Thinking” questions help complete the experiential learning steps. Except for the content review questions, most of these leading questions do not have a “right” or “wrong” answer. In addition to providing feedback to the leader, their purpose is to affirm and validate the perceptions of the members.

Take time to begin to feel comfortable with this process. It may seem awkward at first, but remember, Latin for “to teach” means to draw forth through dialogue and understanding. When the Experiential Learning process is used to help youth share the process of discovery, leaders will be developing them as critical thinkers, concerned for others, with the wisdom to function successfully in their future world.

FORMAT OF KANSAS 4-H CLOTHING & TEXTILES PROJECT

Each lesson plan in this notebook follows the same general outline which includes:

TITLE generally descriptive of the clothing and textile skill to be learned.

LEVEL describes which age level it is written for.

What Members Will Learn . . .

ABOUT THE PROJECT indicates what clothing and textile subject matter will be learned.

ABOUT THEMSELVES indicates what personal or life skills will be learned. These specific objectives can be used to evaluate if the lesson was successful and learning goals accomplished by the members.
MATERIALS NEEDED tells the leader what equipment, supplies, visuals or handouts will be needed in preparation for the lesson.

ACTIVITY TIME NEEDED gives the approximate time needed to complete the activity. Most lessons can be completed in 45 to 60 minutes.

ACTIVITY information is what the leader needs to know to teach the activity. This portion can be used as a leader’s script for the leader if necessary.

LEADER NOTES give directions or instructions for the leader which go with the “Activity” information. Space is available for leaders to write their own notes also. Member activity sheets or handouts are provided for the leader to copy and give to members to work on at the meeting or take home so parents can reinforce the learning.

DIALOGUE FOR CRITICAL THINKING questions are provided for the leader to help enhance life skill development and generalize the subject information to the real world of the youth participant.

GOING FURTHER ideas such as tours, demonstrations, handouts, and things to do at home and in the community, are for the leader and members to consider if they want to learn more about this particular lesson content.

REFERENCES credit the source used to develop this lesson activity in addition to the author.

AUTHOR is the source of information plus names of Kansas State University faculty who reviewed and adapted this lesson including specific ideas from volunteers.

The use of this notebook represents a major change in the way that clothing and textile project materials have been designed and used. Leaders need to realize that members will no longer receive member resource books or materials through the County Extension Office. Members will receive a “Clothing & Textiles Member Guide and Annual Report” which outlines the skills to be learned, describes learning opportunities, lists awards and careers, suggests where they can find more information, provides space for beginning goals and ending evaluations, and a year-end summary record. All other printed materials for members will be given to them by their Clothing & Textiles project leader. There are many “Member Handouts” within the lessons. Leaders should encourage members to begin a Clothing & Textiles Notebook by placing these member handouts in a permanent binder or folder, thus creating their own member manual.

In order for members to have a successful project experience, it is imperative that a leader meet with members. These lessons work best with
an adult and/or teen leader working with a small group of members. Several youth in the group will stimulate the discussion and dialogue, which is so important to the success of this process. If members are unable to meet in a group, the parent may serve as a leader to his/her child by requesting copies of the appropriate lesson plans from the Extension office and completing them at home.

The Clothing & Textiles project has been restructured to feature a series of sequential learning experiences based on members’ age and skill level, which will challenge them with new skills each year they remain in the project. Our goal is to make them knowledgeable about a wide spectrum of the clothing and textile industry and related consumer issues, rather than to specialize in one type of project exhibit. In fact, members and leaders will be exposed to different kinds of fair exhibits, including, but not limited to traditional clothing construction of garments, textiles for the home, recycled and/or embellished articles, plus educational display and/or posters. The goal should be to provide opportunities to share or exhibit what was learned during the project experience.

The project exhibit should be decided by the member, parent and leader, based on member’s age, skill level, equipment and financial needs, and what local exhibit opportunities have been identified. Conference evaluation should be offered for county fair classes. State Fair exhibits offer static exhibits, plus noncompetitive participation in the mini style show, and one entry per county per class for the competitive senior Clothing and Textile Presentation Evaluation (fashion revue).

Ideally, members should progress through all levels in order, but it is not necessary. If project members vary in age and skill levels and the group is large enough, splitting into like age groups with additional leaders is recommended. Older members might be used as assistant leaders with beginning levels which then allows teens to be self-directed learners for advanced skills, or teens might meet together as a multi-club or county-wide group.

**ROLE OF THE 4-H PROJECT LEADER**

Your major roles are that of teacher, facilitator and encourager.

**Your Role as Teacher:**

- Help members set goals.
- Share your knowledge of the project through meetings, tours and home visits. A minimum of four and a maximum of 10 meetings is recommended. Set meeting dates and times with the participants. Remind participants of upcoming meetings.
- Invite and involve parents and other leaders when appropriate.
- Keep your skills current through trainings, consultations, and reading. Ask for help or advice as needed.
Your Role as Facilitator:
• Use techniques to facilitate (assist) learning. See “Teaching with Discussion.”
• Be sensitive and respond to individuals’ needs, beliefs and family circumstances. Do not judge.
• Help members find additional learning opportunities and resources. (Using “Going Further” in the lessons.)
• Relate project to everyday life and career possibilities.

Your Role as Encourager:
• Recognize the personal growth of members and help them celebrate their successes.
• Lead (not push) participants into new skills and new ways of thinking. Encourage and challenge them to become better persons, yet always accept them and love them as they are now.

Your classroom is wherever the member must be in order to learn—in the home, meeting room, or on a field trip. Your subject matter, what you teach, is clothing and textiles and youth development.

TEACHING WITH DISCUSSION
Why Use Discussion?
Discussion is part of every lesson. Discussion questions appear in the “Dialogue for Critical Thinking” section. Discussion is most effective when you want to:
1. Give participants practice thinking in terms of the subject matter.
2. Help participants evaluate their beliefs.
3. Stimulate participants to apply principles.
4. Help participants learn to anticipate or solve problems.
5. Use the resources of the group members.
7. Develop motivation for further learning.
8. Get feedback on how well participants learned the material.

How Can I Get People to Talk?
Discussion can be difficult at first simply because few participate. Sometimes, all that is necessary to improve the situation is time, your smiles and encouragement, and practice. Many participants are used to being talked at, not with in educational situations. The fear of being embarrassed is another major factor. Not knowing the other participants, being unsure of one’s idea, being afraid of sounding silly—these make participants feel that the safest thing to do is remain silent.

How Can I Help Them Overcome Their Fear?
The first step is making sure participants become acquainted with each other and with you. Begin by having get-acquainted activities at the organizational meeting. Continue by providing games, refreshments, time to talk, and other opportunities for friendship building throughout the project meeting period. Get to know each participant personally. Take a special interest in them; they will come to trust you.
When asking a question, call on participants by name. This seems to promote freer communication.

Sitting in a circle also encourages exchange.

Eliminate the fear of being wrong. (This is a tremendous barrier to discussion.) Avoid questions where there is only one right answer. Do not judge participants’ answers about beliefs and preferences. Do not allow any participant to make unkind comments about another’s answer.

At times, give participants opportunities to talk in small groups to work out answers together. If your group seems to have difficulty responding to questions, allow them to write out their answers first. This seems to give them added confidence to share their thoughts with others. As much as possible, ask questions that can have no wrong answers: How do you feel about this? What do you think?

**What if Someone Talks Too Much?**

There are several effective ways to work with a person who monopolizes the discussion. You might ask this person and at least one other to observe the discussion and report their observations to the group; for example: Did we solve the problem? Did everyone get a chance to participate? Another option is to divide into smaller discussion groups. Ask one person from each group to report the results of the discussion. Do not choose the monopolizer to report. You also could talk to this person privately. Explain that you appreciate the participation and insights, but you believe other people also should be given the opportunity to learn how to talk in a group. Ask this participant to help the group by allowing others more time for discussion and perhaps saving personal insights for more difficult questions.


When properly used, incentives can be an effective way to encourage good project work and enhance personal development of the members. One of the strongest human incentives is that inner feeling of accomplishment and achievement.

Public recognition in news articles or at meetings, a word of praise or pat on the back from leaders are also effective in encouraging desirable performance.

Group recognition should be used at the end of the project to recognize the accomplishments of each member who completed the project, attended a certain number of meetings, demonstrated certain acquired skills, etc. Recognize not only the member who might have won the top ribbon, but use your imagination to recognize the most improved hand stitcher, science fair participant, most unusual application of textile knowledge, best use of serger, best records, most active discussion participant, etc.
THE FIRST MEETING
The first meeting is usually an organizational one to plan for the project year. It is a good idea to have parents attend this first meeting with the members. Parents should be encouraged to take part in any or all activities.

As members arrive, plan something for them to do. Perhaps a teen leader can be prepared with a get-acquainted game or activity. Make sure every member knows everyone else. Do not assume this is the case. Taking time now to build group trust will have payoffs later in commitment, discipline and encouraging discussion. Share some of the broad objectives you have for this project. Set dates with members and parents for future meetings. Schedule any demonstrations with members and discuss other special activities for the entire year. Discuss your expectations for recovering costs of materials, copying, etc.

Young people deserve to be treated as contributors and assets instead of passive objects to be done for or to. Your job is to involve your participants and challenge them toward learning and personal growth. They should be involved in the planning and preparation of meetings. A map helps to give us direction, keep us on track and know when we’ve reached our destination. We’ve designed a MAP—Member Achievement Plan—to help you and your 4-H members plan, as a group and as individuals, what they want to learn, make and do in this project. This is called goal-setting. It also teaches decision making.

STEPS 1 of the MAP
Ask members to bring their Clothing & Textiles Member Guide and Annual Report to the first meeting along with pocket folder or binder to put it in. They will use it to begin to develop their “MAP” by completing Step 1. The leader and project group decide on four to six lessons they would like to learn about. Provide members a list of lesson titles from the appropriate level and let them choose. There should be plenty of choices to choose from different topics within the same Level if the same members enroll next year. As members get older, it is appropriate for them to choose less from a given list and become skilled at identifying and writing their own learning goals.

Goals may be divided into two groups: short-term and long-term. Short-term goals can be accomplished during the project year, while long-term goals take one or more years. Members will need to work with both types; however, a base for success and confidence will be established quickly with short-term goals.

<table>
<thead>
<tr>
<th>Short-term goals:</th>
<th>Examples:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Must be specific and attainable</td>
<td>A. By January 1, I will know how to run a sewing machine and serger</td>
</tr>
<tr>
<td>• Have a measurable outcome</td>
<td>B. By May 1, I will know how to properly sort and launder my own clothes</td>
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<tr>
<td>• Specify time of completion</td>
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<tr>
<td>• Often related to long-term goals</td>
<td></td>
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</tbody>
</table>
Long-term goals:
• Must be believable
• Give direction and motivation
• Describe conditions one hopes to achieve

Examples:
A. To qualify my textile display for the State Fair
B. To use wise consumer decisions and purchase a summer wardrobe for less than $200

It is easy for a member to list long-term goals. If your members tend to think of only long-term goals, simply ask them, “What will you need to learn or do in order to accomplish this goal? How will you make this happen?” Answering these questions will provide many short-term goals. As a leader, you are aware of many of your member’s capabilities. You can help identify which goals are realistic for this year and which might have to become long-term goals.

After setting goals, review them periodically with members to see what progress is being made or what needs to be altered to reflect current situations. Hearing genuine praise or concern from interested adults is essential in helping members obtain their goals.

Explain other parts of the Member Guide and Annual Report as necessary. Discuss expectation of members and parents. Complete a short lesson activity from the appropriate level.

STEPS 2 AND 3 of the MAP—Do, Measure
At the project meeting, or at home with their family, members add their own personal goals to their MAP and add the date planned in the column on the right. As members complete their goals, they write the date completed in Step 3.

STEPS 4 AND 5 of the MAP—Evaluate, Share and Celebrate
At the end of the annual project experience, goals should be evaluated. How did the goals work? What was learned? What needs to be accomplished next? Members may not have accomplished what they set out to do, but they may have learned many things in the process. Setting a goal to reach a partial number of total goals isn’t a bad idea, since it enables the younger member to feel successful.

The member and the leader, or in the case of the parent leader, the member and the parent, should complete Step 5 of the MAP as soon as the member has completed his/her short-term plans. All members who complete this step should be given immediate recognition for their project goal-planning accomplishments. The recognition should be determined by the member as what is important to him/her. It may be going out to a movie with a friend, or as simple as personal satisfaction received from meeting the goal.
REFERENCES

*Reweaving the Tattered Web—Socializing and Enculturating our Children*, by Basil J. Whiting, is published by Ewing Marion Kauffman Foundation, 4900 Oak, Kansas City, MO 64112-2776.

*Raising Self-Reliant Children in a Self-Indulgent World*, by H. Stephen Glenn and Jane Nelsen, Ed. D., is published by Prima Publishing and Communications, P.O. Box 1260SR, Rocklin, CA 95677, (916) 624-5718, and can be ordered from St. Martin’s Press, 175 Fifth Avenue, New York, NY 10010 (212) 674-5151.

A video presentation by Stephen Glenn, which summarizes much of *Raising Self-Reliant Children in a Self-Indulgent World*, can be requested through your county Extension office. Ask for the video, *Developing Capable Young People*, available from Kansas State University, Department of Communication’s Media Center.

Some members may wish to secure additional reading materials. The following references are suggested. Members may write to listed organizations or groups for ordering information, or check with their public library or local bookstore.

Videos:

*Gone with the Wash*, Maytag, One Dependability Square, Newton, Iowa, 50208, 515-791-8402, available for Kansas counties to check out through Kansas State University, Department of Communication’s Media Center

*Clothing Care*, The Learning Seed, 330 Telser Rd, Lake Zurich, IL 60047, 800-634-4941, available for Kansas counties to check out from area Extension offices and Kansas State University, Department of Communication’s Media Center

*How Clothing is Made*, The Learning Seed, available for Kansas counties to check out from area Extension offices

*Wardrobe Management: Dress Well for Less*, The Learning Seed, available for Kansas counties to check out from area Extension offices

*Stretching Your Clothing Dollar*, Meridian Education Corporation, Department 9-92H, 236, E. Front St., Bloomington, IL 61701, 800-727-5507, available for Kansas counties to check out from area Extension offices

*Bleach or Dye with Janet Pray*, Islander School of Fashion Arts, Inc., P.O. Box 66, Grants Pass, OR 97526, 1-800-944-0213

*Blue Sky Below My Feet, Fiber and Fabrics*, produced by National 4-H Council, available through Kansas County Extension offices to purchase from Kansas State University, Department of Communication’s Media Center

*The Spotlight is On You*, 1995, The McCall Pattern Company, Educational Department, 615 McCall Rd., Manhattan, KS 66502, 800 255-2762 for ordering information, available for Kansas counties through area Extension offices or Kansas State University, Department of Communication’s Media Center
Collection of clothing and textile resources:

**The Magic of Accessories, 1995,** The McCall Pattern Company, available for Kansas counties to check out through area Extension offices or Kansas State University, Department of Communication’s Media Center

**Clothing: An Intelligent Buyer’s Guide,** The Learning Seed, available for Kansas counties to check out through area Extension offices or Kansas State University, Department of Communication’s Media Center

Men’s Wear Fit and Coordination, 1982, Missouri Extension, video available through Kansas county Extension offices to purchase from Kansas State University, Department of Communication’s Media Center

**Clothing for People with Special Needs,** Gret Atkin, Clothing and Textile Specialist, New York State College of Human Ecology, Cornell University, Ithaca, New York 14853

**Garment Fitting Procedures: Bodice Alteration,** Phyllis Bracklsberg, Iowa State University, available for loan from Kansas State University, Department of Communication’s Media Center

**Garment Fitting Procedures: Lower Torso Alteration,** Phyllis Bracklsberg, Iowa State University, available for loan from Kansas State University, Department of Communication’s Media Center

**Computer Software:**

**Stain 2, Stain & Odor Removal for Washable Fabrics,** available from all Kansas County Extension Offices, developed by Bette Jo Dedic, Cooperative Extension Service, University of Kentucky, Room 252 Ag Engineering Bldg., Lexington, Kentucky, 40546-0276

**CloCare, Care and Maintenance of Clothing,** 1990, Linda Heaton, Clothing and Textile Specialist, University of Kentucky, and Nadine Hackler, Clothing and Textile Specialist, University of Florida

**Fabric Identification and Swatch Kit,** The Learning Seed, 330 Telser Rd. Lake Zurich, Illinois, 60047, 1-800-634-4941

**Fiber Basics,** The Learning Seed, available from Kansas area Extension offices

**Your Ideal Silhouette,** Gail Florin, Meridian Education Corporation, available from Kansas Area Extension Offices

**Printed materials:**

**Clothing Leader Guide,** Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A & M, College Station, Texas 77843-2473

**Stitch ‘N Wear,** Ruth Gulbrandson, Clothing Specialist and Merry Green, McHenry County Home Economist, Cooperative Extension Service, North Dakota State University, Fargo, North Dakota 58105

**Let’s Sew,** Nancy Zieman, 1991, National 4-H Supply Service, 7100 Connecticut Ave. Chevy Chase, MD 20815, 301-961-2934

**4-H Clothing Construction Materials,** Nadine Hackler, Extension Clothing Specialist, Florida Cooperative Extension Service, University of Florida, Gainesville, Florida 32611-0131

**Reader’s Digest Complete Guide to Sewing,** 1976, Reader’s Digest Association, Inc., Pleasantville, New York,

Start Sewing, Singer Education Department, 321 First St., Elizabeth, New Jersey 07207

Simply the Best Sewing Book, Simplicity Pattern Co., 200 Madison Avenue, New York, New York 10016

4-H Clothing Construction File, available for checkout from each of the five Kansas Area Extension Offices

Spot and Stain Removal for Washable Fabrics, C-638, Cooperative Extension Service, Kansas State University

International Fabricare Institute, 12251 Tech Road, Silver Springs, MD 20904, 301-622-1900

Home Survival and Design, Kathy Vos, 4-H Youth Development Programs, University of Wisconsin, 328 Lowell Hall, Madison, Wisconsin, 53703

Enviroshopping: Shopping with Concern for the Environment, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, Instructional Materials Service, 101 Rolf Hall, University of Florida, Gainesville, Florida 32611-0130

American Wool Council, 1200 Clayton Street, Denver, Colorado 80206

Sewing for Profit, NCR Extension Publication 208, Joyce Smith, Extension Clothing Specialist, The Ohio State University, reprinted in the reference section of this Introduction

Color Me Beautiful, Carol Jackson, Acropolis Books, Ltd., 2400 17th St., N.W. Washington, D.C. 20009

American Institute of Men’s and Boy’s Wear, Inc., 1290 Avenue of the Americas, New York, New York 10019

Singer Sewing Reference Library: Tailoring, 1988, Cy DeCosse Incorporated, 5900 Green Oak Drive, Minnetonka, MN 55343, 1-800-328 0590

The Textile UpDate ’93 Ring Binder Notebook 1 and Notebook 2, Deanna Munson, Extension Specialist, Textiles, Kansas State University, available from Kansas Area Extension offices

Consumer Advisory Committee for the American Apparel Manufacturers Association, 2500 Wilson Boulevard Suite 301, Arlington, Virginia, 22201

Additional Resources Suggested by Kansas Family and Consumer Sciences Agents and Specialists
The Reader’s Digest Complete Guide to Needlework

World Wide Web Home Page, Michigan State University Home Maintenance and Repair Page, address: http://lep.cl.msu.edu/msuemip/htdocs/mod02/master02.html; provides information on care and maintenance of many home products, including clothing and textiles. Can be searched by Keyword, or browsed by first letter of subject.

Unit Method of Clothing Construction (Women’s and Men’s Wear), by the Iowa Home Economics Association, The Iowa State University Press, Ames, Iowa 50010
Sewing with Sergers (Book 1), 1985; Creative Serging, (Book 2), 1987; The Serger Idea Book, 1989; Palmer/Pletsch Associates, P.O.Box 12046, Portland, OR 97212-0046

ABC’s of Serging, Tammy Young and Lori Bottom, 1992, Chilton Book Company, Radnor, Penn 19089

Dictionary of Fiber and Textile Technology

10.20.30 Minutes to Sew, Nancy Zieman, Oxmoor House

Videos from Clotilde: 2 Sew Smart Way, B8031, Stevens Point, WI 54481-8031, 800-772-2891

Clotilde Demonstrates Notions, 1 hour

Clothing-Intelligent Buyers Guide

Sew Smart, Judy Lawrence and Clotilde Yurick; Professional methods for the Custom Look

Videos from Nancy Zieman:

Begin to Sew, 1 hour
Motivating Kids to Sew, 1 hour
Singer/Overlock Sewing II, 1 hour

Simplicity has a series of idea/workbook projects with ideas for recycling household items, embellishment, etc. Ones used include, “Casual Cut-ups”, “Towel Treasures”, “The Bottle Bunch.”

Letter to Kansas Family and Consumer Sciences Agents from Deanna Munson, dated December 18, 1995, regarding materials from the Sewing Transition Workshop. This packet contains nearly 30 pages of resources, including a checklist for evaluating resource materials, lists of teacher resources, books, videos, and Internet Sewing and Textiles Sites.

American Home Sewing & Craft Association (Sew America), 1375 Broadway 4th Floor, New York, NY 10018

American Sewing Guild National Headquarters, P.O. Box 8476, Medford, OR, 97504-0476, 503-772-4059

Some suggested Sewing Kit Companies from What’s New in Home Economics

Big Sky, P.O. Box 7362, Missoula, MT 59807, 1-800-733-5300
Frostline, USA, 2525 River Rd., Grand Junction, CO 81505, 1-800-548-7872
LAMA P.O. Box 681, Mount Airy, MC 21771, 1-800-876-8870
Sew Kits by Lida, P.O. Box 500, Harleton, TX 75651
To Sew, P.O. Box 974, Malibu, CA 90265, 1-800-824-5278
PLANNING HELPS
The following forms may be used by the leader to help in planning for their Clothing & Textile project experience.
- Project Member Enrollment Record
- Project Leader Meeting Record
- List of Members and Their Goals
- Volunteer Support Form
- Project Meeting Checklist
- Clothing & Textile Member Guide and Annual Report

The final pages of this introduction section also contain some useful publication resources for the leader.
- Selecting Overlock Sewing Machines
- Sewing for Profit
- Stitch 'N Wear, North Dakota State Extension Service (NOTE: Page 46, figure 10 of this publication, the hem has been turned to the outside of the garment but should be folded to the wrong side)
<table>
<thead>
<tr>
<th>Name</th>
<th>Age Jan. 1</th>
<th>Yrs. in Project</th>
<th>Parents’ Name(s)</th>
<th>Address</th>
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### PROJECT LEADER MEETING RECORD

<table>
<thead>
<tr>
<th>name of project</th>
<th>phase(s)</th>
<th>project leader</th>
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<tbody>
<tr>
<td>PROJECT MEMBERS</td>
<td>ATTENDANCE AT PROJECT MEETINGS</td>
<td>PRESENTATIONS MADE BY MEMBERS</td>
</tr>
<tr>
<td>Name</td>
<td>Phone</td>
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</table>
LIST OF MEMBERS AND THEIR GOALS

1. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

2. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

3. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

4. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

5. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

6. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________

7. NAME: ________________________________
   Plans or wants to do: ________________________________
   Assistance, resources, or materials needed: ________________________________
8. NAME: ___________________________________________
   Plans or wants to do: ___________________________________________
   Assistance, resources, or materials needed: ________________________

9. NAME: ___________________________________________
   Plans or wants to do: ___________________________________________
   Assistance, resources, or materials needed: ________________________

10. NAME: ___________________________________________
    Plans or wants to do: _________________________________________
        Assistance, resources, or materials needed: __________________

11. NAME: ___________________________________________
    Plans or wants to do: _________________________________________
        Assistance, resources, or materials needed: __________________

12. NAME: ___________________________________________
    Plans or wants to do: _________________________________________
        Assistance, resources, or materials needed: __________________

13. NAME: ___________________________________________
    Plans or wants to do: _________________________________________
        Assistance, resources, or materials needed: __________________

14. NAME: ___________________________________________
    Plans or wants to do: _________________________________________
        Assistance, resources, or materials needed: __________________
I would be willing to assist the 4-H program by:

Volunteer I
- Helping members with demonstrations.
- Helping members with project talks or public speaking.
- Helping provide transportation to project meetings.
- Assisting members with project records.
- Helping provide transportation for project tours or field trips.
- Assisting with project meetings when needed. Special skills I have:

Volunteer II
- Help bring refreshments.
- Developing a “calling tree” for meeting reminders.
- Making my home available for a project meeting if needed.
- Helping provide special supplies if needed.
- Others, please explain:

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
# PROJECT MEETING CHECKLIST

## A MEETING EVALUATION INSTRUMENT

After your project meeting, take a few minutes to consider each of the following questions. This checklist should also serve as a reminder of ideas to incorporate in future project meetings.

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<tbody>
<tr>
<td>1. Were the objectives of the meeting clear to members?</td>
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<td>2. Did I give each member a chance to actively participate? (sharing ideas, assisting, presentations)</td>
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<td>3. Did I commend or encourage each youth in some way?</td>
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<td>4. Did I plan for differences in ages, abilities, and interests of members?</td>
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<td>5. Did I observe progress of individual members?</td>
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<td>6. Did I involve other volunteers in some way? (planning, leadership assistance, transportation, refreshments)</td>
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<td>7. Did I give members a chance to assume responsibility when it was appropriate?</td>
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<td>8. Did I incorporate some fun activity or game into the project meeting?</td>
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<td>9. Did I summarize the new information shared and skills learned at the close of the meeting?</td>
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<td>10. Most of all, did I enjoy working with the young people involved?</td>
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</table>

*Seven or more positive responses denotes an excellent meeting rating!"
Welcome to the 4-H Clothing and Textiles Project! It is one of several projects in the Family Living Division of Kansas 4-H projects. It is also one of the more popular projects and is important because everyone wears clothes and is surrounded by hundreds of textiles products. Kansas youth need to know how to be wise clothing and textile consumers, to understand the science of textiles, and how to construct and recycle garments or textile products.

Your 4-H Clothing and Textiles leader will be the key to helping you learn many things about the clothing and textiles industry that you may never have thought about. Selecting from more than 80 different lessons, if you remain in the Clothing and Textiles project, you will have the opportunity to explore and learn everything from how to read a label and care for clothing, to how to design or alter patterns when constructing a garment, to how fibers are made, and how you can reduce environmental waste in a global community. In addition, personal and public presentation skills such as modeling, grooming, and confidence in clothing and accessory decisions will be covered. Plenty of new topics are presented, so that you can remain in the same level for learning new and exciting things to make and do. The “Going Further” section of each lesson contains all kinds of fun activities to do in your community, or other ideas to continue learning. You’ll have fun with other clothing and textile members as you study about these five general concepts: Me and My Body; Textile Science; Care and Maintenance; Creating with Fabrics and Fibers; Wardrobe Planning.

ADDITIONAL LEARNING OPPORTUNITIES
Besides attending project meetings with your friends, you can learn more about clothing and textiles and share what you’ve learned by giving clothing and textile presentations at your club, county 4-H Day, State Fair, school or civic clubs in your community. The State Fair Fashion Revue is a special opportunity for the top county winners 14 and older, and all members can participate in the State Fair Mini-Style show. Many 4-H’ers, both boys and girls, also participate in the local, district, and state Make It With Wool and Shepard’s Lead contests. Many members enjoy participating in club and county fashion revues held at county fair time and throughout the year for special occasions. Clothing and Textile classes in consumer judging clinics and contests help you learn to observe, evaluate, and make decisions. Your leader has other ideas for trips and tours related to this project that will make learning fun in your community.

You may exhibit at the county fair, and if 10 or older with a qualifying exhibit, advance to the State Fair. Be prepared to see traditional classes for constructed garments or articles, as well as new educational classes such as displays, posters, and notebooks offered so that you will be able to show or exhibit what you have learned from the wide array of project topics. One or more county project winners are generally recognized at County Achievement programs, based on year-end records, reports, or award applications. Each county may submit their top eligible Kansas Award Application (KAA) to Area KAA evaluations. The top two Clothing and Textiles KAAs from each Extension Area will advance to State evaluation, where the state winner will be named and given the opportunity to represent Kansas at National 4-H Congress.

CAREERS
There are many career choices available to those interested in the Clothing and Textiles industry. College degrees generally require emphasis in chemistry, math, computers, marketing, and business. Several of the lessons are devoted to helping 4-H’ers explore these careers:

<table>
<thead>
<tr>
<th>Textile Chemist</th>
<th>Sales Representative</th>
<th>Market Researcher</th>
<th>Educator</th>
<th>Seamstress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile Designer</td>
<td>Appliance Consultant</td>
<td>Apparel Designer</td>
<td>Costume Designer</td>
<td>Upholsterer</td>
</tr>
<tr>
<td>Research Specialist</td>
<td>Product Designer</td>
<td>Fashion Writer</td>
<td>Carpet Specialist</td>
<td>Buyers</td>
</tr>
<tr>
<td>Textile Physicist</td>
<td>Industrial Designer</td>
<td>Consumer Liaison</td>
<td>Designing for Special Needs</td>
<td></td>
</tr>
</tbody>
</table>

WHERE TO GO FOR INFORMATION
If you do not have a Clothing and Textiles project leader for your club, there are several options. Check with your Extension office to see if you can be a part of a project group in a neighboring club, or check to see if you have a countywide group. If not, ask your parent or an adult friend to act as your leader. You may visit the Extension office and review the Clothing and Textiles Leader Notebook and copy the material you wish to use. It also contains a list of additional resource information if you want to write for it.
Member “MAP” Achievement Plan

Step 1—PLAN:
A. Decide at the beginning with your group and list 4-H project lessons you would like to learn about:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

B. Decide for yourself and list things you want to learn, make, or do . . .

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Step 2—DO:
As you are doing what you planned, make notes about your progress on your “Journal” page.

Step 3—MEASURE:
Write the date you’ve completed each part of your plan in the space provided.

Step 4—EVALUATE:
Tell about what you planned that worked. If some of your plans didn’t work, what would you do differently next time?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Step 5—SHARE:
As soon as you have completed your short-term plans, discuss them with your leader using this guide.

We agree that ______________________________________ has completed these goal planning steps and should be recognized for project achievement.

Date ____________________
4-H’ers Signature _________________________________________________
Leader’s Signature _________________________________________________
See instructions for Step 2, page 2 of this guide. You may want to include the date, what you did, what you learned, and how you felt, for the purpose of helping you remember your experiences.
CLOTHING & TEXTILES PROJECT SUMMARY FOR ______________ YEAR

Name ____________________________ Age _________ Level _____________ years in project _____

Learning Activities in This Project
Indicate the number of times participated

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>County</th>
<th>Multi-County</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field trip/tours</td>
<td></td>
<td></td>
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<tr>
<td>Talks/demonstrations</td>
<td></td>
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<tr>
<td>Judging</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>No. of exhibits/displays</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public presentations (modeling)</td>
<td></td>
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</tbody>
</table>

(Add additional pages if more space is needed for this section)

Describe Leadership given in the Clothing and Textiles project this year:

Describe Community Service given in the Clothing and Textiles project this year:

Summarize important things you learned in each of the 5 Clothing & Textiles concepts:

1. Me & My Body

2. Creating with Fabrics and Fibers

3. Textile Science

4. Care & Maintenance

5. Wardrobe Planning

On a separate page, you may attach a photo of you or someone else showing a favorite article or outfit you made or purchased, or display you created. If constructed, attach fabric samples.

Member’s signature ____________________________ Parent, Guardian or Leader ____________________________

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MG32 January 1996

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Selecting Overlock Sewing Machines

SELECTION
Overlock sewing machines are special purpose machines that trim, stitch and overcast a seam in one operation. They are also called sergers because of the overcasting function. Overlock machines sew faster than conventional home sewing machines (approximately 1500 stitches per minute versus 900 stitches per minute and provide a professional looking seam.) These compact, lightweight machines (about 19 pounds) cost between $400 and $800.

Unlike conventional machines, overlocks have no bobbin. Instead, loopers interloop a 2 to 5 multiple thread system to form stitches. If not secured at both ends of stitching, threads or loops can pull out. A pair of very fine, sharp cutting blades to the right of the needle(s) trim seam allowances neatly as fabric is stitched. Overlocks are not designed to replace conventional home sewing machines, but to be used with them.

TYPES
There are several types of overlock sewing machines on the market. These are usually identified by the stitches they form and the number of threads the machines use at one time while stitching. For example, a three thread machine makes a 3 thread stitch and requires 3 separate spools of thread used together to form the stitch. The types of machines available at this time are:

- 2 thread
- 3 thread
- 2/3 thread
- 3/4 thread overlock stitch
- 4/2 thread safety stitch
- 3/4 thread mock safety
- 2/3/4/5 thread combination overlock and safety stitch.

Some of these machines can make a rolled hem stitch and a flatlock stitch. A rolled hem stitch is a very fine stitch (similar in appearance to a narrow satin stitch) and is used commercially to finish edges of ruffles, hems, napkins and other single layers of fabric. The width varies from 1.5 to 2.0 mm depending on the brand of machine. Some overlocks with 2 thread capabilities and most overlocks with 3 thread capabilities can do the rolled hem stitch.

Flatlock stitches are formed by stitching two layers of fabric together with tension settings that allow the stitch to be pulled apart. This causes the 2 layers of fabric to overlap, creating a very flat decorative seam. A loop stitch shows on one side (A) and a ladder (B) on the other. The fabric can be used with either side out. Flatlock stitches are possible on machines with either 2 thread or 3 thread capabilities.
Two thread overlocks can be identified by one needle and two threads. One thread is used in the needle and one in the looper. The stitch will not form a secure seam and, therefore, is normally used to overcast seam edges of garments sewn with a conventional sewing machine.

Flatlock stitches can be made on all 2 thread machines; rolled hem stitches on some 2 thread machines.

Three thread overlock machines use one needle and three threads for normal stitching. They make an overcasting stitch from 2.5 mm to 5.0 mm wide. The thread forms a row of stitches that lock at the seam line to form a secure seam combined with a seam finish. The seam allowance will be about ¼ inch.

Three thread overlocks are versatile machines. They usually handle all weights and types of fabrics including single layers of lightweight silk-like fabrics. The stitch exhibits slight give for use with stretch fabrics and knits. Seams formed are moderately strong but should be reinforced with conventional machine stitching in stress areas. Both rolled hem and flatlock stitches can be made on three thread machines. A machine with 3 thread capabilities meets the needs of the majority of home sewers. (C)

Two/three thread overlock. These machines convert to using either 2 or 3 threads. They perform all functions described for the two thread and three thread machines mentioned above.

Three/four thread overlocks feature two needles and four threads. Two spools of thread are used for the two needles and two spools for the upper and lower loopers. These machines make a three thread stitch with an extra row of stitches (provided by the second needle) through the middle of the overlock stitch (D). As a result, the stitch is stronger and slightly wider than that formed by a 3 thread machine.

Three/four thread overlocks will form a standard 3 thread stitch using one needle in the machine. In fact, the way to change stitch width on 3/4 thread machines is by using either the left needle or the right needle. When both needles are used to complete a 4 thread overlock stitch, the width is preset and cannot be changed. Overlock stitch widths on 3/4 thread overlocks range from 3.5 mm to 6.5 mm depending on machine.

These machines perform all the functions of a standard 3 thread overlock. This includes rolled hem and flatlock stitches. Standard overlock seams on a 3/4 machine will be more secure than on a 3 thread machine because of the extra row of stitching provided by the second needle.
The finished seam from a 3/4 overlock has slight give, making it satisfactory for use with knit fabrics including high stretch materials used in swimwear.

Overlocks with 2 or 3 thread capabilities (including 3/4 thread machines) work well as companions to conventional home sewing machines. Seams can be sewn on the standard sewing machine to allow for fitting while sewing. Final seams can then be stitched on the serger either together or single layer to provide a seam finish.

A true four thread overlock (also called 2/4 or 4/2 overlocks) forms a stitch different from the 3/4 machine. Be certain to know the differences, advantages and limitations to each before making a decision to purchase.

A 4/2 overlock uses 2 needles and 2 loopers and requires four threads. These machines form a chain stitch seam with 2 threads, an overcast edge with 2 threads, and trim seams in one operation. The 4/2 thread overlock can sew three different stitches: chainstitch or safety stitch, 2 thread overedge stitch, or true four thread safety stitch by combining the chainstitch and overedge stitch. (E)

Because overlock machines have no bobbin, the seam on a 4/2 machine is formed with a chainstitch. If not secured, the thread will pull out by tugging on the appropriate thread end. Some ready-made clothing uses the chainstitch seam for ease in alterations. The crotch seam in men’s trousers is normally sewn with this stitch.

Four/two machines handle all weights of fabric but are most successful on medium to heavy weights. The chainstitch gives a very stable, secure seam, but is not suitable for stretch seams in knits. The approximate width of finished true four thread seams is 6 mm to 7 mm.

The 2 thread overedge stitch can be made without the chainstitch and is similar to the stitch described on the 2 thread machine above. Used alone, it will not make a secure seam, but can form a flatlock stitch. Rolled hems are not usually possible on 4/2 machines, although some companies have provided special attachments for this.

Four/two overlocks are less versatile and less suitable for most home sewers. They are the choice of many professional dressmakers and alterationists as they provide a neat, secure seam rapidly. Overlocks generally are a cost effective investment for individuals involved in businesses that involve sewing activities.

3—Clothing & Textiles, Publication Resource
Three/four Mock Safety Stitch is another type of 3/4 thread overlock machine that features a mock safety stitch. A few companies market this machine that has the appearance of a 4/2 safety stitch from the right side and the appearance of the standard 3/4 overlock stitch from the wrong side. Otherwise, the machine functions similarly to the standard 3/4 overlock. It uses 2 needles, 4 threads, converts to 3 threads, flatlocks, does a rolled hem, and gives a seam with slight stretch. These machines feature seam width adjustments beyond that of using left or right needle—a limitation of most other 3/4 machines.

The 2/3/4/5 overlock is the most recent addition to the market. It features 2 needles and 3 loopers. The machine has all the capabilities of a 2 thread, 3 thread, and a 4/2 machine. It can make a chain stitch like that on the true 4/2 thread overlock, but with either a 2 thread overedge stitch or a 3 thread overlock stitch. A 2 thread overedge and a 3 thread overlock are possible without the chain stitch, as well as flatlock and rolled hem stitches.

Another type of 5 thread machine produces a stitch much like the 3/4 thread machine. To produce the stitch, two threads are threaded through the left needle. A true 4 thread safety stitch is not possible on this machine. However, a durable, yet stretchable seam results. Rolled hem and flatlock stitches can be made on this machine. When buying a 5 thread machine, be aware of which type is being purchased and its advantages and limitations.

The 2/3/4/5 overlock is obviously the most versatile machine because of the many variations possible. Some people might find it more complicated to understand and operate. Determine how easily the machine converts from one type of stitch to another. A complex procedure might reduce frequent use of all stitch variations.

FEATURES
There are some points to consider or questions to ask about overlock machine features.

Threading: The overlock has a separate set of thread guides for each spool or cone of thread used on the machine. The threading process must be done carefully and repeated for each of the two to five threads. Note the presence of color coded thread guides and a visual threading diagram on the machine. Some machines feature “lay in” threading, which eliminates wrapping thread around tension disks. Most machines require thread to be caught on or inserted through thread guides. Practice threading a machine before you buy to determine ease or complexity of the process. Do not allow the salesperson to get by with showing only pull through threading.

Thread: Most machines handle a variety of threads from standard sewing thread to decorative threads, such as pearl cotton. Most sewers use special thread designed for overlock machines. It comes on cones, is quite fine, and may have a special finish to accommodate high speed sewing. The finer thread reduces bulk and stiffness in seams. Overlock machines use more thread to complete stitches than conventional sewing machines. Cone thread, less expensive than regular sewing threads, is a more economical choice. If not available in your area, investigate mail order sources before purchasing an overlock machine.

When shopping for an overlock, take along pearl cotton, fingering yarn, or crochet thread and ask the salesperson to demonstrate with it. Note the quality of stitch and ease with which the machine handles decorative threads.

Overlock machines require even feeding of thread from the spool. Devices that adapt different types of thread spools accompany most machines.
Needles: Some overlock machines require special industrial needles; other machines use conventional sewing machine needles. Industrial needles are stronger and will probably not have to be replaced as often as regular needles. The greater thickness of industrial needles can make a larger hole in fabrics. Industrial needles should never be substituted for conventional machine needles and vice versa. Consider availability of industrial needles. Individuals in outlying areas may need to investigate mail order sources.

In two needle machines, note the number of screws holding needles in place. Some machines use one screw to anchor both needles; others feature a separate screw for each needle. Operation of the machine will not be affected, but changing needles is more cumbersome when one screw anchors both.

Stitch Adjustments: Consider ease and range of stitch adjustments for length and width of stitches as well as type of stitch. Most stitch length settings are achieved by sliding or turning a knob or dial. Some machines require the use of a screwdriver to make this adjustment. If a screwdriver is necessary, does the correct size come with the machine? Are settings accessible, clearly marked, and easy to read and manipulate?

Width adjustments are achieved by using either the left or right needle in some 2 needle machines or actually moving the position of the throat plate or knife or changing the throatplate in other machines. Again, note the ease of the operation and range of widths possible.

Determine the procedure for actually changing stitches such as from overlock to rolled hem or four thread overlock to two or three thread overlock. How complex is the procedure? Are the stitches built-in or are special adaptors needed? Do they come with the machine or require a separate purchase, and what is the additional cost? If the procedure is complex, decide how often you will use different stitches.

Tension: Tension adjustment is more often needed when changing stitch type or thread than when changing fabric. Note accessibility and ease of operating tension dials. Are they color coded, numbered, or use a + and - system? Those with numbers should be easier to reset for normal stitching conditions. Tension disks that make one revolution are usually numbered 0 to 9.

Tension dials capable of making several revolutions are usually not numbered but do allow a greater range of tension settings. Some companies using this tension arrangement feature a number system on the barrel of the tension disk to indicate which revolution the disk is on, i.e., 2, 3 or 4. Decide on the system with which you are most comfortable.

Knife Replacement: Cutting knives retain sharpness over extended sewing periods but do dull and must be replaced eventually. Overlock machines operate with two knives—one stationary and one movable. Under normal sewing conditions, the movable knife usually needs to be replaced once for every six stationary blades that are replaced. One extra stationary knife is included in the purchase of most machines. Remember to replace the spare once it is used. Replacement stationary blades cost about $5; movable blades are more expensive, about $20.

On most overlocks, the cutting mechanism can be disengaged. This allows stitching without automatic trimming of fabric. If the knife cannot be disengaged, care is needed when stitching circles or using techniques where trimming is not desired.
**Power and Light Switch:** A separate on/off switch for electric power is featured on some machines. It is often connected to a light over the stitching area. Separate power switches may be more critical when young children are in the home. The machine can be turned off without unplugging. This is primarily a safety feature.

Most overlocks feature a built-in light over the sewing area. Note how well the work area is lighted, presence of glare and ease of bulb replacement. If the machine does not have a built-in light, an auxiliary light source may be needed.

**Presser Feet:** Presser feet options affect ease of operation and versatility of the overlock. Snap-on feet as well as conventional screw-on feet are available. Some brands feature a swing out presser foot, which makes threading easier. Note availability of special feet such as rolled hem, blind hem, elastic or tape guide presser foot. Some come with the machine; others must be purchased separately. The control to raise or lower the presser foot may be located in different places. Note the location and convenience.

Generally, presser feet options don’t affect the overall operation and quality of stitch but should be considered as special features for versatility and sewing ease.

**Special Features:** Note any special features such as free arm models, special tables, availability of dust covers, travel cases, carrying handles, trays for trimmed seam allowance fabric and the accessory case contents. Some machines feature built-in storage for basic accessories such as tweezers, cleaning brush and needles on the machine.

Also note ease of cleaning and oiling, position of thread cutter for easy use, smoothness and quietness of operation, presence of suction cups, if needed, to stabilize machine, and service and warranty arrangements. Often, such details make a big difference in your sewing pleasure. Many companies offer special features to improve quality, versatility or sewing convenience. Differential feeding action ensures even feeding of fabric. These machines have two sets of feed dogs or teeth—one set in front of the needle and one in back. Each set can be adjusted to feed at different rates to gather automatically while stitching or eliminate puckering in difficult fabrics.

Note also seam allowance markings on the machine, direction of hand wheel rotation and ease and comfort of foot control use. Review instruction booklets carefully. Are supplemental books available for more complete use of the machine and is there an extra cost?

**Conventional Machines With Overlock Adaptations**
Currently, a few companies market conventional sewing machines that overcast and automatically trim seam allowances in one operation. Two machines use an attachment which connects to the stitching mechanism like an automatic buttonholer does. This allows the seam allowance to be trimmed away automatically during stitching.

Any stitch on the machine including stretch stitch, zig-zag, blind hem or decorative stitches can be used with the trimming attachment. A true overlock is not possible on these machines. Another company offers a sewing machine with two distinctly separate stitching mechanisms—one is a conventional sewing stitch, the other overcasts and trims. This machine operates without a bobbin in the overcast mechanism. It is available with either two thread or three thread capabilities. The machine has a built-in turntable to swivel the machine to the overcast mechanism on the reverse side of the machine.
Shopping For Your Overlock Machine

Don't hurry when shopping for an overlock machine. Investigate several brands and consider your needs. Try not to allow special offers or sales to influence you. The machine is a long term investment and should be selected with thought and without pressure.

Note how many functions the machine does and the ease of conversion. If the process is cumbersome, you may seldom use some functions. To what extent is convenience sacrificed for versatility?

Collect several fabrics that you normally sew with. These might include bathing suit or actionwear fabrics, or heavyweight crepe de chine, quilted fabrics, or heavyweight functional denims or poplins. Cut them into seam lengths and try each stitch the machine makes on each fabric. This lets you determine how well each machine sews each fabric, and the ease of changing stitches or adjustments. Be sure to try threading the machine by yourself.

Be aware of service. Always buy from a reputable dealer who stands behind the merchandise. A machine that costs a few dollars more from a reputable dealer, may be less expensive in the long run, should problems occur with the machine.

Some dealers offer special instruction classes or regular sessions, sometimes called “clubs,” to help owners learn to use their overlocks more confidently. Take advantage of these if available. Consider your needs and sewing habits. Remember, too, that your viewpoint as the buyer is just as important as the seller’s. Take your time and make a selection that will satisfy you.
<table>
<thead>
<tr>
<th>Type</th>
<th>2</th>
<th>3</th>
<th>3/4</th>
<th>3/4 Mock Safety</th>
<th>4/2</th>
<th>2/3/4/5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>2 thread overedge</td>
<td>3 thread overedge</td>
<td>Overlock with extra row of stitching</td>
<td>Mock safety chain</td>
<td>Chainstitch with 2 thread overedge</td>
<td>Chainstitch with 2 or 3 thread overlock</td>
</tr>
<tr>
<td># of needles</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td># of loopers</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Stretch in seam</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Moderately secure seam</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Very secure seam</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Rolled hem</td>
<td>possible on some machines</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>generally no</td>
<td>x</td>
</tr>
<tr>
<td>Flatlock stitch</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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## Selecting Overlocking Machine Buyer’s Checklist

<table>
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<th></th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
</tr>
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<tbody>
<tr>
<td>1. Brand and Model Number</td>
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<td></td>
</tr>
<tr>
<td>2. Total Cost</td>
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<td></td>
<td></td>
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<tr>
<td>3. Number of Threads: 2, 3, 4, etc.</td>
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<td></td>
<td></td>
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<tr>
<td>4. Number of Needles</td>
<td></td>
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</tr>
<tr>
<td>5. Type of Needle: Industrial of Conventional</td>
<td></td>
<td></td>
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<tr>
<td>6. Types of Stitches: Overlock</td>
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<td></td>
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<tr>
<td>Chain/Safety Stitch</td>
<td></td>
<td></td>
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<tr>
<td>Rolled Hem: Built in/Cost of Separate</td>
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<td></td>
<td></td>
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<tr>
<td>Attachment/Ease of Conversion</td>
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<tr>
<td>7. Ease of Converting to Different Stitches, i.e., 3 to 4 Thread Overlock to Chain, etc.</td>
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<tr>
<td>8. Stitch Quality on Various Fabrics</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9. Stitch Quality with Decorative Threads</td>
<td></td>
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<td></td>
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<tr>
<td>10. Ease of Changing Stitch Width and Length</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Ease of Threading Loopers</td>
<td></td>
<td></td>
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<tr>
<td>12. Color Coded Thread Guides and Diagrams</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13. Tension Dials: Numbered, Color Coded, + or - Ease of Adjusting Tension</td>
<td></td>
<td></td>
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<tr>
<td>14. Knife Blades: Can Be Disengaged</td>
<td></td>
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<tr>
<td>15. Location of Presser Foot Lever</td>
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<tr>
<td>16. Power Switch: Yes or No</td>
<td></td>
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<tr>
<td>17. Location of Light</td>
<td></td>
<td></td>
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<tr>
<td>18. Operates Quietly</td>
<td></td>
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<tr>
<td>19. Machine Stability when Stitching</td>
<td></td>
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<tr>
<td>20. Easy Cleaning and Oiling</td>
<td></td>
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<tr>
<td>21. Instruction Manual: Easy to Understand</td>
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### Selecting Overlocking Machine Buyer’s Checklist, *continued*

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<th></th>
<th>#1</th>
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<tr>
<td>22. Special Features:</td>
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<tr>
<td>23. Additional Features:</td>
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<tr>
<td>24. Store and Salesperson</td>
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<tr>
<td>25. Availability of Service</td>
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<tr>
<td>26. Warranty</td>
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<td></td>
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<tr>
<td>27. Lessons/Classes</td>
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</table>

Adapted from material developed by Ruth Gulbrandson, North Dakota Cooperative Extension Service
### Summary of Machine Types

<table>
<thead>
<tr>
<th>Type (as described by # of loopers)</th>
<th>2 thread overedge</th>
<th>3 thread overedge</th>
<th>overlock w/ extra row of stitching</th>
<th>mock safety stitch</th>
<th>chainstitch with 2 thread overedge</th>
<th>chainstitch with 2 or 3 thread overlock</th>
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<tbody>
<tr>
<td>Description</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td># of needles</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td># of loopers</td>
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<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>stretchin seam</td>
<td>N/A</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>moderately secure seam</td>
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<td>x</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>very secure seam</td>
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<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rolled hem</td>
<td>possible on some</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>generally not</td>
<td>x</td>
</tr>
<tr>
<td>flatlock stitch</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Sewing For Profit

“I really need a new suit, but with my long arms, sleeves in ready-to-wear are always too short.”
“When I cleaned the closet, I found three skirts that are too snug. I wish I knew someone who could alter them.”
“There must be a dozen shades of blue bedspreads but not one really matches the new bedroom wallpaper. If only...”
“What a darling teddy bear! Would you make one for me? My grandson would love it!”

Remarks like these reflect a need for sewing services. If a time for custom sewers exists, it is now. But before you jump into business as a dressmaker, reupholsterer, drapery-maker or quilter, ask yourself, “Is sewing for profit for me?”

A custom sewing business in the home offers many advantages—a flexible time schedule; being your own boss; and low initial investment in equipment, workspace and updating skills. If you have small children, work in the home saves costly day care services. Most families can use additional income from a home business. Custom sewing often begins as an income supplement, but it can develop into a business that makes a substantial contribution to the family’s income. Other benefits are enjoyment and self satisfaction. If you like to sew, other jobs might not provide as much creative challenge as sewing lovely fabrics and working with interesting patterns.

Custom sewing isn’t for every skilled sewer, but it holds potential for many. This publication will help you decide if custom sewing is for you and will show you how to make it a successful business.

If you are sewing for profit already, this publication will suggest ways to make your business more profitable and enjoyable.

**Personal Traits**

Do you have the qualities to be successful at and enjoy a custom sewing business in the home? Think about these important qualities:

- physical energy
- ambition
- initiative
- resourcefulness
- self esteem
- nerve—a risk taker
- tact and diplomacy
- organizational ability
- self-discipline

Let’s see why these personal traits influence your success. A business places many demands on an individual, especially when combining the activity with a home and family. *Physical energy* is needed, particularly in busy periods. You must be able to meet a variety of demands. *Ambition* to do something special and to have a goal worth working for is important. Initiative means reaching out to new opportunities rather than waiting for them to come to you. Do you like to try new challenges or are you fearful? Being resourceful and enjoying new challenges, even seeking them out, are important traits for any self-employed business person. Learning is often a reward of trying the unfamiliar and figuring out creative solutions.

What is your attitude toward yourself and your abilities—your *self esteem*? A business person must have a thick skin. Customers may be critical of your work, but you can’t let one negative comment destroy you. Know your abilities, believe in them, and don’t let difficult customers bother you regardless of whether they are right or wrong. If warranted, make requested changes and forget about the situation. You will never please everyone. On the other hand, don’t let customers take advantage of you.
When working with the public, tact is necessary. Some customers are difficult to please regardless of the quality of work offered them. The dressmaker has a special challenge. When customers look in the mirror, they usually see what they want to see, not the actual image reflected. You may need to help customers save face, but they will usually appreciate your kindness.

Analyze your management abilities. Be honest about your self-discipline. A home business is not for the procrastinator because there’s no one around to make you do the work. Being your own boss may not be easy. Can you schedule time easily? Can you coordinate home, family, and social and work interests with little difficulty? Customers expect work to be done thoroughly and on time. Work that is late or of poor quality because it was done hurriedly will harm your business. Being a good manager, planning a schedule and sticking to it are critical to a successful home business.

Perhaps you don’t have all of these traits. Some can be learned or developed. Often, people have special abilities that don’t surface until needed. Think carefully about your capabilities, actual or hidden. Your potential may be greater than you think.

Family Considerations
In any home business, family support is vital. It’s so important that starting a business in the home should be a family decision because it is your family’s home, too. Your family can’t help but become involved with the business and must cooperate. Family members will have to take phone messages, greet customers and assume some household tasks. Members must accept the fact that clients will take some of the attention formerly devoted to them. Be sure to plan quality time with your family. Don’t forget to sew for them, too.

Home Arrangement
A separate sewing room is desirable but not necessary. Many successful custom sewers have used dining rooms and corners of kitchens and living rooms. If you are waiting for a child to leave home so you can claim the bedroom or for a quiet summer to build a sewing room, you are just procrastinating. Start a custom sewing business and earn enough money to build the extra room.

If a section of a room is your sewing area, a screen helps to hide your work activities. If possible, select a place where equipment and partially completed garments don’t have to be put away. Setting up a machine whenever you sew wastes time. In the custom sewing business, time is money, so use it carefully.

For dressmaking, consider a location that will provide privacy for customers during fittings. Be certain a full-length mirror is available. A nearby bedroom may work well. Special work areas for making window treatments and reupholstering are recommended. Perhaps a basement or garage would be suitable, especially with messy activities such as reupholstering. Existing lighting in these areas may be inadequate but is easily improved. You will need long tables for cutting and sewing window treatments as well as a good sized work space.

Locate the sewing area in relation to other activities. You may want to combine sewing with kitchen and laundry chores, or supervision of children’s play activities. Be careful to keep your hands, clothing and work surfaces clean and free from items that will damage or soil fabric when sewing is combined with other activities.

Basement or second floor sewing areas result in extra steps but provide more privacy and freedom from interruption. With a separate sewing room or area, a telephone extension saves time and steps.
A desk or table with chairs where you can confer with customers gives an appearance of organization and professionalism. So does a display of fashion or interior magazines, pattern books or related materials. An attractive work area will be pleasing to both you and your customer.

**Your Business Organization**

Although most at-home businesses are formed as sole proprietorships, it is wise to know the different forms of business organizations and their advantages and disadvantages. A business may be operated as an individual or sole proprietorship, partnership or corporation.

A **sole proprietorship** is the simplest type of business organization and can be set up at little or no cost. You and the business are considered as one. Assets and liabilities of the business are considered the same as personal assets and liabilities. For example, a creditor can collect from your personal assets if the business has insufficient funds to cover debts.

As a sole proprietor, no separate tax returns are filed. Details of business income and expense are reported on IRS Form 1040 SE (self employment) and on Schedule C of the individual 1040 tax form. Income or loss from the business is added to the individual’s other income or losses and taxed at individual income tax rates. Most custom sewing businesses use the sole proprietor form of organization. It is simple and inexpensive, and requires less complex record-keeping methods than other forms of ownership.

In a **partnership**, the business is co-owned by two or more people who share both profits and losses. A custom sewer may decide to expand the business by adding a partner. Partners have joint control over the management of the business and its assets. Advantages of a partnership are that it is simple to organize and operate, the ability to obtain capital or credit and expand services is increased, and government controls and special taxation are limited. Business income and expenses are reported in a manner similar to a sole proprietorship.

One disadvantage of a partnership may be the sharing of business responsibilities so that each partner receives profits equal to input. It may be difficult to measure if each partner does an equal share of the work. If the partnership breaks up, dividing assets may be difficult. The biggest disadvantage, however, is liability. Each member of the partnership is liable for any debts incurred by any member of the partnership. This liability extends to personal property of the partners. For example, you might have a reupholstery business with a partner who buys a van in the name of the business to deliver furniture. If the partner leaves town without paying for the van, you are liable for the debt. Your personal property, such as a car, could be sold to pay for the business debt incurred by the partner.

If you plan on forming a partnership, seek a lawyer’s advice. Simple agreements can be drawn up that provide for and protect each partner. A lawyer can explain potential problems in detail.

Custom sewers probably will not be involved in **corporations** unless the business expands greatly and leads to more opportunities. Forming a corporation is expensive and involves increased government regulation and taxation. If your business grows to this point, discuss the advantages and disadvantages of forming a corporation with your accountant or lawyer.

Custom sewers may also work on a contract basis with stores or other businesses. In contract work, a custom sewer agrees to make certain items or perform certain services, usually in quantity, for an organization, group or retail outlet. The organization or retail outlet becomes the consumer for the custom sewn work, and it sells or distributes the work to its members or clientele. Contract work can be done by sole proprietors, partners or corporations and involves no legal fees.
The United States Small Business Administration (SBA) has offices throughout the country that offer management assistance. Make an appointment with this agency to discuss your business idea, form of organization, financing and general business operation. The SBA offers many excellent publications and business counseling at no charge. To contact the nearest SBA office, look in your telephone book under U.S. Government, Small Business Administration.

Should You Specialize?
Once you have decided to start a custom sewing business, the next decision involves specializing. Specializing is focusing your business on a particular service, product or clientele. It offers definite advantages and disadvantages.

Advantages
Specializing lets you develop speed and skill in producing a particular item. For example, if you specialize in making draperies, you can develop your own timesaving system. Your skill increases so you produce a better product. When specializing, consider assembly line production. Make 25 to 50 items at one time. If you are sewing appliqued baby bibs, sew the applique on all 25 bibs, then bind the edges on all 25 bibs, then attach the ties to all 25 bibs. Concentrate on eliminating wasted motion.

Specializing lets you direct advertising to certain audiences and narrows the area in which you must keep up-to-date. More importantly, you can concentrate on what you do best and enjoy most. For example, if you are not good at fitting, perhaps drapery construction is an area where you can specialize.

Disadvantages
Concentrating on one kind of sewing and repeating the same steps could become monotonous.

Specializing means you must be aware of market trends and shifts in consumer demand. Your business may be in trouble if you have 50 outdoor chef’s aprons made and suddenly find that consumers want feminine Victorian apron styles. Specializing can also mean “feast or famine” very busy or very slow periods. For example, if you specialize in bridal wear, you may be very busy during the spring and summer but have little or no business during winter. Would such uneven income present problems for you?

Consider carefully the many possibilities for specializing. These include alterations, bridal wear, western wear (including square dance outfits), skating or dance costumes, monogramming, vestments for clergy, window treatments, reupholstery, slip covers, decorator pillows, quilts, patchwork designs, colonial curtain designs, tailored suits for the professional woman, covers for musical instrument cases, dolls, antique doll clothes, and repairs of school band or athletic uniforms.

Government Licenses and Regulations
Each state has some licenses, regulations and other rules that apply to individuals doing custom sewing in the home. Specific regulations for your state are given on the separate insert sheet accompanying this publication. If the insert sheet is missing, contact your county Extension home economist for a copy.

Here are some general regulations you may need to investigate:
A vendor’s license provides the state with a mechanism for collecting sales tax on work subject to sales tax in your state. A vendor’s license allows you to purchase supplies for your business without paying sales tax on them. Some suppliers give a small discount to vendor’s license holders.

Sales tax is collected on custom sewn items in some states. If you operate your business in one of these states and do not charge or report sales tax, you are breaking the law.
Mail order merchandise is subject to sales tax only if it is normally charged in your state and the merchandise is shipped to another address within the state. If the merchandise is shipped to another state, do not charge sales tax regardless of the sales tax laws in your state or the state of destination. The merchandise must be shipped by common carrier. If a customer from another state comes to your place of business, purchases a taxable product and wants to take it with him, sales tax must be charged. To avoid sales tax, the item must be transported to the other state by common carrier.

Registering a business name is required in some states, particularly if you operate under a fictitious name or if you use a trade name. An example of a fictitious name would be “Designer Dressmaking Boutique.” If your name was used, such as “Designer Dressmaking by Suzy Parker,” registration of the business name would not be required. This regulation provides for the owner’s name to be on file should customers have complaints about the business. Also, it prohibits another business in the state from operating under the same name.

Licenses for stuffed items, required in most states, apply to merchandise that uses stuffing products such as polyester fiberfill, cotton batting, urethane foam or straw. Items affected include stuffed toys, quilted items, reupholstered furniture, pillows and infant accessories. The regulation usually involves submitting a sample of stuffing for approval and applying for a license to obtain a label indicating the fiber content of stuffing used.

Flammability legislation in some states may regulate the materials or stuffing used in certain consumer products such as furniture, stuffed toys or children’s clothing. Children’s sleepwear sold across state lines must meet federal standards for flammability. Be aware of regulations in your state concerning manufacture, testing and sale of children’s sleepwear. Contact your county Extension home economist for current textile flammability regulations.

Zoning regulations are local. Contact your township, city or county zoning board for information about your location. Zoning complaints about custom sewing businesses in the home seldom occur unless they cause unnecessary disruption in the neighborhood. For example, complaints may occur if your business creates a parking problem, excess traffic on the street or excess noise, or affects the appearance of your property or the neighborhood. Zoning is seldom a problem in residential areas, especially if there is no business sign in the yard and no neighborhood disruption occurs. In some residential neighborhoods, it may be possible to have the area spot zoned for your home business.

Other legislation may apply in your state. Review the insert accompanying this publication. The local U. S. Small Business Administration office provides information about business regulations in your state at no charge.

It is important to understand and comply with some other government regulations:

Income tax—As a business, income tax on net earnings must be reported and paid to the Internal Revenue Service. A sole proprietorship or partnership reports business earnings and expenses on IRS Form 1040 SE (self-employed) and Schedule C and submits the standard IRS 1040 form. If the business grows to the point where a sizable tax payment is required for the yearly personal income tax, an estimated quarterly tax return should be investigated. Contact an accountant or the local IRS office for the recommended procedure.

Social Security—As a self-employed individual, custom sewers pay Social Security Tax (FICA) on net incomes. The rate changes yearly, so contact your nearest Social Security office for current figures. The tax is reported on the IRS 1040 SE (self-employed) tax form at the end of the year Consult your local IRS or Social Security office for other information concerning this topic.

Retirement—Self-employed persons may want to consider additional retirement programs. Programs are available through insurance companies and brokerage houses. Two plans specifically designed for self-
employed individuals and available through commercial banks are the Keough Plan and the Individual Retirement Account (IRA). Each plan allows a contribution of income to an account without paying taxes on contribution until it is withdrawn. The difference in the two plans is the amount of money that can be contributed each year. The Keough plan maximum is $7,500 and the IRA is $2,000. Money in these accounts cannot be withdrawn before retirement without substantial penalties.

Insurance
Any business, including one in your home, involves certain liabilities. Many types of insurance are available. Investigate basic types of insurance such as liability for personal injury, personal property and business personal property.

Homeowners’ insurance will not cover claims related to business in your home. For example, if a customer comes to your home and falls on the steps, homeowners’ insurance may not cover any legal action because the customer was in your home on business. Homeowners’ insurance may not apply if a customer’s property or your own equipment used for your business, such as a sewing machine, is lost or damaged by fire or theft. Consult your insurance agent to determine insurance coverage. Some companies can add a rider or endorsement to a homeowners’ policy to cover home businesses. Other companies must write a separate policy, which costs more than adding a rider.

Determine how much coverage you need. Do you need to insure against loss of customers’ goods through fire or theft? If you seldom have more than $200 to $300 of customers’ property in your home, your liability is small. If you alter clothing for clients who buy expensive designer garments, the liability is much higher. Three garments that need hems could be worth $2,000.

Consider insurance for completed products. Suppose you make a dress and leave a pin in by mistake. The pin could scratch a customer’s eye as the completed garment is put on.

If your business involves delivering completed goods, your automobile insurance may not cover business trips. Check with your insurance agent. An endorsement or rider for business operation of a personal automobile may be written for a small increase in premium.

Finally, determine how important your custom sewing income is to your family. Initially income may be small, but it could become a substantial amount that the family depends on. If you break an arm and could not sew for several months, could your family do without the income from the custom sewing business? Disability insurance for this type of situation is available.

These are a few of the many types of insurance available. You can be overinsured, so consider your situation carefully. What are the greatest risks? What is the cost of different types of insurance? Discuss the situation with a reputable insurance agent. Shop around for a variety of policies and viewpoints before making a decision. Always be certain to have something in writing that states what your business coverage is. This is especially important if your business liability is being insured under a personal homeowners’ or automobile policy.

The Pricing Problem
Perhaps the most difficult problem for the custom sewer, experienced or inexperienced, is pricing. The problem and the service itself are very individual. For example, a beautician provides a service. In the same town the price range for a basic shampoo and set may differ by as much as $10. The differences in haircuts, coloring and permanents may be even greater. The customer selects and pays for the service that pleases him or her most.
Here are some factors that affect custom sewing pricing:

**Location**—The area in which someone lives and works will affect the price a custom sewer can charge. Locations where higher rates will be more acceptable include urban, suburban and high income areas as well as those with a high percentage of employed women, especially professionals. Rates in rural areas tend to be lower.

**Skill**—The experienced sewer can often command a higher rate depending on the particular skills offered and whether the clientele appreciates and values the skill. A dressmaker especially adept at fitting or redesigning garments has special skills. Some customers might be willing to pay very well for this expertise.

**Speed**—Time is money. A dressmaker who sews fast, and well, has a competitive edge. This sewer can complete more items in the time available and earn more per hour.

**Customer**—Some customers have special needs or different standards for fit and quality of workmanship. They will pay higher rates to someone who meets these All higher standards or provides the special skill.

**Fabric**—The fabric affects the price charged. Fabrics requiring a special knowledge or special techniques can be sewn at higher rates. For example, the custom sewer cutting into an imitation suede fabric at $50 per yard takes a bigger risk than when cutting into a $7 per yard polyester crepe. Expense increases if the custom sewer makes an error with the expensive fabric and must compensate the customer. Also, sewing on imitation suede demands special knowledge and techniques for which the custom sewer should be compensated.

**Competition in the area**—The local competition affects rate setting. Services should not be overpriced or underpriced. This is not good business, both individually or within the community of competitors. A custom sewer should investigate local rates. Drycleaners and department stores often publish rates—ask about them.

Establishing rates can be done in several ways. Basic to any approach is the value of your time. What price is required to make time spent in custom sewing worthwhile? Some sewers want a minimum of $4 per hour, others $5 per hour, and others $8 to $10 per hour or higher. Here are four ways you might use to determine rates

**By item**—Rates are often quoted on an item basis. Most customers prefer to have a cost estimate or price range before they agree to the work. As a custom sewer, determine a price range for certain basic garments and alterations such as hems or zipper replacement. Keep records on how long it takes to complete certain tasks. Multiply time by the hourly rate desired. For example, it takes four or five hours to complete a basic blouse with collar, cuffs and front opening. If you want a minimum of $5 per hour and a blouse takes five hours to complete, the labor charge would be $25. Use a price range of $25 to $30 depending on the complexity of the garment and fitting problems.

**By hourly rates**—Complexity of a garment is a method by which charges depend on the sewing operations required to complete a garment The chart on page 22 lists construction techniques that might be used on a garment, then gives a charge according to hourly rates desired by the custom sewer. The custom sewer would itemize the various operations in a garment, then total them for a cost estimate. This approach is time consuming and may be awkward, but it can provide some guidelines for determining rates and help customers understand the skills and, time required to produce a custom sewn garment. To personalize the chart, check each detail and compare the amount of time you spend on a procedure in relation to that given on the chart. Adjust the chart to better reflect your pace.
By comparing custom-made with ready-to-wear—When the cost of raw materials is included, custom sewn garments cannot be made for less than the price of a comparable ready-to-wear garment, excluding designer garments. A customer can buy off-the-rack in a store for less money. Customers come to the custom sewer because they can’t find what they want or cannot get a satisfactory fit. In either case, special or custom service is desired and should be compensated appropriately.

The total cost of the garment should be comparable to similar ready made clothing, including material and labor. Some custom sewers try to price slightly under comparable ready-to-wear. This pricing procedure gives them a competitive edge and may attract the business of individuals who normally buy ready-to-wear. Only the sewer who works quickly, yet produces a quality product, can afford this approach.

By comparing rates in your location—Department stores and drycleaning establishments often publish rates for repairs and alterations. A custom sewer can usually price competitively with those businesses because of the low overhead possible in home situations. Realize that not all custom sewers or businesses are in competition with you. Your service or skills may merit a higher rate. Be competitive, but do not undercharge for quality work.

Once you decide on a pricing system, use the same approach for all customers. This will avoid confusion in setting rates and avoid problems with pricing differences that could occur. Whatever system is used, give customers a price or estimate regardless of whether they request it. This will avoid possible misunderstandings later.

Although you have determined basic rates and developed ranges, never give a final quote over the phone. Always see the pattern, fabric and the person or piece of furniture or window area before establishing the individual price. A garment for a person with difficult fitting problems takes considerably longer to complete even with a simple pattern. An unbalanced up/down and left/right plaid takes more time to lay out and construct than a balanced plaid or solid color fabric both for a garment or an interior design article. The extra time and knowledge required to complete such an item should be charged for.

Always charge for any special services These may include preshrinking the fabric, shopping for fabric or other supplies, or delivery to the customer. Customers requesting last minute jobs should pay for the extra service.

Consider overhead in determining rates. Servicing the sewing machine and replacing needles, straight pins and ironing board covers are examples of overhead expenses. At the end of the year, total these expenses and divide by the number of garments made. This cost may be small per item, but it is a business expense that should be reflected in rates.

More precise rates can often be established for some home furnishings and craft items. Check around in your area to determine what is being charged. Do not underprice or overprice your work in relation to other similar services. Some guidelines for interior design projects include the following:

- $7 to $9 per foot of drapery rod. If the measurement of the drapery rod is 10 feet, the labor charge should be $70 to $90 regardless of length (up to 8 feet).
- $8 to $10 labor per panel or width of fabric used regardless of length.
- Reupholstering — $200 to $300 per sofa for labor. If you sell fabric, there may be different rates for labor depending on whether the customers buy their own fabric or buy from you. Also, if the sofa requires detail work such as tufting with many covered buttons, charge appropriately.

One guideline used for crafts is a selling price of two to four times the cost of materials. For items in which the cost of materials is negligible, but labor is intensive, another pricing method should be used. Charge more.
for special orders- be sure to get a deposit on them. This is especially important if the order is unique and might be difficult to resell, such as a monogrammed item. See references on pages 28 and 29 for additional information on pricing crafts.

Some customers may question rates and indicate that they can buy a clothing item in a store for the same or less money. If they can, maybe they should! Help them understand that they are coming to you for something special that cannot be found in a store. Also, they should compare the quality of your work with similar store quality. Perhaps they can buy less expensive items in discount stores, but you are not sewing discount store quality.

Itemizing your bill may help customers understand the amount of time involved in making and fitting a custom garment or home furnishing. Include the cost of materials, special services such as shopping or preshrinking fabric, and hours to complete the garment. People who do not sew often do not realize the number of hours required to redesign, fit or actually sew a garment or home furnishing. Record the number of hours and hourly rate to determine labor charge.

Establishing rates when sewing for friends or relatives can present problems. You may decide not to sew for them at all or use the same rate structure as you do for other customers. An alternate approach is trading skills or services. You may sew for them if they baby-sit for you, mow the lawn or paint a room. Both parties will value and respect the service and skills involved with this approach. Whatever your approach, decide before you start your business.

Be careful to never undervalue work. A custom sewer who undervalues his or her own skill and ability can’t expect clients to value and respect that skill and ability. If you undervalue your talents, you do a disservice to yourself, your family and your clients because your talent will never be appreciated.
### Sewing for Profit—Hourly Rates

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<tr>
<th>Construction Technique</th>
<th>$4/hour</th>
<th>$5/hour</th>
<th>$8/hour</th>
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<tr>
<td>Alteration</td>
<td>4—8</td>
<td>5—10</td>
<td>8—16</td>
</tr>
<tr>
<td>Layout, cutting &amp; marking</td>
<td>2—4</td>
<td>2.50—5</td>
<td>4—8</td>
</tr>
<tr>
<td>Match plaids, extra</td>
<td>2</td>
<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Seams &amp; darts</td>
<td>2—4</td>
<td>5—10</td>
<td>4—8</td>
</tr>
<tr>
<td>Collars</td>
<td>2—4</td>
<td>2.50—5</td>
<td>4—8</td>
</tr>
<tr>
<td>Neck facing</td>
<td>3</td>
<td>3.75</td>
<td>6</td>
</tr>
<tr>
<td>Sleeve (set—in)</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>two—piece</td>
<td>5</td>
<td>6.25</td>
<td>10</td>
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<tr>
<td>gathers</td>
<td>5</td>
<td>6.25</td>
<td>10</td>
</tr>
<tr>
<td>Cuffs</td>
<td>2</td>
<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Armhole facings</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Zipper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lapped or centered</td>
<td>2</td>
<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Hand picked</td>
<td>3</td>
<td>3.75</td>
<td>6</td>
</tr>
<tr>
<td>Invisible</td>
<td>2</td>
<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Fly front</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Front opening band</td>
<td>2—4</td>
<td>2.50—5</td>
<td>4—8</td>
</tr>
<tr>
<td>Pockets</td>
<td>2—4</td>
<td>2.50—5</td>
<td>4—8</td>
</tr>
<tr>
<td>Waistband</td>
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<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Elastic casings</td>
<td>1—2</td>
<td>1.25—2</td>
<td>2—4</td>
</tr>
<tr>
<td>Buttonholes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine</td>
<td>.40 ea</td>
<td>.50 ea</td>
<td>.80 ea</td>
</tr>
<tr>
<td>Bound</td>
<td>1 ea</td>
<td>1.25 ea</td>
<td>2 ea</td>
</tr>
<tr>
<td>Sew on buttons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By hand</td>
<td>.30 ea</td>
<td>.40 ea</td>
<td>.65 ea</td>
</tr>
<tr>
<td>By machine</td>
<td>.15 ea</td>
<td>.15 ea</td>
<td>.25 ea</td>
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<tr>
<td>Belt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tie</td>
<td>2</td>
<td>2.50</td>
<td>4</td>
</tr>
<tr>
<td>Buckle</td>
<td>3</td>
<td>3.75</td>
<td>6</td>
</tr>
<tr>
<td>Topstitching</td>
<td>2</td>
<td>2.50+</td>
<td>4</td>
</tr>
<tr>
<td>Pleats</td>
<td>2</td>
<td>2.50+</td>
<td>4</td>
</tr>
<tr>
<td>Underlining</td>
<td>4—10</td>
<td>5—12.50</td>
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<tr>
<td>Lining</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Simple dress</td>
<td>6—12</td>
<td>7.50—15</td>
<td>12—24</td>
</tr>
<tr>
<td>Coat &amp; jacket</td>
<td>8—16</td>
<td>10—20</td>
<td>16—32</td>
</tr>
<tr>
<td>Skirt &amp; pants</td>
<td>4—8</td>
<td>5—10</td>
<td>8—16</td>
</tr>
<tr>
<td>Cover buttons</td>
<td>.20 ea</td>
<td>.25 ea</td>
<td>.40 ea</td>
</tr>
<tr>
<td>Help with pattern &amp; fabric selection</td>
<td>2</td>
<td>2.50+</td>
<td>4</td>
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<tr>
<td>Hem</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>No edge finish</td>
<td>3</td>
<td>3.75</td>
<td>6</td>
</tr>
<tr>
<td>Edge finish</td>
<td>5</td>
<td>6.25</td>
<td>10</td>
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</table>

Adapted from material by Jacquelyn Orlando, Extension Specialist in Textiles and Clothing, Iowa State University, Ames, Iowa. October 1974

Advertising
To be successful in the custom sewing business, you must do quality work and let customers know that you are in business. Some custom sewers never advertise and others do only initially. Others advertise on a regular basis. Most people associate advertising with placing ads in a newspaper or weekly shopping publication. Advertising, however, can be formal or informal, and you should think about both approaches.

Formal advertising includes placing commercial advertisements. Newspapers and telephone book yellow pages are among the most common, but they are expensive. Local shopping newspapers are less expensive and widely read. Church bulletins and apartment complex newsletters are other places to advertise.

Let local fabric stores, department stores and dry cleaners know about your business. Take examples of your work, especially when dealing with fabric stores. If you have a specialty such as tailored suits, imitation or natural suedes, or fitting, let the store know about it. Provide some price guidelines, too. Give fabric store managers plenty of information to provide to customers who request names of custom sewers.

Contact the Veterans Administration, nursing or convalescent homes, or associations for the handicapped. These agencies often seek custom-made garments with special adaptations for physical handicaps.

If you have special skills, capitalize on them. If you specialize in alterations, contact weight reduction clubs. If tailored suits for women are your specialty, contact organizations of business and professional women.

Although an added expense, printed business cards to distribute or leave with prospective customers are a good idea. Business cards or simple notices can also be posted in laundromats or on community bulletin boards located in libraries or supermarkets. If zoning regulations permit, display a sign in your yard.

Informal advertising methods usually bring as much, if not more, business than formal approaches. Word-of-mouth is often the best and the least expensive advertisement. Try to get your work before the public eye. Items such as choir robes, cheerleading or band uniforms, square dance costumes, gowns for community choral or fraternal groups, theatre costumes or window treatments for public places are examples. If done well, the quality shows, and word-of-mouth advertising begins.

Another type of informal advertising is making display garments for fabric stores. Well-made garments will be noticed by both sewers and non-sewers. Today, many sewers employed outside the home have little time to make their own clothing, yet they appreciate the quality, fit and distinctive nature of custom-sewn clothing and are willing to pay for it. Perhaps the store will allow you to include your name or business card on the display garments as advertisement.

Make contacts in the community. A good business person is involved in community activities. Whether you choose the PTA, church, 4-H, firemen’s auxiliary or other local service organization, these contacts are useful.

When participating in community activities, look your best. You and your family should be walking examples of your work. Try to make unique items that really illustrate your skill. That’s good advertisement, and you and your family members will enjoy the special treatment.

Mail order—If you specialize in gift or other specialty items such as dolls, patchwork, decorative pillows or western shirts, consider selling nationally by mail order. Advertise in trade or craft publications. Check the library for names and addresses as well as the classified ad section of the back of sewing and needlework magazines.
A word about consignment selling of custom-sewn items, especially crafts—determine the consignment outlet’s policy on sale of display items. Good advertising results from display of your work; however, items shown in sunny windows may become faded and those placed in the showroom may become soiled or shop-worn. Are you willing to sacrifice the income from one item used for such advertisement? Would you prefer your work not to be exposed to this treatment? Consider the alternatives.

Finally, the best advertisement is a job well done. It’s the least expensive, too. Satisfied customers are your best salespeople, so always take pride in your work and provide the highest quality possible.

**Keeping Records**

Accurate records help you know your business and give your customers better service. Two types of records should be kept: financial and customer.

Good financial records help show how profitable your business is, identify areas where profitability can be improved, revise price lists, remember clients, and prepare complete and accurate tax returns. Financial records need not be complicated. Basically they should be easy to use and retrieve, simple to understand, accurate and up-to-date.

You may or may not want to check with an accountant initially to help you prepare a record keeping system or your income tax forms. If you do, call an accountant and check on the cost of these services. Internal Revenue Service Publication 583, “Record Keeping for a Small Business,” is a helpful reference. Copies are available at no charge by calling or writing your nearest IRS office.

As a small business, you will need to record how much money comes in and from what source, and how much money is paid out and to whom. Your income will generally be from customers paying for products and services. Record income in a notebook, ledger or even file cards, including date, amount paid, sales tax, customer’s name, form of payment such as cash or check, and other pertinent comments such as down payment and type of service.

A business may deduct costs of operation when reporting income tax. You should know how much it costs you to operate the business. Accurate records show if you are losing money, operating inefficiently or under-charging for services. Expenses to record include purchase and maintenance of equipment, sewing supplies, office supplies (business cards, record keeping supplies, postage, envelopes, work agreements), insurance, regulatory fees and licenses, advertising, mileage if you use your automobile for business, professional update expenses (books, magazines, costs to attend workshops or classes), professional services (lawyer or accountant), and gifts or entertainment expenses (Christmas cards to customers).

When you operate a business in your home, additional expenses for the home may be deducted. To claim deductions, Internal Revenue Service guidelines indicate that an area of your home, such as a room or section of a room, must be used solely and exclusively for your business. For example, if you live in a five room house and use one room solely for your sewing business, one-fifth of household expenses can be deducted from income for tax purposes. These household expenses include gas and electric, telephone and additional services related to the home upkeep such as lawn mowing and housepainting.

To keep business expenses separate from personal expenses, consider opening a checking account for your business. If possible, pay all bills by check so you will have a record of and receipt for payments. If you write more than five checks per month, the cost of a separate checking account, which is deductible as a business expense, will be worthwhile.

Customer records will help you save time and energy, serve your customers better and present a more profes-
sional image. Some records you may want to keep include customer measurements, pattern alterations, references, copies of work agreements, and special notes or problems about serving the customer. Records may be kept alphabetically in large envelopes or file folders, or on file cards. Use a box or small file cabinet to keep records together. See the end of this for suggested customer record forms.

**Work Agreements**

A work agreement can be a help in your custom sewing business. It doesn’t have to be formal with many legal terms, but it is binding and protects you and your customer. It gives a businesslike image.

A work agreement simply states the terms under which the work will be done and paid for. It can be on a special printed form, handwritten or written on a sales ticket. Use carbon paper so that both you and the customer will have a copy. You’ll want to include some of the following items on the work agreement:

1. Business name, address and phone number.
2. Date of agreement.
3. Customer’s name, address and phone number.
4. Description of work to be done (include pattern number, view, changes, special details, fabric).
5. Materials supplied by customer.
6. Materials and services supplied by custom sewer (thread, interfacing, preshrinking, shopping, cost of materials).
7. Labor charge.
8. Methods of payment (cash, check, credit card) and timetable for payment. If the dressmaker supplies materials, the cost should be collected in a down payment. If the customer provides materials, they serve as the customer’s investment in the work rather than as a down payment. Never allow work to leave your home without full payment.
9. Final fitting and completion date.
10. Return clause. You may want to state a time limit when work may be returned for changes (such as 48 hours or one week).
11. A clause providing for sale of unclaimed work may be included.
12. You may want to add a disclaimer for loss or damage due to theft or fire unless covered by insurance.

A work agreement is designed to protect both you and your customer and should be signed by both of you. If using a printed form, prepare a small quantity to begin with as you may want to make changes after using the form. If you have specific legal questions about a work agreement, consult an attorney. See the end of this resource for an example of a work agreement.

**Customer Relations**

Working with the public can be enjoyable and challenging. Tact and patience are critical qualities to develop. Deal with clients in a manner that neither offends them nor allows them to take advantage of you. Establish business policies at the beginning. Try to anticipate problems or special situations that may come up and decide how you want to deal with them. Some policies that you may want to consider are as follows:

- Alterations or repairs will be done only on clean items.
- Fabric and notions should be preshrunk by customer.
- Customers must wear same foundation garment and shoes for measurement and fitting sessions.
- Customers should be told your business hours so they will know the best and most convenient times to reach you. If you have many clients employed outside the home, allow at least one evening or time on Saturday when they might contact you.
- No garment will leave the premises until paid for in full.
- Establish a time limit, such as three days or one week, for unsatisfied clients to return work for changes. Thus, you will not be held responsible for free alterations when a customer gains or loses weight.
These practices will give you control over your business. Good customer relations cover a vast area. Always be tactful, sympathetic and attentive to clients. Convince clients that you are genuinely interested in giving them a good product or helping them look their best. If you specialize in clothing, a client may ask you to alter or make a garment in a way that might be unattractive. If you specialize in home furnishings, a client may want draperies made in a fabric that will not wear well or is inappropriate. Do not antagonize or insult clients, but try to convince them that they might not be pleased with the result. Work that fails to satisfy you or the customer is a poor advertisement for your business.

When working on an item, you might decide that to changes from those originally agreed on should be made. Be certain to call your client and discuss any change so the work will not be questioned or unsatisfactory when completed.

Keep appointments with customers. Maintain a date book and check it daily. Help customers realize that it’s important for them to be on time for appointments. They would not be a half hour late for their lawyer or doctor.

Occasionally you will be asked to perform work that you have little or no experience with. Don’t practice on your customers unless they have agreed to it. Indicate that you are unfamiliar with a fabric or technique and help them find another resource. You could inform the customer that you are not as familiar with that technique as you would like to be, but that you would take the time to learn about it. After practicing you could do a job both you and the customer will be pleased with. It is better to say “no” than do a poor job. Realize that you have a responsibility to correct mistakes. In the long run, you will feel better about making corrections and customer respect and goodwill will increase.

Sometimes it is necessary to protect yourself from difficult customers. A work agreement and good customer measurement charts will help. For example, you may want to mark down the hem length agreed on at the final fitting. If the customer changes her mind when the garment is completed, you should not have to change the hem without charge if it matches the agreed on length. Each situation must be evaluated individually, but remember to protect yourself as a business person.

Clients may question rates that you charge. Only you can evaluate whether your rates are fair and in line with local competition, and whether they reflect the special abilities for services you offer. If a client insists that items you make can be purchased for less in a store, then suggest that he or she do so. If you produce quality work, most clients will be willing to pay for the service.

To improve your business, consider asking customers to evaluate your work. This helps with future business, and most customers will believe your sincerity in serving them. Use a form they can complete (sample at end of this resource section) when the work is finished. Include a self addressed, stamped envelope. Or customers may simply discuss their likes and dislikes with you.

Managing Your Time
A major challenge for many custom sewers is managing time. Sewing as a hobby is done off and on or when time is available. Sewing as a business is done on a regular basis. The successful custom sewer must possess or develop self-discipline. If you truly enjoy your work, you should look forward to it.

Establish work hours or days that fit your needs and those of your clients. You may work daily from 8 a.m. to noon or 9 a.m. to 3 p.m. when children are at school. You may be a night owl who is most productive from 10 p.m. to 2 a.m. Perhaps Tuesday through Thursday might be your work days, with Monday and Friday left for family responsibilities or other activities. Determine how many hours a week you want to work and accept only that amount of work from clients. Whatever your schedule, stick to it. You must go to work even though you don’t leave your home.
Time is money to a custom sewer! Develop a system to use time efficiently. Here are a few pointers:

- Cut out several garments at one time, including interfacings and linings for each. You will need a good supply of pins.
- Whenever possible, stitch as many parts of a garment as possible before going to the ironing board to press.
- Always have a basket ready with handwork such as buttons to sew on and hems to complete.
- Keep work area relatively neat and put equipment back where it belongs. Hunting for a special notion can waste time and break concentration.
- Keep equipment in good working order and become adept at servicing it yourself regularly. Good equipment that works properly is a time saver and makes your job easier.
- Have a box, plastic bag or container for each customer’s materials, fabrics, notions and patterns.

Work with customers by appointment. If possible, schedule appointments, fittings or home visits for price quotations of interior design work on the same day or during the same part of the day. This practice reduces wasted time and interruptions, which break concentration and work pace.

A major problem for individuals with a home business is friends who telephone or drop by. They often do not realize that you have time commitments. If friends call, ask them to call back or offer to call them at a later time, explaining that you work steadily between certain hours. Before long, friends will realize which days or hours are convenient for you.

The Professional Approach

Sewing as a hobby and sewing as a business are two different things. When you sew as a business, you are a professional with standards to maintain. First, consider yourself and your personal appearance. Whatever your work interests—clothing, home furnishings or crafts—be neat and well-groomed when clients call at your home. That includes your clothing, hair and makeup. As a dressmaker, your clothes should look professional and set an example. Wear clothing you have made. Sew distinctive clothing for yourself and family members. Attractive, well-made and well-fitted clothing is constant advertising as you interact with people in your community and clients in your home.

If your interests are in home furnishings such as window treatments, slipcovers or reupholstery, your home should be an example of your work. Keep the room designs in your home current, attractive and distinctive. Whatever kind of sewing you do, keep rooms that customers view in order. Ten minutes a day spent tidying up will give rooms a neat look and customers a positive impression. Cluttered areas not only look bad but can be hazardous.

Visit supply houses such as fabric shops, interior fabric centers and craft shops. Get to know the managers. They can help you learn about trends and send business to you. Shop in better clothing and furniture stores to see the very best merchandise. Shopping is free, so choose expensive stores. What are the trends in fabrics, designs and techniques? With clothing, look to see how garments are made. What kinds of buttons and buttonholes are used? Are buttons self-covered, small, large, simple or decorative? Are bound, machine, loop or no buttonholes the trend? Are hems done by machine or hand? Are linings attached to seams with thread chains?

With furniture, is cording being used on cushions? Are solids or prints popular? Are stripes being used in interesting ways? Are cushions made of one fabric, or is the trend toward solid colors on the back and designs on front? When you know how the best merchandise is treated, you can incorporate the same ideas into your own work.
Subscribe to professional and trade publications to keep up-to-date. A few possibilities are listed on this page. Build a small reference library. A good basic sewing reference is necessary. Consider some books on special topics such as sewing with imitation suedes, sewing with natural suede or leather, or energy-saving window treatments. A reference on wardrobe planning, personal color selection or interior design will broaden your own background and help you provide more service to clients.

Enroll in update classes or attend fashion shows to learn what’s new. Always be aware of new opportunities. You will feel more confident and competent and offer a better service to clients. Being a custom sewer is not just sitting at home and sewing. It is also knowing what is fresh and new in the areas that relate to your special Business.

Publications

Craft’s Digest. Extension Specialist, Related Art, Pennsylvania State University, 208 Armsby Building, University Park, Pennsylvania 16902.
  Newsletter focuses on problems related to marketing crafts A different topic is explored in each issue.

Dressmakers Dialogue. Published by Leiters Designer Fabrics, Box 978, Kansas City, Missouri 64141.
  Newsletter designed for custom dressmakers with articles relating to techniques used in the trade, special custom techniques or details and aids for conducting a business.

Home Sewing Trade News, P.O. Box 287, 330 Sunrise Highway, Rockville Center, New York 11571.
  Newspaper designed for fabric store owners/managers and focuses on what’s new as well as trends and success stories in retailing. Leiters Sewing News.

Leiters Designer Fabrics, Box 978, Kansas City, Missouri 64141.
  Contains construction tips and pattern ideas for sewing enthusiasts.

Making It, P.O. Box 286, 330 Sunrise Highway, Rockville Center, New York 11571.
  Newspaper designed for home sewer/consumer market focusing on new products, fabrics and trends.

Mind Your Own Business at Home, 2520 N. Lincoln Ave., #60, Chicago, Illinois 60614.
  Newsletter about home business-related resources, information, organization, needs.

Sew Business, 2100 N. Central Road, P.O. Box 1331, Ft. Lee, New Jersey 07024.
  Magazine is designed for fabric stores and focuses on merchandising trends, new products and fabrics. Sew News, P.O. Box 1790, Peoria, Illinois 61656. Newspaper designed for home sewer/consumer market focusing on new products, fabrics and trends.

Silver Thimble, 311 Valley Brook Road, McMurray, Pennsylvania 15317.
  Publication includes many creative construction ideas including tips about sewing specific patterns.

  Newsletter has strong construction technique orientation, often with detailed “how-to” instructions; also focuses on fashion and selecting compatible patterns, fabrics and techniques.

The Needle People News, P.O. Box 115, Syosset, New York 11791.
  Newsletter has tips, ideas and sources of products and information.

Books


Leiter, James C. and Joan Stanley. Discover Dressmaking as a Professional Career. Leiters Designer Fabrics, P.O. Box 978, Dept. DD, Kansas City, Missouri 64141.

Bulletins

*Recordkeeping for a Small Business*, IRS Publication 583. Available at no charge from IRS office.

*Small Business Administration Publications*. A list of publications can be obtained by writing Small Business Administration in your area. Most publications are free or carry a small charge.


  #175—How and Where to Sell
  #176—How to Price and Protect Your Work #177—How to Keep Records
  #178—How to Promote Your Product and Yourself

Organizations
Custom Clothing Guild, 6705 147th Court N.E., Redmond, Washington 98052. Professional association that provides service and support for professional custom sewers who work at home; publishes newsletter.

National Alliance of Homebased Businesswomen, P.O. Box 95, Norwood, New Jersey 07648. Professional association for women with home businesses; publishes newsletter; holds annual meeting and meetings by mail.

National Association for the Cottage Industry, P.O. Box 14460, Chicago, Illinois 60614. A nonprofit professional organization designed to help and promote the at-home business person.


SCORE—Service Corps of Retired Executives
An organization of retired executives who volunteer services to assist small businesspersons. The service is provided at no charge. SCORE can be contacted through the Small Business Administration. Ask for the location of a local chapter.

U.S. Small Business Administration—Write or call office in your area.

Reaching Your Potential
You, like most people, have potential you don’t know exists. Sometimes situations occur in life that present challenges. When individuals meet these challenges, they are often surprised at themselves. Starting a home business has helped many people experience that same feeling. You will never realize your potential, you will never know what you can accomplish, unless you try. A hobby-based home business allows you to grow with the business. As it expands, so does your knowledge and experience. As the business expands, so does your ability to deal with it. If possible, use the earnings from a home business as supplemental income in the beginning. It is much easier to begin if another regular income already exists. Often businesses grow and provide a substantial income. Gradual growth is usually desirable both for the business as well as for the new business person.

Look at your situation, personal traits and the potential for your business idea. Be honest with yourself but don’t let fear of failure deter you. A homebased business isn’t for everyone, but it may be for you.

The following pages are examples of invoices for use in sewing service.
Kansas 4-H Clothing Leader Notebook

Level I

Me and My Body
Grooming and Impressions ................................................................. 3
Design Basics .................................................................................. 9
Daily Care, "A Head Above" .............................................................. 15

Care and Maintenance
Daily Care Means Longer Wear ....................................................... 25
Sewing on a Button .......................................................................... 39

Textile Science
How Fabrics Get Color .................................................................... 45
Introduction to Fibers ...................................................................... 53

Creating With Fabrics and Fibers
Ready, Set, Sew ............................................................................... 57
Fabric Preparation ......................................................................... 71
Straight as an Arrow—Measuring .................................................... 79

Wardrobe Planning
Clothing Basics .............................................................................. 89
Clothing Compliments .................................................................. 95
Giving and Receiving .................................................................... 101
Grooming and Impressions

Clothing & Textiles, Level I, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• What are good grooming habits
• How to achieve good grooming habits
• How grooming habits affect impressions of others

ABOUT THEMSELVES:
• How to perform good grooming habits
• How to practice good grooming habits
• How to plan for personal change in grooming habits
• How to evaluate personal grooming progress

Materials Needed:
• Copies of Activity Sheet
Optional:
• Polish remover
• Nail file
• Small bowl with warm soapy water
• Orangestick or toothpick wrapped in cotton
• Towel
• Hand lotion
• Nail polish
• Pencils

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

How many of you have ever been in an airport, to an amusement park, or other public place and watched people go by? Did the appearance of those people cause you to form an opinion about them? Can you share with the group what you thought?

We tend to form opinions of others based on how they are dressed. We use their clothing and appearance as clues to help us make up stories about where they are from, what their job might be, or what they are like. Strangers use your appearance and clothing for clues about what you are like. What does your appearance tell others about you?

Things appearance tells us—How we form impressions

Now we are going to do an activity that will help you understand how your appearance is used to impress others. I am going to show you some pictures of different people and ask you some questions about your impressions, or what you think the picture tells you about the person.

Leader Notes

Have members sit in a comfortable place. If they do not know each other, have them introduce themselves and answer this question. You begin. Or, you can have some pictures clipped from magazines and show each member. Let them respond to the appearance of the person in the picture. Ask them to tell how they feel about the person and why.

Make a set of flash cards, using pictures of different people from magazines or books. Try to use a variety of people, taking clues from the guided questions given in the activity.
Leader Notes

1. Is this a man or woman, a girl or a boy? How can you tell? What clues do you see in this picture?
2. Tell me a story about this person in the picture. (Just because a child can make up a story about someone from clues does not make it true. ALL APPEARANCE CLUES can be misleading. Sometimes people are different than they appear.)
3. What might be the age of this person?
4. How can you tell if this is a healthy person?
5. Are there clues that this person might be a part of some group? (letter jacket/sweaters, scouts, military, gang identification code and colors, etc.)
6. What emotions do you think this person is feeling? Look for clues in facial expression and body language (the way your mouth or eyes express feelings, the way you move or place your arms or legs gives a message). Who would like to demonstrate a happy emotion? a sad emotion? a scared emotion?
7. What profession, based on uniform or clothing might this person be?

Ask the members if they have ever gotten to know someone who seems to become more likable the longer/better they know them? Discuss how people may look different (disabled, scarred, different race, etc.), but after you know them, you will feel more comfortable around them.

A good indication that a person can care for himself or herself is if they practice good personal grooming habits. Let’s look at a well groomed person from the floor up.

Feet: Toenails are trimmed and clean. Socks changed daily, shoes free from dirt and mud. (If it is not an economic issue for your members, you could mention why polish is good for shoes—help them last longer.)

Hands: Fingernails trimmed and clean, hands clean. If polish is worn, it should not be chipped.

Face: Clean and washed daily and after meals, teeth brushed and flossed.

Hair: Clean and styled, with a style that makes you feel good. Hair should be washed when needed. (Some styles are not designed to be washed every day.)

Overall: Clothing should be functional, practical, clean and comfortable. If you know how to mend, all tears and mending should be taken care of before wearing. Shower or bathe daily when possible and get plenty of rest, exercise, and nutritious food.

What you can do to become better groomed.

1. Begin a new habit. Try one new grooming habit and do it regularly until it is part of your daily routine (at least 21 days). Then begin another one.
2. Organize grooming aids in one place. For example, what would you need to have in the bathroom with you if you were getting ready for school, for shopping, for playing ball?
3. Keep your sewing box in your room for care of clothing. If repairs or replacements are needed, do it right away or tell an adult. Treat any stains as you remove a garment or tell an adult. Hang clothes up or put in laundry basket. DON’T THROW CLOTHES IN A HEAP! If you do, bugs may get into them and eat holes in your clothes, and walking on your clothes will make them wear out sooner.

By doing these things, good grooming will become a habit. A habit you will not have to think about and you will be ready for other opportunities as they come your way.

To have hands that you can be proud of, try a weekly manicure.

1. First remove polish, if you have any on.
2. Girls file nails to a nice rounded shape. File from sides to center using short, one-way strokes, not a back and forth movement. Boys clip nails slightly rounded. File if needed to smooth edges.
3. Soak each hand in warm soapy water to clean the nails and soften the cuticles.
4. Use a fingernail file to clean under nails.
5. Using an orangestick or toothpick wrapped with cotton, push back the cuticle until base of nail is smooth and a half moon shows. Members may choose to push back cuticles with a towel when drying hands.
6. Rinse and dry hands thoroughly.
7. Apply lotion to keep hands and cuticles soft.

(NOTE: To clip toenails, clip straight across so that ingrown toenails do not develop. To clip fingernails, clip with a gently rounded curve.)

DIALOGUE FOR CRITICAL THINKING:

Share:
Q: How do people dress to imitate someone they admire?
A: Answers will vary. Ask about hair style, colors, uniforms, etc.

Q: In what ways do your friends dress alike?
A: Answers will vary. Be sure to question about grooming (clean hair, etc.)

Q: What good grooming habit do you now practice?
A: Answers will vary.

Process:
Q: What good grooming habit would you like to start? Write one goal.
A: Answers will vary. Help members make a plan about how they could do this.

Q: Why is it hard to break habits or change?
Generalize:
Q: How could you improve the way you care for your clothing?
A: Answers will vary, i.e., pretreat spots, repair tears, toss loosely in laundry basket.

Q: What other kinds of habits should we evaluate?

Apply:
Q: How will you act differently in the future because of what we learned today?

GOING FURTHER:
• Make grooming kits to donate to area homeless shelter (soap, tooth paste, toothbrush, nail clipper, dark hand towel, wash cloth, shampoo).
• Allow members to experiment with grooming aides.
• Use a video of actors to discuss how people act that may not be true to themselves at all. Discuss how some people may appear one way and be completely different than the impression they present.

REFERENCES:

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University.

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Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; Martha White-Huling, Extension Specialist, 4-H Youth Programs; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team.
GROOMING
CLOTHING & TEXTILES, LEVEL I, ME & MY BODY
Activity Sheet

You’re Looking Better Than Ever

Directions: Answer each question and prepare the necessary materials.

1. With a partner, develop a list of standards for good grooming. How would you rate your own grooming on such a scale?

2. List grooming habits you now have.

3. What are some ways you could improve your grooming habits?

4. Develop a plan to improve your grooming habits by filling in the chart below.

<table>
<thead>
<tr>
<th>Grooming Habits</th>
<th>How often?</th>
<th>What skills or information do I need to improve?</th>
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5. Make a chart showing your progress or improvement on the back of this sheet. Set it up like a calendar.
Design Basics  
*Clothing & Textiles, Level I, Me & My Body*

What Members Will Learn . . .

**ABOUT THE PROJECT:**  
- Design elements—line, color, and texture  
- Use of these elements in dress

**ABOUT THEMSELVES:**  
- To consider design elements when deciding what a garment might look like on them—self-evaluation skills  
- To recognize the design elements in each garment chosen  
- The importance of observation skills

**Materials Needed:**  
- If outdoors, paper or plastic bags  
- Copies of Activity Sheet, Texture Scavenger Hunt—create a list of items that are indigenous to your environment; can be completed indoors by having examples of the items listed and having members categorize them  
- Pencils  
- Box  
- Scissors  
- Colored markers  
- Scraps of fabric  
- Paper to draw designs on  
- Copies of Member Handout  
- Optional activity—magazines, catalogues, scissors, sketching paper, pattern book

**ACTIVITY TIME NEEDED:** 45 MINUTES

**ACTIVITY**

Today, we are going to talk about design. Design means to plan something. The elements of design are the tools with which we plan a space, such as a room, a picture, a garment, or our appearance from head to toe.

The elements of design that we use on ourselves are color, texture, line, shape and form. Each one of these elements can be used to change the look of a particular space. Let’s begin by talking about each one of these elements.

**Line, Shape, Form**—Lines create shapes and forms. Think of a square. It has four straight lines. It is flat, so we call it a *shape*. Now think of a box. Count the number of lines (edges) the box has.

**Leader Notes**

Welcome all members and have them sit in a comfortable place. Ask them to introduce themselves if they do not already know each other and state a tool used to build or change something. You begin.

Allow the members to count the number of lines the box has. (12)
Take a moment and discuss lines that are apparent in the room. They may be windows, walls, upholstery or the designs in the clothing members are wearing. Pass out and review the Member Handout, “Line and Design.”

Because it is not flat, we call it a form. Lines are used to create all types of shapes and forms. Lines don’t have to be straight. What shapes are created with straight lines? What shapes are created with curved lines?

Vertical lines: go up and down and seem to make objects more narrow and tall.
Horizontal lines: lay flat and seem to make objects appear wider and more sturdy.
Curved lines: can seem graceful and soft or appear bolder.
Zigzag lines: appear active, fast and exciting.
Diagonal lines: add movement and function; they can draw attention to or away from a particular point.

Take a moment and look at your neighbor’s face shape. Is it different than yours? Likewise, each of us have a unique body form. This is why we need to understand how to use the design elements of color, texture and line to make ourselves look our best. Most importantly this is why we may not be able to dress exactly like our friends. What looks good on them may not look as good on us.

Color is often the first element you notice. Color is very important to the response each of us feels when we see any item such as a garment or a room. We can only see color when there is light (that’s why everything looks black at night). Some colors have a different feel. One way to group colors is by their feel. Warm colors are red, orange and yellow. They seem warmer in temperature. Cool colors are green, blue, and violet. These colors seem cooler in feel.

Some important words you need to know about colors are hue—the name of a color (red, blue, etc.), value—the lightness or darkness of a color (light is a tint, dark is a shade), and intensity—the brightness or dullness of a color. Value is best exhibited in black and white photographs. The brightest of color is a pure hue and the dullest of a color is almost gray.

Texture is the feel of an item. Different textures add variety to life and are all around us. Think of sandpaper, metal, rocks, fur, burlap, velvet and peaches. Each of these have a different texture. Whether you know it or not you react to texture. Some textures make you want to touch them, others are the opposite. Would you want to touch a porcupine? a fuzzy kitten? Looks can sometimes be misleading when it comes to texture. Have you ever seen something that looked soft, or stiff, or slick, and then you touched it and found that it wasn’t that way at all? Were you disappointed?

The important thing about texture, when it comes to clothing, is that rough textures seem to take up more space, smooth textures seem to recede (take up less space).

We can use our knowledge of the design elements to make our form look more attractive. As you can see, the combinations of line, color and texture are endless. Something can look different by changing one or more
of the elements. The more you experiment with them the more you will understand them. Now you will be able to use art elements to your benefit, on both yourself and your surroundings. So have fun with line, color and texture.

- Do all textures feel the way they look?
- Why might some textures feel similar but look different?
- Which textures do you like best?
- Would you say there are more smooth or rough textures in this room?
- What other words can you think of which describe textures?

Possible answers are: smooth, rough, fuzzy, nubby, grainy, bumpy, spongy, silky.

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Name an example in this room of a horizontal line, vertical line, curved line.
A. Depending on room—windows, door, chairs, upholstery print, lamps, etc.

Q. Is pink a tint or a shade? Are burgundy and rust tints or shades?
A. Tint and shades, respectively.

Q. How does wearing different colors or textures make you feel?

Q. Why is it important to know this?

Q. What does hue mean?
A. The name of a color (e.g., blue, yellow-green, magenta)

Process:
Q. How would a fuzzy, bold checked sweater look on a short person?
A. It would take up more space thus they would look shorter and bigger.

Q. What was one of the most important things you learned today? Why?

Generalize:
Q. What is one thing to do differently the next time you select a garment or pattern? Why?

Q. What are the consequences of wearing a color or texture that is not suitable for your coloring or body shape?
A. Doing so will not enhance and may detract from your natural features.

Apply:
Q. What color might a doctor want his waiting room to be? Why?
A. Blue. It’s a soothing, calming color.

Q. Discuss how design—line, color, texture—is used to send messages in sports uniforms.
GOING FURTHER:

- Have members take pencil etchings or charcoal rubbings of various textures and make a collage of the etchings.
- Have members make a texture board by gluing samples of different textures onto a small piece of poster board.
- Have member and a partner (maybe an assisting adult) identify:
  - skin tone
  - hair color
  - eye color
  - body shape
- Then have them select the features they would like to emphasize or de-emphasize. Have them answer the above questions using the following elements of design: color, form, line, shape, texture.
- Prepare a notebook of different textures by gluing samples of different textures on small sheets of poster board and place them in waiting rooms at doctors, dentists, or other offices.
- Prepare a poster on the effects of different lines of clothing on appearance.

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*Home Survival and Design*, Kathy Vos, 4-H Youth Development Programs, University of Wisconsin, 328 Lowell Hall, Madison, Wisconsin 53703

*Clothing Speaks*, Marilyn Stryker and Jereldine Howe, Clothing and Textile Specialists, Kansas State University Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506

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Texture Scavenger Hunt

Some possible suggestions for textures for members to look for in their own environment. This list could be shortened or lengthened.

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<tr>
<td>24. sticky</td>
<td>25. warm</td>
<td>26. cracked</td>
<td>27. crepy</td>
<td>28. crinkly</td>
<td>29. crumple</td>
<td>30. downy</td>
<td>31. even</td>
<td>32. feathery</td>
<td>33. filmy</td>
<td>34. flaky</td>
<td>35. glazed</td>
<td>36. grooved</td>
<td>37. hairy</td>
<td>38. lumpy</td>
<td>39. metallic</td>
<td>40. pleated</td>
<td>41. quilted</td>
<td>42. satiny</td>
<td>43. scaly</td>
<td>44. smooth</td>
<td>45. waxy</td>
<td>46. wooly</td>
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</table>
Lines and Design

Each one of these lines has an effect on the figure. Become aware of them and recognize what each can do:

A vertical line slenderizes and lengthens—suggests dignity. It carries the eyes up and down the figure.

A horizontal line broadens and shortens—carries the eyes across and gives a restful impression.

A diagonal line, if more lengthwise than widthwise, slenderizes and adds height. It combines qualities of vertical and horizontal which can be disturbing and lively. This can add width if carried too far to one side.

A curved line suggests grace and femininity and lends softness to the figure. It is especially suited to party clothes.
What Members Will Learn . . .

ABOUT THE PROJECT:
- The importance of daily grooming activities
- What hairstyles are becoming for different face shapes
- What glass frame shapes are becoming for different face shapes

ABOUT THEMSELVES:
- The importance of beginning a daily hair care routine
- The importance of self-evaluation

Materials Needed:
- Large hand mirror
- Crayons, one per member
- Glass cleaner
- Optional, glasses frames to try on
- Ask members to bring a clean hair brush from home
- Copies of Activity Sheets and Member Handouts

ACTIVITY TIME NEEDED: 60 MINUTES OR COULD BE MADE INTO TWO LESSONS

ACTIVITY
What are some of the basic grooming points we have talked about before? (Bathing, nail cleaning and clipping, shampooing, cleaning face, clothing care, daily brushing and flossing of teeth, and daily use of deodorant.)

Today, we are going to talk about your “crowning glory.” A well cut, styled, and maintained head of hair can greatly enhance a person’s appearance (helps a person look more attractive). Likewise, dirty, unkept hair sends the message that this person has little concern for his/her appearance or the impression he/she wishes to make.

Since hair is one of the first things you see, and it is part of our appearance day in and out, it makes sense that we should spend extra time keeping it in tip-top shape.

One of the first steps to great looking hair is regular brushing. Brushing polishes or lubricates each strand of hair, removes grime that settles on the hair, and stimulates the scalp. A natural bristle brush will tame thick, coarse hair and control fine, fly away hair. Brushing is important, but too much of a good thing can be bad. It can pull your hair out, cause split ends, and actually wear it out. Give hair a special brushing once or twice a week just before shampooing.

Leader Notes
Have members introduce themselves if they do not know each other. Have them name someone they know whose hair they admire and ask them to describe the hair style.

Might show different brush samples.
For the greatest stimulation, brush hair in two directions. If you have long hair, bend from the waist, flip the hair over your head, and brush from the hairline to the ends of your hair with long sweeping strokes. Touch the scalp each time with the bristles of the brush and slide the brush smoothly off the ends. Be careful not to snap the brush when you reach the ends of your hair causing split ends. After you have stimulated the entire scalp, stand up straight and brush down from the top of the scalp.

Be gentle. Pull brush smoothly and firmly to the very ends of the hair. Don’t brush wet hair; use a wide-toothed comb instead. Tips: Always use a clean brush. Remove the hairs with a comb and clean the brush frequently with warm soapy water.

Massaging is easier on the hair than brushing, and it feels so good. A tight tense scalp is bad for your hair. Blood vessels become constricted and reduce the flow of blood. This condition limits nutrition to the scalp and results in many scalp and hair problems. Massage prevents this situation. It exercises scalp muscles, tones and strengthens them. Circulation, muscle, and glandular activity are also improved.

How to massage:
• Bend your head forward.
• Starting at the back of your neck, apply the cushions of your fingers in a moderately brisk, circular motion over your entire head.
• Alternate the rotary movement with slight pressure on the pressure points; behind the ears, on the temples, and at the nape of the neck.

Before selecting a hair style or products such as shampoo, creme rinse, or conditioners for your hair; you need to know what type of hair you have. There are many types of hair, but they can be placed in these main categories:

*Fine Hair* feels like a baby’s hair, doesn’t hold a set, becomes limp in humid weather and is usually thin. A short, blunt cut gives body to fine hair.

*Coarse Hair* is bushy and wiry and often hard to comb or set. A good hair cut allows the hair to fall naturally. Layered cuts allow the hair to fall into natural waves. If hair is very thick, this technique of cutting thins the hair. Specially trained beauticians and barbers may give good suggestions for setting or managing this type of hair.

*Medium Hair* has good body (will hold a style) but is not wiry.

*Oily Hair* separates into thin strands near the scalp one day after a shampoo. It feels heavy, appears darker at the roots, and sticks together. Oily hair needs frequent shampooing.

*Dry Hair* is dull and lacks luster. It feels harsh and fuzzy, has brittle ends, little sheen, and is hard to control. Dry hair needs conditioners to give it needed moisture.

*Normal hair* may be neither excessively dry nor oily. That is, it is in good condition. It may begin to get oily after four or five days.

You can shampoo your hair as often as you like if you choose the shampoo with the right formula. Read the labels to find the one best for you.
Ask yourself these questions when choosing a shampoo:

- Can my hair go several days without shampooing and still look okay? Choose a shampoo for normal hair.
- Is my hair flyaway and uncontrollable? Choose a shampoo for dry hair.
- Does my hair get oily and feel matted the day after a shampoo? Choose shampoo geared for oily hair.
- Is my hair limp and fine? You need a shampoo with extra body.
- Is my hair color-treated? Protect the color with a color-fast shampoo and regular deep conditioning.
- Do I have dandruff? If so, try one of the medicated shampoos—or consult with your physician.

Once you’ve selected the right shampoo, be sure you use it correctly. Don’t push hair around all over your head. Work you fingers down from the top of your scalp gently. There’s no need to lather twice unless your hair is very oily.

After lathering, be sure to get the shampoo out. Rinse, rinse, rinse. Use warm water so the natural oils on your hair will not be washed away. Creme rinses make hair silky and easier to comb, add sheen, and keep flyaway hair under control. Choose one that is formulated to your hair type. If your hair is damaged, use a penetrating conditioner. Instant conditioners can be used for regular hair care.

When choosing a hair style, first consider its manageability and your skill. What can you do, or not do, with it? Second, consider the shape of your face according to hairline and bone structure. Third, consider what facial features you wish to emphasize or minimize.

If you don’t want to spend much time on your hair, a simple style is the answer. Choose a straight blunt cut or a layered one that can be brushed and blown dry after a shampoo. Blow-drying is the fastest, easiest way to style hair for a more natural look. Dryers come with an assortment of combs, brushes, and styling features. For more elaborate styles for girls, there are electric rollers, electric brushes, curling irons, or traditional rollers and clips. Large rollers can be used to create an almost straight look or wide loose waves, while small rollers and clips create tighter curls.

A good permanent can give hair the body it needs to hold a style. If a home permanent is used, it is essential to follow the manufacturer’s directions exactly.

If you want to break this into two lessons, this would be a good break point.
Once you know your face shape and styles, there may be prominent features you want to draw attention to or from. Here are some suggestions:

**FOR GIRLS:**
- Prominent nose. Fluffy bangs or a wavy hairdo with height at crown, no center part.
- Receding chin. Keep hair no longer than jawline level, lift hair at the temples, and let sides sweep back softly.
- Prominent chin. Cover part of jawline by bringing long points of hair in from below the ear following the exact jawline.
- High forehead: Long, soft bangs or hair that dips down over brow.
- Low forehead. Short, wispy bangs can conceal a poor hairline.
- Glasses. Avoid crowding face with low bangs or hair brought forward on temples or cheeks.

**FOR BOYS:**
- Sharp nose. Minimized by forward swirls of hair or forward movement like dipped side bangs.
- Low forehead. Usually flattered by height on top.
- High forehead. Needs less height on top and a natural part.
- Protruding ears. Camouflage by fullness at sides.
- Long neck. Flatter by having the hairline lower at the nape.
- Short neck. Flatter by having the hairline higher at the nape.

Lastly, protect your hair from as much damage as possible. Sun and chlorinated water can take a heavy toll on your hair. Use hats or caps as much as possible to protect hair from sun and wind. If you are a frequent swimmer, a swim cap is an excellent investment. For less frequent swimmers, a thorough rinse after swimming is a must and a good conditioner will help keep hair healthy.

Should you be one of the many people requiring glasses, the frame you choose is an important one. Frames come in endless varieties of color, shapes and materials. Since frames are usually worn daily, it is important that you chose a frame that flatters your face as well as blends with your wardrobe. Here are suggestions for finding the best glass frames for you.

**Oval Face**—Choose frames that keep the oval look to the face. Frames should follow the brow yet allow some of it to show above the frames. Look for a softly curved bridge.

**Round Face**—Choose frames that narrow the face. Frames should be slightly wider than the widest point of the facial outline. Look for a bridge that is slightly arched, bringing the frame outer edges sweeping upward slightly.

**Diamond Face**—Choose frames that create width in the upper face above the cheek bone. Look for a wide flowing upper bridge. Lower part of frame should sweep down and toward the outer jaw line.
Oblong Face—Choose frames that shorten the face. Frames should be within the widest part of the face. Look for a bridge with a soft curve.

Square Face—Choose frames that are slightly wider than the widest point of the jaw line. Look for a bridge with an upward arch. The lower part of the frame should have slightly upswept curved lines.

Heart Face—Choose frames that are within the width of the temple hair line. Look for a bridge that may curve softly up. Outside lower edges may downsweep somewhat.

Triangle Face—Choose frames which add some width to the upper part of the face. Look for a bridge that curves up to form part of a flowing upswept line to accentuate width in the upper part of the face.

Next, look at the set of your eyes to use the following tips:
- Close-set eyes—Select a wide bridge and a larger lens.
- Wide-set eyes—Select a narrow bridge and lens width in upper line of frame, deepen lens size.
- Small eyes—Select lightweight frames and larger lenses.
- Large eyes—Select heavier frames with enough width and depth to give the eye some freedom of space.

If you have a unique nose to consider, try these tips:
- Short nose—Choose a high arched bridge to create nose length.
- Long nose—Select a deep-set bridge to shorten long nose.
- Broad nostril—Choose a keyhole-type to diminish broad nostrils.

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What face shape is the desired shape?
A. Oval

Q. What are ways you can protect your hair?
A. Wear a cap, hat, rinse and wash after swimming

Process:
Q. How do you determine your hair type?
A. Evaluate the qualities it displays—manageability, oiliness, thickness.

Q. Name three healthy hair habits.
A. Adequate washing, frequent brushing, healthy diet, matching hair care products to your type of hair, protection from sun, wind and water.

Q. Name a famous person who has influenced hair styles.
A. Princess Diana, Dorothy Hamil, Olivia Newton John, Michael Jackson, Bo Jackson, The Beatles, others.

Send home copies of member handout, Haircuts, and activity sheet, What’s Your Hair I.Q.?
Leader Notes

Generalize:
Q. Name two hairstyles that are recommended for your face shape.
A. Answers will vary.

Q. From what you learned about your face shape, what would you do to change your hair style or glasses frames the next time you have a chance? Why?
A. Answers will vary.

Apply:
Q. What choices do you have in establishing a grooming routine?
A. Answers will vary.

Q. How will you treat your hair differently after what you have learned today?

GOING FURTHER:
• Take members to an optical store to try on glass frames to illustrate the preceding. Be sure to notify the store manager and receive permission.
• Have a beautician present a lesson on hair care and different hair styles.
• Trace hair styles back to a certain period and discuss changing fads throughout the years.
• Evaluate hair care products and their environmental impact. (Check Consumer Reports for evaluations.)
• Discuss careers in beauty industry and/or eye care industry.
• Assist someone who cannot care for his or her own hair or who cannot get out to buy hair care products.

Answers to “What’s Your Hair I.Q.?”
1. True
2. False
3. True
4. False
5. False
6. True
7. True
8. False
9. True
10. True
11. True
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Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A & M, College Station, Texas
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Haircuts

• If your face is round, do not cut your hair so short that it fails to add the illusion of length to your face. You will need enough hair on top to add height in waves, curls, etc. Also, you will need enough hair to fall down below the lobes of your ears so that the illusion of the perfect oval face is created.

• If your face is oblong or diamond shaped, allow for enough hair to curl or dip over the side of your forehead and enough at the side to add width to the sides of your face. You will also need hair falling down below your jawline. In other words, your long face needs complete framing to create the wanted oval contour.

• If your face is a triangle or pear-shaped, a narrow forehead and wide jaws, your hair must never be cut so short that it causes the jaws to stand out. They should be completely framed by a soft coiffure that falls below them. Furthermore, the narrow forehead should be widened by waves or curls to accentuate the oval illusion.

• If your face is an inverted triangle or heart-shaped, a wide forehead and narrow chin, your hair should never be cut so short that a pointed chin is left alone. Your hair should be cut and curled so that it is long enough to give width to the chin line, and so that dips and curls cover part of the forehead to give balance to the contour.

• If your face is squarish, wide forehead and wide jaws, be sure to leave your hair long enough to soften its contour into the perfect oval. Never crop your hair so short that jaws and forehead are left standing alone.

• If your face is a perfect oval, you are a very lucky person indeed. Show this beauty by wearing the most simple styles possible. Your face type will look lovely with short hair or long. However, avoid extreme styles, for these can distort even a perfect face and lessen it’s natural glamour.
## Face Shapes

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<th>Face Shape</th>
<th>Face Shape Example</th>
<th>Compared to Oval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square</td>
<td><img src="image" alt="Square Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
<tr>
<td>Round</td>
<td><img src="image" alt="Round Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
<tr>
<td>Triangular</td>
<td><img src="image" alt="Triangular Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
<tr>
<td>Inverted triangle or heart</td>
<td><img src="image" alt="Inverted Triangle Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
<tr>
<td>Diamond</td>
<td><img src="image" alt="Diamond Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
<tr>
<td>Rectangular</td>
<td><img src="image" alt="Rectangular Example" /></td>
<td><img src="image" alt="Oval Example" /></td>
</tr>
</tbody>
</table>

Face shapes and hairstyles: To look more oval, put fullness where face shape comes inside the oval. To accent another shape, place fullness where face shape come outside the oval.
**What’s Your Hair I.Q.?**

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hair grows about ( \frac{1}{2} ) inch per month.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Shampooing twice a week damages your hair.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>You can wear out your hair by brushing too much.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Hair conditioners do not really affect the hair shaft.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Hot water gets hair cleaner.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>To get rid of split ends permanently, you must cut them off.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>How often you get your hair cut depends on the length.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>You should always lather your hair twice.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Rinsing can be as important as the way you shampoo.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>A hairstyle that makes your face look oval is best.</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Diet, exercise, and sleep affect the condition of your hair.</td>
<td></td>
</tr>
</tbody>
</table>
Daily Care Means Longer Wear
Clothing & Textiles, Level I, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• General daily care of clothing
• How proper day to day handling of clothing extends the life of a garment
• How to sort clothing and prepare for laundering

ABOUT THEMSELVES:
• Responsibility for their own clothing care
• How to work together to contribute to the family by assisting in clothing care chores
• All decisions have consequences

Materials Needed:
• Clothing items to sort and demonstrate proper storage, including jeans, shirts, stained item, delicate items, socks, sweater, shoes and towel. Include at least one item that is recommended dry cleanable. Be certain to include items that are various colors, fabric weights, and some lint givers (towels) and lint receivers (black nylon socks)
• Metal, wooden, skirt, plastic, and padded clothes hangers
• Copies of Activity Sheets and Member Handouts

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY
One of the most important things each one of us can do daily is to take proper care of our clothing. By proper day to day care we can avoid unnecessary laundering, pressing and soiling of our garments. Garments receiving proper care will also (most likely) be available for our wear whenever we will want them. Other people may not see you taking care of your clothes, but the results are clearly visible in our everyday appearance. Day-to-day maintenance keeps your clothes fresh, clean, and comfortable.

Each day when we remove an article of clothing, we are making a decision about how to care for that item. If we take good care of our clothing, it will last longer and look new longer. If we throw it in the corner, it may get wrinkled or dirty, and not be available to wear the next time we would want to wear it.

It is very important that we have a place to put our clothing and that we know where that is. Different items need to be stored differently depending upon the item.

Leader Notes
As members arrive for your project meeting have them sit in a circle in a comfortable place. After all members have arrived, ask each one to tell the group their name and one item of clothing they must put away each day. You start.
Now we are going to talk about the decisions you have to make as you wear and remove clothing. Let’s say you have just come home on a very cold day at school. You get inside the door, what is the first thing you remove? (Answers may vary—coat, hat, gloves, boots, backpack, etc.)

It is very important for you to have a place to put your belongings. Let’s say you take off your backpack first, do you have a hook or special place where you put it everyday? Backpacks and jackets need hooks or closets with hangers that you can reach. Baskets or bins are nice for things like gloves, mittens, scarves, and hats. You need some hanger space for lightweight dresses, shirts, pants and other garments that wrinkle when folded. Dresser drawer space or bins are good places to store jeans, sweaters, sweatshirts, pajamas and other items that can be folded. You need some special space to store your shoes, and other items such as belts, socks, underwear and jewelry.

When you remove your hat and gloves, you may notice they are wet from the snow. What do you do with them now? Be sure they are dry before you put them away. They should always be dried first. You can use the dryer, a line, or air dry on a towel on a cabinet (or sink or tub) in a cool place that is well ventilated. Do not hang or store clothing near a heat source. If you put items away wet, they may mildew. Mildew is a growth that causes a bad smell and may stain the item. Also, once mildew starts to grow, it can be difficult to destroy. After the gloves and hat are dry, put them in their proper place.

You left your wet boots on a mat by the door to dry and now you will change into play clothes. As you remove your school clothes, take a minute to look at them. Ask yourself these questions?

1. Is it dirty? If not, hang it up or fold and put away. When you hang clothes, using tubular plastic, padded or wooden hangers will help clothes to maintain their shape. Wire hangers can bend, snag, rust, cause snags and leave dents in shoulders. Remove belts to prevent straining loops. Don’t crowd the closet. Leave space for garments to keep shape. Sweaters and other knitted garments should be folded, so they will not stretch, and placed on a shelf, in a drawer or across a padded rod or hanger.

   If yes, put it in with the laundry. Prevent wrinkles in durable press and knit clothes by folding them into laundry hamper instead of crushing them. First, empty all pockets, zip zippers, close snaps and hooks and eyes. Unbutton all buttons. Turn jeans inside out, remove all non-washable items like collar stays or attached jewelry.

2. Is it stained? If yes, leave it out and tell your parents so they can treat the stain quickly.

3. Is it torn or in need of repair? If yes, keep it separate and tell a parent so repairs can be made before cleaning.

One way you may greatly help your parents is to volunteer to help with laundry. A chore that must be done in every house is one of sorting clothes. After all the household hampers are combined, we sort clothes so
that it is easier to fill a washing machine with items that require similar temperatures of water for washing.

There are several groups you will sort the clothes into. Using the following groups, we will sort these items.

**Sort by color:**
- Whites—laundry in hot water.
- Brights or darks—laundry in cool water. Read labels for wash separately. Explain that some dyes (colors) may fade onto other items and should be washed alone. Look at the care label to illustrate that this should be printed on the care label if wash separately is recommended.

**Sort by construction:**
- Woolens and loose wovens, sheers, delicates, need less agitation.
- Lint producers (example= terry towel)—wash these together [never with a lint collector! (example: nylon socks)].

**Sort by need for special attention:**
- Dry cleaning.
- Garments needing pre-spotting or mending.
- Don’t know—parent will help decide.

This lesson suggested we repair any tears immediately. This lengthens the time that you are able to wear the garment.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. When helping sort the family laundry, what are some groups you might sort into?
  - A. (1) Color— lights, brights; (2) Construction—woolens and loose weaves; (3) Lint givers and those needing special attention; and (4) prespotting, mending, or ones that you don’t know about and need your parents/caregivers help.

- Q. What might happen if you put your clothes away wet and dirty?
  - A. They might mildew.

- Q. How soon should you repair tears or remove stains from clothing?
  - A. As soon as possible.

- Q. What should you do with dirty but dry clothes?
  - A. (1) empty pockets; close zippers, snaps, hooks, and eyes and unbutton buttons; (2) remove non-washable items; and (3) turn jeans inside out and neatly store in clothes hamper.

- Q. What items do you no longer wear because they are in need of repair?
- Q. What do you usually do with these items?

**Process:**
- Q. What are some stains you might get on your clothes or household fabrics?
Leader Notes

Q. How might you feel about staining a favorite shirt you wear?

Q. How would you deal with your feelings?

Q. Why is it important to make good decisions about taking care of your clothes?

Generalize:
Q. You can help with the chore of laundry by sorting—this will give your family more time to do other things. How much time does your family spend doing clothing care a week?

Q. What other things could your family do with this extra time?

Q. What other family chores do/could you help with?

Q. We use our sense of sight to sort clothes. How do you think someone who is visually impaired would sort their clothes?

Apply:
Laundry costs your family in time and it also costs us in money and water.
Q. How does a family of limited income save money on laundry costs?

Q. What happens to the water after we launder our clothes?

Q. How could we save water on laundry?

Q. How could you prevent from getting your good clothes stained while cooking or painting a picture?
A. Wear an apron or cover with an old shirt.

GOING FURTHER:
- Handout clothing care evaluation.
- Laundering guide for home use, see “Basic Laundry Skills,” Level II.
- Check out and view Gone with the Wash video from local or area Extension Office.
- Compare the traditional American way of laundry to that of a western European or an underdeveloped nation.
- Conduct an experiment on effect of storage on wrinkling. Fold an all cotton T-shirt carefully and put in a drawer. Throw another all cotton T-shirt in a drawer carelessly and compare after one week. If fabric is slightly damp the wrinkles will be much more apparent. (Check daily to be sure no mildew is starting. Be sure fabrics used have not been treated for wrinkle resistance.) Share the results.
- Make a padded cover for a wire hanger.
REFERENCES:
Preparing Laundry, Clothing Care—Capable Kids Can, Deanna Munson, Textile Specialist, Cooperative Extension Service, 216 Justin Hall, Kansas State University, Manhattan, Kansas 66506
Gone with the Wash, Maytag, One Dependability Square, Newton, Iowa 50208, 515-791-8402
Clothing Care Computer Program, Cooperative Extension Service, University of Kentucky, Room 252 Agriculture Engineering Bldg, Lexington, Kentucky 40546-0276
Clothing Care and Laundry Video, Meridian Education Corporation, Department 9-92H, 236 E. Front St. Bloomington, Illinois 61701, 1-800-727-5507

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Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
DAILY CARE MEANS LONGER WEAR
CLOTHING & TEXTILES, LEVEL I, CARE AND MAINTENANCE
Activity Sheet

Clothing Care Evaluation

I take care of my clothes each day by:
• Hanging up clothes
• Folding clothes
• Putting dirty clothes in the laundry
• Showing stains and tears to an adult
• Keeping closets neat
• Keeping drawers neat

Show how well you took care of your clothing for two weeks. Have an adult in your household sign here that you completed this activity.

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
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</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Signature

30-Clothing & Textiles, Level I
Preparing Laundry

Sharing household tasks not only reduces the parent/caregiver’s workload, but also helps children become more responsible and self-reliant. Sharing household tasks offers children an opportunity to make decisions and develop feelings of self-assurance and independence.

Your success in helping children assume responsibility depends a great deal on your own attitudes and expectations, as well as on how well the lines of communication between family members are kept open.

The ideas presented here can be helpful to all families, but especially those working parents who want to involve the whole family in household management.

Even young children can begin to take responsibility for the care of their own clothing. Before delegating tasks, however, consider your children’s ages and abilities. As a family, discuss clothing care activities that need to be done, and who is to be responsible for them. Make a list of daily tasks for which each member of the family is to be responsible. Be certain your children have the skills necessary to complete their assignment.

Initially, your children will need assistance from you to learn how to care for their clothes. They also will need containers, hangers, and storage for laundry supplies and equipment, and of course, many gentle reminders to complete their tasks. The following ideas may start you thinking of ways to help your children learn to care for their own clothing. You’ll probably think of others as you discuss plans with your children.

After School Clothing Tasks
Parent/Caregiver’s Responsibilities
1. Provide hooks within your child’s reach for coats, sweater, etc.
2. Provide baskets, drawers, shelves, etc., for small items, preferably near the entryway your child uses. A clothesline and clothespins in the back hall are handy for hanging wet mittens, hats, and other clothes.
3. Provide hangers. Help your child sort and organize drawers and closets. Use crates, straw baskets, painted coffee cans, or shoe boxes to store small objects. Install rods or hooks in closets to hang scarves, ribbons, gloves, etc.
4. Provide laundry baskets for soiled clothes. Teach your child what clothes can be worn a second time and which should be laundered after each wearing.
5. Designate laundry day or time.

As your children get older, they can assume greater responsibility for clothing care. You might, for example, want them to do some of the family wash, fold and put clean laundry away, iron clothes, learn to use the sewing machine or do simple mending. The important thing is that you provide training to enable your youngsters to complete each task successfully.

Child’s Responsibilities
1. Hang up outerwear such as overcoats or parkas.
2. Put away books, mittens, umbrellas, book bags, lunch boxes, and musical instruments when arriving home from school.
3. Change from school clothes to play clothes. Hang up school clothes that can be worn again.
Preparing Laundry, continued

4. Put soiled clothes in basket. Close zippers, hooks and eyes, and empty pockets before placing clothes in dirty clothes container. Put stained or damaged clothing in a special basket so stains can be treated immediately.
5. Deliver soiled clothes to laundry area on laundry day.

Preparing Laundry

Parent/Caregiver’s Responsibilities

1. Check out video “Gone With the Wash” from local Extension office.
2. Watch video with child.
3. Discuss with the child basic laundry concepts for sorting clothes according to care label, color, surface texture, construction and degree of soil.
4. Teach child where to find care labels in garments.
5. Provide baskets for storing sorted laundry. Label each basket as to the categories you use for sorting laundry. At least seven baskets should be provided, labeled as follows:
   - Whites, launder in hot water
   - Brights or darks, launder in cool water
   - Woolens or other delicates
   - Lint givers
   - Dry cleaning
   - Garments needing pre-spotting or mending
   - Don’t know; parent/caregiver will help decide
6. Show child where to find all dirty laundry stored in the home.
7. Reassure child you will check the sorted piles when you arrive home. Help him or her understand any changes needed for doing laundry successfully, and proceed with laundry.

Children’s Responsibilities

1. View video with parent/caregiver.
2. Collect dirty laundry and bring to the laundry area.
3. Prepare clothing to be laundered.
   - Remove any items left in pockets.
   - Brush any heavy mud from clothing.
   - Close all zippers, hooks, etc.
   - Turn jeans inside out.
   - Remove all non-washable items like collar stays.
   - Look for spots, stains and damage. Place any garment needing stain removal or repair in a special basket labeled as such.
   - Locate the care label. Read it and decide in which basket of laundry to put the clothing in. Remember there is a basket for the items that you do not know what to do with, and ask your parent/caregiver for help later.
4. Sort laundry into the appropriate basket.
5. Ask your parent/caregiver to check your work when he or she returns home.
The Laundry Game

The Laundry Game is a game to help members identify appropriate laundry sorting for typical washable/dry cleanable items.

Number of Players 2 to 6

Game Materials 20 “I” cards that describe and illustrate typical washable/dry cleanable items
70 “S” cards that describe stacks in which to sort laundry.

Goal To have each player choose three “I” cards, then continue picking and discarding “S” cards until all the “S” cards in a player’s hand describe the most appropriate sorting stack for the three “I” card items. The winner is the first person who collects the most appropriate group of “S” cards first. (There must be one appropriate “S” card for each “I” card. Leader can serve as a judge.)

Rules of the Game
• Dealer shuffles the “I” cards and allows each player to select three.
• Dealer shuffles the “S” cards and deals three to each player. Remaining “S” cards are placed face down in the center of the table.
• The person to the left of the dealer begins play. Player reviews the “S” cards received in the deal and compares them to the item described on the “I” card. Player selects one “S” card that is not appropriate and discards it, face up, beside the pile of “S” cards in the center of the table. The player then picks up the top card on the pile of “S” cards that is facing down.
• Play continues in a clockwise direction.
• When the pile of face down “S” cards is exhausted, the dealer shuffles those that have been discarded and turns them face down to continue play.
• A player can stop discarding and drawing cards any time that person believes that the cards in hand represent the most appropriate combination of “S” cards for the three “I” cards being held.
• The judge rules whether, in fact, these “S” cards are the most appropriate ones. If so, the player is the winner. If not, the player is eliminated and the remaining players continue drawing and discarding “S” cards.
• The first player to assemble three appropriate “S” card (one for each “I” card) wins.
### “S” Cards

Leader: Copy this page one side only, to make 10 sets of cards.

<table>
<thead>
<tr>
<th>Whites—launder in warm water</th>
<th>Brights or Darks—launder in cool water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woolens or other delicates</td>
<td>Lint Givers</td>
</tr>
<tr>
<td>Dry Cleaning</td>
<td>Garments needing pre-spotting or mending</td>
</tr>
<tr>
<td>Don’t know, parent or caregiver will help decide</td>
<td></td>
</tr>
</tbody>
</table>
“I” Cards

**White Towels**
100% cotton
Care Label: Machine wash with like colors, before first use, tumble dry. Do not bleach colored towels.

**White Dress Shirt**
65% polyester/35% cotton
Care Label: Machine wash warm, gentle cycle, tumble dry low, do not bleach and use warm iron.

**Black Pants**
100% polyester, double knit, greasy spots
Care Label: Machine wash warm darks separately, tumble dry, remove promptly and do not bleach.

**Red Beach Towel**
100% cotton
Care Label: Machine wash with like colors (deep colors bleed), before first use, tumble dry. Do not bleach colored towels.

**Red Bathing Suit**
85% nylon/15% spandex
Care Label: Machine wash cold, hang dry. Do not bleach, wash dark colors separately.

**Green Sleeping bag**
80% polyester/20% cotton
Care Label: Machine wash separately on delicate cycle in warm water. Dry at a low temperature. Remove from dryer immediately at end of drying cycle. Do not dry clean.

**Bathroom Rug**
100% nylon
No Care Label.

**Brown Jacket**
100% Wool
Care Label: Dry clean only.

**Plaid Slacks**
100% cotton
“guaranteed to bleed”
Care Label: Machine wash cold, wash separately. Tumble dry low, warm iron.

**Purple Warmup Suit**
100% acrylic
Care Label: Machine wash cold, wash with like colors. No bleach. Tumble dry on low. Cool iron.
### “I” Cards

<table>
<thead>
<tr>
<th>Item</th>
<th>Material</th>
<th>Care Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blue and White Football Jersey</strong></td>
<td>100% nylon</td>
<td>Grass stained. Care Label: Machine wash with like colors. Only non-chlorine bleach when needed. Tumble dry low.</td>
</tr>
<tr>
<td><strong>White Curtains</strong></td>
<td>100% polyester</td>
<td>Care Label: Machine wash warm, no bleach. Tumble dry on low heat. Little or no ironing.</td>
</tr>
<tr>
<td><strong>Blue Baby Clothes</strong></td>
<td>100% cotton</td>
<td>Food stained. Care Label: Machine wash warm gentle cycle, tumble dry on low and use a cool iron.</td>
</tr>
<tr>
<td><strong>White Sheets</strong></td>
<td>50% cotton/50% polyester</td>
<td>Care Label: Machine wash, tumble dry, remove from dryer immediately at the end of cycle. Do not bleach colors or prints.</td>
</tr>
<tr>
<td><strong>White T-shirt</strong></td>
<td>50% cotton/50% polyester</td>
<td>Care Label: Machine wash warm, tumble dry.</td>
</tr>
<tr>
<td><strong>Pink Blanket</strong></td>
<td>100% acrylic</td>
<td>Care Label: Machine wash in warm water on gentle cycle with mild detergent. Machine dry at medium temperature. Reposition blanket several times during drying and remove from dryer immediately at end of cycle.</td>
</tr>
<tr>
<td><strong>Navy Blue Sweater</strong></td>
<td>100% wool</td>
<td>Care Label: Professionally dry clean or hand wash in cold water.</td>
</tr>
<tr>
<td><strong>Blue Jeans</strong></td>
<td>50% Cotton/50% polyester</td>
<td>Grass stained. Care Label: Machine wash with like colors. Only non-chlorine bleach when needed. Tumble dry and remove promptly.</td>
</tr>
<tr>
<td><strong>White Tablecloth</strong></td>
<td>100% linen</td>
<td>No Care Label.</td>
</tr>
<tr>
<td><strong>White Gym Socks</strong></td>
<td>85% acrylic/13% nylon/2% lycra</td>
<td>Care Label: Machine wash warm with similar colors, only non-chlorine bleach, tumble dry on medium.</td>
</tr>
</tbody>
</table>
## Daily Care Means Longer Wear

**Clothing & Textiles, Level I, Care and Maintenance**

### Leader’s Key

#### The Laundry Game

<table>
<thead>
<tr>
<th>Content</th>
<th>Quantity</th>
<th>Care Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White Towels</strong></td>
<td>4</td>
<td>100% cotton, Care Label: Machine wash with like colors, before first use, tumble dry. Do not bleach colored towels.</td>
</tr>
<tr>
<td><strong>Black Pants</strong></td>
<td>6</td>
<td>100% polyester, double knit, greasy spots, Care Label: Machine wash warm darks separately, tumble dry, remove promptly and do not bleach.</td>
</tr>
<tr>
<td><strong>Red Bathing Suit</strong></td>
<td>2</td>
<td>85% nylon/15% spandex, Care Label: Machine wash cold, hang dry. Do not bleach, wash dark colors separately.</td>
</tr>
<tr>
<td><strong>Bathroom Rug</strong></td>
<td>7</td>
<td>100% nylon, No Care Label.</td>
</tr>
<tr>
<td><strong>Plaid Slacks</strong></td>
<td>2</td>
<td>100% cotton, “guaranteed to bleed”, Care Label: Machine wash cold, wash separately. Tumble dry low, warm iron.</td>
</tr>
<tr>
<td><strong>Blue and White Football Jersey</strong></td>
<td>6</td>
<td>100% nylon, Grass stained, Care Label: Machine wash with like colors. Only non-chlorine bleach when needed. Tumble dry low.</td>
</tr>
<tr>
<td><strong>White Dress Shirt</strong></td>
<td>1</td>
<td>65% polyester/35% cotton, Care Label: Machine wash warm, gentle cycle, tumble dry low, do not bleach and use warm iron.</td>
</tr>
<tr>
<td><strong>Red Beach Towel</strong></td>
<td>4</td>
<td>100% cotton, Care Label: Machine wash with like colors (deep colors bleed), before first use, tumble dry. Do not bleach colored towels.</td>
</tr>
<tr>
<td><strong>Green Sleeping Bag</strong></td>
<td>3</td>
<td>80% polyester/20% cotton, Care Label: Machine wash separately on delicate cycle in warm water, Dry at a low temperature. Remove from dryer immediately at end of drying cycle. Do not dry clean.</td>
</tr>
<tr>
<td><strong>Brown Jacket</strong></td>
<td>5</td>
<td>100% Wool, Care Label: Dry clean only.</td>
</tr>
<tr>
<td><strong>Purple Warmup Suit</strong></td>
<td>2</td>
<td>100% acrylic, Care Label: Machine wash cold, wash with like colors. No bleach. Tumble dry on low. Cool iron.</td>
</tr>
<tr>
<td><strong>White Curtains</strong></td>
<td>1</td>
<td>100% polyester, Care Label: Machine wash warm, no bleach. Tumble dry on low heat. Little or no ironing.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| **6** Blue Baby Clothes | 100% cotton  
Food stained  
Care Label: Machine wash warm gentle cycle, tumble dry on low and use a cool iron. |
| **6** Blue Jeans       | 50% Cotton/50% polyester  
Grass stained.  
Care Label: Machine wash with like colors. Only non-chlorine bleach when needed. Tumble dry and remove promptly. |
| **1** White Gym Socks   | 85% acrylic/13% nylon/2% lycra  
Care Label: Machine wash warm with similar colors, only non-chlorine bleach, tumble dry on medium. |
| 5 or 3 Navy Blue Sweater | 100% wool  
Care Label: Professionally dry clean or hand wash in cold water. |
| **1** White Sheets      | 50% cotton/50% polyester  
Care Label: Machine wash, tumble dry, remove from dryer immediately at the end of cycle. Do not bleach colors or prints. |
| **1** Pink Blanket      | 100% acrylic  
Care Label: Machine wash in warm water on gentle cycle with mild detergent. Machine dry at medium temperature. Reposition blanket several times during drying and remove from dryer immediately at end of cycle. |
| **1** White T-shirt     | 50% cotton/50% polyester  
Care Label: Machine wash warm, tumble dry. |
| **7** White Tablecloth  | 100% linen  
No Care Label. |

1 Whites—launder in warm water  
2 Brights or Darks—launder in cool water  
3 Woolens or other delicates  
4 Lint Givers  
5 Dry Cleaning  
6 Garments needing pre-spotting or mending  
7 Don’t know, parent or caregiver will help decide
Sewing on a Button

What Members Will Learn . . .

ABOUT THE PROJECT:

• How to replace a button
• Other simple repair techniques
• Appropriate time to do repairs
• How to make a thread shank

ABOUT THEMSELVES:

• Their ability to complete a simple repair task
• Self confidence in accessing the need for clothing repair
• Satisfaction in knowing how to properly care for personal belongings

Materials, Resources Needed:

One of the following for each child:

• 3 × 3-inch piece of fabric
• Sweatshirt or some other item to decorate with buttons
• Hand sewing needles, size (6)
• Thimble
• Beeswax
• All purpose sewing thread
• Button, shankless
• Toothpicks (heavy duty)
• Needle threader
• Marking pen
• Copies of Activity Sheet and Member Handout

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:

Our bodies tell us that if we take good care of them they last longer and look better. This is true with our clothing as well. By good care and quick mending, our clothing will last longer and look new longer. Sometimes accidents happen and our clothing needs repair. Have you ever had a garment in need of repair? What happened to the garment? (answers will vary, tears, buttons off, elastic out, hem out, etc.) Did you or someone in your family repair the garment?

One repair that most everyone will have to make at one time or another is sewing on a button. Sometimes, it is a good idea to resew a button right after you purchase a garment, especially if the buttons are loose at purchase. This keeps from losing the button later when it may be extra hard or impossible to find.

Leader Notes

Have all the children sit in a circle around a table or on the floor. Allow everyone to tell their name and one item they own that has needed a repair in the past. You begin.
The best time to sew on a button is as soon as you can. Before putting the item in the laundry or putting away do the mending. That way the item can be repaired then stored or laundered and ready to wear again.

Every button must have a shank so there is room for the buttonhole to fit under the button. A shank is an extension under the button. Buttons without holes have metal or plastic shanks which are part of the buttons. Buttons with holes do not have shanks. You must add shanks as you sew them to the garment. Today, we are going to learn to make a thread shank.

Mark the center of the fabric by folding the piece in half then half again and mark the center with the marking pen or straight pin—unfold and remark with marking pen. Place button directly over mark. (for variety you may sew buttons on a sweatshirt, accessory collar or some other item. The member will gain experience in sewing on buttons and have a decorative item they will enjoy wearing or giving as a gift.)

Use a doubled knotted thread. Draw the thread through beeswax to prevent knots from forming in the thread while sewing. Hide the knot between the fabric and the button.

Put the toothpick on top of the button between the button’s holes.

Sew five or six stitches through the holes, stitching over the toothpick.

Bring the threaded needle up from the underside of the garment, between the button and the fabric.

Remove the toothpick. Pull the button to the top of the threads.

Wind the needle thread tightly around the threads between the button and the fabric five or six times, forming a shank.

Bring the threaded needle back to the underside of the fabric. Knot the thread close to the fabric.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. When is the best time to repair a button?
A. As soon as possible, before laundering or storage.

Q. What is a button shank?
A. An extension under the button or extra thread so the button hole will fit under the button.

**Process:**

Q. Why is it important to know how to sew on a button?

Q. What was the hardest thing for you to do when you sewed on your button? What was the easiest?
Generalize:
Q. How can your family save money by repairing garments?
A. Use garments longer, costs more to have someone else repair, more clothing to choose from so each requires less wear and cleaning.

Q. How is repair of clothing like recycling?
A. It means we can use an item again. Example—using jeans with holes in the knees as cut-offs.

Q. Have you ever recycled any other garments?
A. Answers will vary—use a personal example if you have one.

Apply:
Q. It takes patience to learn to sew on a button. What are other times that you can remember when you had to be patient?

GOING FURTHER:
• Have members volunteer to do button mending for local nursing home residents.
• Visit person that does repair work at local laundry mat or in home.
• Suggest members total number of garments currently not being worn because in need of repair.
• Have special project meeting to do minor clothing repairs.

REFERENCES:
Let’s Sew, Nancy Zieman, 1991, Nancy Notions, Ltd., P.O. Box 683, Beaver Dam, WI 53916

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team

Pass out the button box activity sheet for members to take home.
Sewing on Buttons

Every button must have a shank so there is space for the buttonhole to fit under the button. A shank is something that is added under the button. Some buttons (those without holes) have metal or plastic shanks which are made as part of the button.

Buttons with holes do not have shanks, so you must make shanks as you sew them to the garment. Here’s how to make a thread shank:

1. Mark the button position on the center front or back, directly under the buttonhole. Place the button over the mark.

2. Make a doubled knotted thread first, treated with beeswax. Hide the knot between the button and the fabric.

3. Put a round toothpick, a small knitting needle, or a large darning needle on top of the button between the button’s holes.

4. While stitching over the needle or toothpick, sew five or six stitches through the holes of the button.

5. Bring the threaded needle up from the underneath of the garment, between the button and the fabric.

6. Remove the toothpick or needle. Pull the button to the top of the threads.

7. To make the shank, wind the needle thread tightly around the threads between the button and the fabric five or six times.

8. Bring the threaded needle back to the underside of the fabric. Knot the thread close to the fabric and clip.
SEWING ON A BUTTON
CLOTHING & TEXTILES, LEVEL I, CARE AND MAINTENANCE
Activity Sheet

Button Box

ACROSS
1. Number of stitches taken through holes in buttons
2. Will prevent thread from knotting and tangling while sewing on button
3. Use to make a thread shank on buttons that have holes

DOWN
1. Extension from a button to give room for a buttonhole to fit under button
2. What you place on the mark and directly over the buttonhole
4. When starting to sew ______ the knot between fabric and button.
**SEWING ON A BUTTON**
CLOTHING & TEXTILES, LEVEL I, CARE AND MAINTENANCE
Activity Sheet, Leader’s Key

**Button Box**

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**ACROSS**
1. Number of stitches taken through holes in buttons
2. Will prevent thread from knotting and tangling while sewing on button
3. Use to make a thread shank on buttons that have holes

**DOWN**
1. Extension from a button to give room for a buttonhole to fit under button
2. What you place on the mark and directly over the buttonhole
3. When starting to sew ________ the knot between fabric and button.
How Fabrics Get Color
Clothing & Textiles, Level I, Textile Science

What Members Will Learn . . .

ABOUT THE PROJECT:
• Colors in fabrics can come from dyes
• Some dyes come from nature and some are laboratory produced
• Dyes can be added to fabric at many different stages of production
• Some ways fibers “take” dyes

ABOUT THEMSELVES:
• The importance of color in making clothing decisions
• An appreciation of nature and technology as it affects their daily life

Materials Needed:
• 100 percent white cotton T-shirt or cap
• Cotton clothes line and wood sewing spools
• Pots or pans (enamel or stainless steel)
• Tablespoon
• Strainer
• Long-handled spoon
• Heat source
• Water
• String or rubber bands
• Dye (both RIT and tea)
• 9 × 6-inch samples of the following fabrics:
  2, 100 percent cotton/bleached cotton muslim
  1, 100 percent polyester
• Detergent
• White vinegar
• Bleach or Dye with Janet Prey Video, order by calling 1-800-944-0213 from Islander School of Fashion Arts. Cost is $39.95 plus $5.00 shipping
• Copies of Member Handout

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Without much thought most of us purchase a garment or household furnishing with the most emphasis on one factor. Do you know what that is? Color. Have you ever thought how we get such a wide variety of choice when it comes to colors. Fabrics may in the raw stage have a slight color but without dyes our wardrobes’ would indeed be quite drab. Today, we are going to talk about how fabrics are dyed and let you experiment with some dyes so you can understand how we get the wide choice of

Leader Notes
Have everyone sit in a comfortable place.
Allow members to introduce themselves and tell their favorite color. You begin.
colors that are so important to us as we purchase our clothing and home furnishings.

In all humans our sense of sight is very powerful, so it is expected that color is very important in our decision in what we want to wear. Even thousands of years ago people had discovered natural dyes that gave them the ability to color and decorate the clothing they wore. Many ancient cloths have the remains of various dyes found in nature that were used from everyday wear to the most holy celebrations.

Natural dyes come from things in nature like plants, insects and minerals. Have you ever gotten a rust stain on your clothes? That is a natural dye resulting from the mineral iron. The stain is actually a dyed spot on the fabric and is why rust is so hard to remove from fabric. Grass stains are another similar example. Many different colors can be achieved from nature, and until 1856 that was the only way to color fibers. In 1856, the first synthetic or laboratory produced dyes were developed. Today almost all fabrics you buy in stores are dyed with synthetic dyestuffs. Only art projects, craft techniques, and other specialty items would use natural dyes.

There are two ways to color fibers. One way is using pigments. Think of pigments as tiny dust spots of color that are sprinkled evenly over the fabric. Pigments are held in place by clear glue, or they are added to the fibers before they are spun into fibers.

The second way to color fibers is using dyes. Think of a dye being like jello particles. Once they are put in solution (sometimes water), they dissolve and soak through the fiber, becoming part of the fiber. A chemical reaction makes them part of the fiber.

Dyes can be added at most any stage of the textile process. This includes during dyeing the fibers (fiber dyeing), dyeing the yarns (yarn dyeing), dyeing the fabric or piece goods (piece dyeing), or the end product. The earlier the dyeing, the better the color penetration (even color and longest lasting). Manmade fibers can even be dyed as they are being made. Color is added to the solution being used to make fiber. Natural fibers cannot be dyed this way. If we think about the types of fibers we have talked about we can see how some fibers may absorb dyes better than others. Most fibers that we say are comfortable to wear also breathe or absorb moisture and accept dyes well because of their high absorbency. These we would say “take” the dye better. Others that do not absorb moisture well will not accept dyes well unless treated specially for this purpose, or dyed by special ways and using special dyes.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. Where do dyes come from?

A. Natural dyes from plants, insects, and minerals, others from chemicals and manufactured products.
Q. Name a natural dye and a man-made dye.

Q. Where can fibers be dyed?
A. At most stages of the textile process.

Process:
Q. Why does the open weave of the muslin dye better?
A. The more the fiber absorbs the more of the dye it will hold and make it “take” better.

Q. Why are dyes important to you?
A. Answers will vary—give us color, are used as safety features (reflective tape in active wear, flags to mark caution), used as art for expression, etc.

Q. What similar experiences have you had in dyeing or staining something?
A. Examples—dyeing eggs, spilling food and staining clothes, etc.

Generalize:
Q. What is one of the most important factors that determine what particular textile product you as a consumer select?
A. Color.

Q. You have learned what a pigment is as opposed to a dye; what do you suppose is meant by the term “pigment paint?”
A. Small spots or dust of color have been added to paint and that color is held in place as the paint dries and adheres to the wood.

Apply:
Q. What do you think our world would be like today if we had only natural dyes?
A. Answers will vary—we might have less color because natural dyes are more difficult to apply, often less colorfast, and only available from plant, insect and minerals, meaning those materials would be used in different ways than they are today.

Q. If you dyed the fabric, what might you do next time for different results?

GOING FURTHER:
- Tour a T-shirt shop that does printing to show the difference between dyeing and printing. You will probably see heat transfer or screen printing being applied to T-shirts that have already been dyed.
- Look at fabrics under a magnifying glass to determine if fibers are dyed as yarns or altogether. Use denim or oxford cloth as an example of dyed yarns woven with non-dyed ones.
- Have a person that uses natural dyes talk about and demonstrate natural dyes.
Leader Notes

- Look for other things that are colored and guess how they get their color. Example: paper, houses, dishes, etc.
- Select one method of printing fabric to study. Explore beginnings and development of the method you choose. Create a design to apply to a garment or accessory. Investigate ways to make your design colorfast to washing and sunlight.
- If you keep a fabric file, add information about fabric designs.
- Briefly discuss the terms design and pattern. List ways design can be achieved in fabrics.
- Ask someone who knits or weaves to demonstrate several methods of adding a pattern to the fabric.
- Ask members to collect examples of built-in and applied designs for an illustrated talk. Give talk to parents other club members or Extension Home Economics clubs.

REFERENCES:
The Art of Dyeing, Rit Consumer Service Laboratory, P.O. Box 21070, Indianapolis, Indiana 46221
Tea Dyeing, Homespun Elegance, Ltd., Sandra J. Sullivan, 104 Holly Circle, Fredericksburg, Virginia 22405
Clothing Leader Guide, Ann Beard, Alma Fonesca, Teresa Criswell, and Melia Huntsos, Texas Agriculture Extension Service, Texas A&M University System, College Station, Texas

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Tie-dye is a “resist” type of fabric dyeing. Sections of fabric are folded or gathered and then tightly tied off with string or covered with clamped wood blocks. The fabric is dyed and the portion of fabric beneath the tie or blocks is prevented from absorbing dye, giving an undyed pattern on a colored ground. The result can be precise and controlled or wildly abstract, depending on the technique used.

The attraction of tie-dye as an art form lies not only in the beauty of the results, but also in their absolute uniqueness. No two designs are ever the same. Each design has an element of the unplanned that makes it different from any other.

The techniques and materials for tie-dye haven’t changed much over the centuries. The basic equipment is still a pot, heat source, water, string or rubber bands, dye, and of course, fabric.

TECHNIQUE:
The most basic tie-dye “knot” is the rosette: a section of fabric is pinched up and tied tightly at the base with string or a rubber band. Adding several more ties along length of fabric gives a sunburst effect.

The donut knot starts out like a rosette: fabric is pinched into a puff, the top of puff is pushed down and through to other side and tied tightly. Knots can be dyed one or more colors and extra color can be squeezed into banding with an eyedropper.

For a stripe effect, undiluted dye color is poured on fabric from a squeeze bottle. Colored section is gathered or pleated and color is covered with ties.

Block-dyeing is a technique of tie-dyeing in which two identical wooden blocks are cut. One block is placed on top of a folded piece of fabric; the other directly below it. Blocks are C-clamped together, sandwiching fabric.

Folding and pleating fabric in different ways before tying gives a controlled repeat of a design. Further variations of design and color are achieved by varying dyes, width of ties, and type of fabric used—so that the resulting effects are practically limitless.
Directions for Tea Dyeing

Have you ever looked for that perfect piece of fabric on which to stitch that beautiful cross stitch sampler, and there just wasn’t any fabric that had that old look? Or maybe you would like a beige jump rope or brown and white tie-dyed T-shirt? Now you can achieve that perfect color in a few easy steps from ingredients everyone probably has at home.

Any cotton fabric will dye. Do not try to dye anything that is a synthetic, such as polyester cotton. This will not dye well at all. All directions are for 100 percent cotton or linen.

GETTING YOUR FABRIC READY

You will need to remove all sizing from your fabric or rope before starting the dyeing process. To do this, wash with detergent and rinse well. YOU MUST GET OUT ALL OF THE SIZING, OR YOUR FABRIC WILL NOT DYE EVENLY! Cut a small piece of fabric for test dyeing.

MATERIALS YOU WILL NEED:
Detergent  Enamel or stainless steel pot (do not use an enamel or Teflon pot that is scarred)
Fabric     White vinegar (optional)
Tea        Strainer (very fine)
Tablespoon Long-handled spoon

All ingredients are figured for a yard or less of fabric. To do anything larger than that, you will have to adjust the proportions of tea to water and the size of the dye pot.

PREPARING THE DYE POT

If you are using loose tea, you will need to measure 1 tablespoon of tea. If you are using tea bags, open tea bags and measure out 1 tablespoon. This will take approximately two tea bags.

TO TEST DYE

Pour 1 quart of water in a pot with 1 tablespoon of loose tea. Boil slowly for 15 minutes. Strain loose tea out of the dye pot. Add the small piece of WET fabric that you cut earlier.

Simmer your fabric for about 15 minutes, stirring occasionally for even dyeing. If it is not dark enough, (remember, wet fabric will appear darker than it really is) continue dyeing for another 15 minutes. Continue to check every few minutes to make sure it doesn’t get too dark. Do not dye for more than 30 minutes. Any longer will not make your fabric any darker. If you find that 30 minutes does not make it dark enough, you will have to start over with another piece of fabric. To another quart of water add 1½ tablespoons of tea and repeat the test dyeing process. If this does not make the fabric dark enough, you must start over and add more tea. After you determine the color you like, write down how long it took you to achieve that color. NOTE: Linen will not dye as dark as cotton.

FINAL DYEING

Now that you have determined the length of time it will take, you are ready to dye your fabric. A 2-gallon pot should be large enough. You will need 4 tablespoons of tea to 1 gallon of water to dye 1 yard or less of fabric. Place WET fabric in your dye pot and stir occasionally for the length of time you determined in your test dyeing. When you have reached that point, rinse your fabric well in warm water until the water is clear. Do not dry in
HOW FABRICS GET COLOR
CLOTHING & TEXTILES, LEVEL I, TEXTILE SCIENCE
Member Handout

Directions for Tea Dyeing, continued

direct sunlight. You can dry it in a clothes dryer, but this will set wrinkles that are difficult to get out. It is better to iron your fabric while it is still damp.

WILL YOUR FABRIC FADE?
There really is little need to set the dye when using tea, especially if it is going to be a jump rope and not likely to need frequent washings. If you are doing hand towels, linen, clothing, etc., that will need frequent washings, you might want to use a little white vinegar to set the color. Simmer your dyed fabric for 10 minutes in 1 gallon of water to which you have added ½ cup of vinegar. Adjust the proportions for larger dye pots. Rinse in warm water and dry as explained before.

MAKING ADJUSTMENTS IN THE AMOUNT OF TEA
If you found in your test dyeing that 1 tablespoon per quart was not dark enough, then you will have to make an adjustment. For instance, if 1½ tablespoons to 1 quart of water was enough, then you will need 6 tablespoons of tea to 1 gallon of water. Use the table below as a guide.

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<th>TEST DYEING</th>
<th>FINAL DYEING</th>
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<td>Tea</td>
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<td>1 Tbsp</td>
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<tr>
<td>1½ Tbsp</td>
<td>1 Quart</td>
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<td>2 Tbsp</td>
<td>1 Quart</td>
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Remember, this chart is based on 1 yard of fabric. For larger pieces of fabric, mix larger amounts of dye based upon the chart proportions, and use a larger dye pot.

Color is added by many other methods and using some very complicated equipment to get dye into fabrics more difficult to dye and to form complex designs. Patterns of color can be applied to fabrics just as dyes can be applied. Patterns can be formed using dyes or pigments and special paints applied to the surface of the fabric. These are usually easy to recognize because they are clear and bright on one side of the fabric. Many designs such as paisleys, calicos, and floral patterns are printed designs. Design is applied to fabrics in ways other than dying or printing. In addition to designs in color, some fabric designs are created by applying chemicals that change only part of a fabric. For example, plisse’ is all one color but it has a pattern of puckers in it. Plisse’ is made by treating the fabric with chemicals that shrink the fabric. The chemicals are printed on the fabric everywhere except the places the fabric is supposed to pucker. As the fabric shrinks, the untreated part of the fabric puckers up.

Flocked designs are also printed on. Special glue is applied to the fabric in a pattern, then very short fibers are sprinkled on the fabric. Some dotted fabrics are made this way. Another method for designing is with embroidery, with or without cut work. Eyelet is embroidered around small holes cut in the fabric. Other fabrics may have an all-over embroidery design.

Because there are so many ways to add color and pattern to fabric, we have a great variety to choose from.

The procedure for tie dyeing can be used with the tea dye. Refer to The Dye and Printing Process, Level II, for more complex dying and printing procedures.
What Members Will Learn . . .

ABOUT THE PROJECT:
- What is a fiber
- Fibers have special properties
- A unique property of wool fiber

ABOUT THEMSELVES:
- They may choose clothing for reasons relating to fiber content

Materials Needed:
Small quantity of the following battings for each member (approximately the amount contained in one cotton ball)
- polyester and cotton batting (enough for half the members to have polyester and the other half cotton batting)
- wool batting
- Short pieces of 3-ply yarn

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:
When we talk about clothing we often refer to the word fabric. Fabric can be smooth and silky or rough and bulky. Many items that we buy are chosen because of the comfort or appearance of the fabric. Today, we are going to talk about the building blocks of fabric or what we call “fibers.” These, when we put together, make fabrics.

Fibers are very important. We find fibers in the world around us. They are easily put together to make fabrics. Some fibers are made from things we find in nature. They are called natural fibers. Some examples are cotton (from the cotton plant), linen (from the stem of the flax plant), silk (from silkworms) and wool (from sheep).

People can even make fibers from plastics, these are called “man-made” fibers. Man-made fibers are made from chemicals in the laboratory. Some of the most common man-made fibers are polyester, nylon, rayon and acrylic.

A “fiber” is a strand like a piece of hair. Fibers are then put together, (usually by twisting) to form a yarn. This may make you think of knitting yarns. These are indeed very large yarns. Yarns can also be very small, like the size of a thread. These yarns are then woven together to make a fabric.
Fibers cause fabrics to behave differently due to what are called fiber properties. In another lesson we will learn about the properties of certain natural and manmade fibers. To help us understand that each fiber has characteristics making it different from other fibers, we will learn about one property that is unique to wool fibers.

Wool has a property called felting or shrinking. This property is desirable when making felt fabric, but undesirable when washing wool fabric and clothing.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. What is a fiber?
  
  A. A strand like a piece of hair used to form yarns and/or fabrics.

- Q. Name three different natural fibers.
  
  A. Cotton, linen, silk, or wool.

**Process:**
- Q. How are fibers different?
  
  A. They all have different properties causing fabrics made from different fibers to behave differently.

- Q. What fiber has properties that cause the fibers to felt or shrink when heat, moisture and rubbing is applied?
  
  A. Wool

**Generalize:**
- Q. What is one of your favorite fibers? Why?

- Q. Why is it important to understand different fibers when selecting clothes or fabric?

**Apply:**
- Q. What wool fabrics are found in your house? What are the major uses?

- Q. Can you think what might happen if there were no sheep or wool produced in the United States?
  
  A. Wool would have to be imported and it would cost more.

**GOING FURTHER:**
- Put samples of wool and cotton fabrics in a chlorine bleach to demonstrate that chlorine damages/dissolves wool and bleaches but does not dissolve cotton.

- Visit or invite a speaker that demonstrates spinning of wool and or combing and spinning of cotton.

- Look up facts about the countries that export a particular fiber.
REFERENCES:
Textiles, Norma Hollen, Jane Saddler, Anna Langford, Sara Kadolph, Macmillan Publishing Company, 866 Third Avenue, New York, NY 10022
Needles and Pins—The Fun Begins, 4-H Clothing Curriculum Beginning level, Meredith P. Stroh, and Steven D. Fisher, Cooperative Extension Service Kansas State University, Manhattan, Kansas
American Wool Council, 50 Rockefeller Plaza, Suite 830, New York, New York 10020, 212-245-6110, FAX 212-333-5609

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Reviewed by:
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What Members Will Learn . . .

ABOUT THE PROJECT:
- Procedures to start, steer and stop the sewing machine
- Uses and purposes of sewing tools

ABOUT THEMSELVES:
- Confidence when operating a sewing machine or serger
- Gain skill and self confidence
- Appreciation of sewing as a lifetime skill
- Importance of observation and following directions

Materials Needed:
- Ask members to bring the instruction book for their sewing machine to this meeting
- Copies of Activity Sheets and Member Handouts
- Sewing tools (see suggested list in lesson)
- Sewing machine and/or serger
- Pencil, marker or crayon for each member
- See materials needed in the Paper Ornament activity

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY
As with any hobby or career, sewing has special tools and skills. Since you have enrolled in sewing as a project, we will teach you some things about the tools you will be using. You also will learn some beginning skills. By knowing these skills, you will be surprised what fun sewing can be and how easy it is to make something of which you can be proud. Chances are you know someone who likes to sew. How long have you been sewing? One of the best things about sewing is that there is always something new to learn. You can sew for years and still be learning. You also will feel proud as you see your ability improve as you practice.

The tool that probably comes to mind when you think of sewing is the sewing machine. It is the major machine that you will use when you sew. Another machine you may use is the serger. The serger sews faster, but it does not replace everything the basic sewing machine does. It is generally used to finish outside seams. It cuts the outer edge of the fabric at the same time it finishes the edges. It has no bobbin, and uses two to five spools of thread.

Leader Notes
Welcome members. Have them sit around a sewing machine and serger so they can see well. Allow them to introduce themselves to the group. Ask that they name one person they know that sews. You begin.

See page 52 in Stitch and Wear book, found in the reference section at the end of the Introduction, for a diagram of a serger.
Let’s talk about the sewing machine first. As you look at different sewing machines you may think they all look very different. However, most sewing machines are more alike than different. They work by taking two threads and knotting them together through fabric. This looping action forms the stitches that hold the fabric together. All sewing machines use two threads. One is the bottom thread or “bobbin” thread, and the other is the top thread. Threading the machine is one thing you need to learn.

Now let’s talk about sewing tools. There are many kinds of sewing equipment in stores. You probably already have some sewing tools at home. Choose equipment which will help you do the job in the best way. When you choose to buy equipment, get the best quality you can afford, so that you are not frustrated by equipment that doesn’t work well.

As you assemble items for your own sewing basket, think about each one carefully. Does it fit your size? Are you going to use it frequently? Find a box or basket that will hold all your supplies. If your container is too small, you may lose equipment because it cannot be kept together. If it is too big, you will not use the container as much because it will be awkward to carry around.

Next, you will get a chance to drive the sewing machine and serger. It is important that you drive the sewing machine just as someone learns to drive a car. Begin slowly, and watch where you are going. As you operate the machine, don’t do anything else, no TV or other distractions. When you are finished, come to an end slowly. Turn everything off when you are parking it for a time.

To learn how to operate the serger, cut two long pieces of fabric the same length and width. A woven fabric that has some body may be helpful, but any fabric will work. Hold the fabric at the beginning and end; serge the length of the fabric. Check your results, cut off the serging and begin again. If you need to use pins, place them parallel to the edge and far enough away from the edge that they are not in the seam allowance.

We are discouraging the practice of using tracing paper because many members have ruined garments by using tracing paper on the right side of fabric.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What tool is useful to help you take out stitching?
A. Seam ripper.

Q. What is the bottom thread on the sewing machine called?
A. Bobbin thread.

Process:
Q. What sewing tools do you own?
A. Answers will vary.

Q. Is a serger a complete replacement for a sewing machine? Why or why not?
A. It cannot do everything that a sewing machine does, but it does finish the edge of seams smoother than a sewing machine.

Q. What was the most interesting thing you learned today?
Q. Why was that interesting for you?

Generalize:
Q. How will you use what you learned today?
Q. What did you learn about yourself?
A. Perhaps they might recognize need for patience, listening, practicing.

Q. Looking at seams in the garments that you have on, were the seams constructed with serger or conventional sewing machine? Why do you think that?
A. Majority of ready-to-wear clothing will have serged seams. Serging seams gives a faster finished seam in the factory and saves money.

Apply:
Q. How is learning to sew like learning to drive a car?

GOING FURTHER:
• Take time for members to experiment with the different tools of sewing.
• Have members bring their sewing boxes and help decorate them.
• Take members shopping for needed sewing tools.
• Play a word scramble with the tool names. The first to unscramble all words wins a sewing tool.
• Thread the machine and let members practice driving on fabric.
• Show how to adjust stitch length. Have members count stitches and measure inches/centimeters to demonstrate how stitch length is determined.
• Show what damage a hot iron can do to a scrap of synthetic fabric.
• Have members sew a sample bean bag in any shape on any fabric to try out the stitching of the machine.

Give each of them several copies of another stitching guide to take home and practice on with their home sewing machine.

Pass out the activity sheet, “Paper Ornament” and have members make the ornament to take home.

Pass out the word search and have members complete this activity until their parents arrive.
Leader Notes

• Have members go around the room to different items and identify the sewing equipment on display... could add more sewing equipment. (For information on buying sewing machines or sergers, see the lesson, Sewing Equipment, in Level II.)

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READY, SET, SEW
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Threading Your Sewing Machine

Show how to thread the machine by drawing with markers, crayons, or colored ink.

READY, SET, SEW
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Basic Sewing Tools

Identify the sewing tool and match it to its use by drawing a line.

- **Sewing tool**
- **Uses**
  - used to mark hems, seams, and other areas.
  - used to cut fabric.
  - used to hold pattern securely to fabric.
  - used for hand sewing.
  - place to keep pins handy for use.
  - used to protect your finger when hand sewing.

START HERE
(stitch without thread)

Road Test

License To Drive

a Sewing Machine

This license certifies that

is a Licensed Driver

Leader

Driver has shown ability to:
- thread machine
- wind bobbin
- stitch with thread
- control speed
- use seam guide
- fasten threads
READY, SET, SEW
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Stitching Guides

64-Clothing & Textiles, Level I
Stitching Guides, continued
YOUR SELLING EQUIPMENT WORD SEARCH

FIND AND DRAW A CIRCLE AROUND THE HIDDEN WORDS.

ACROSS

1. ___ ___ ___ ___ ___ ___ ___ are used to cut threads.
2. Use the right color ___ ___ ___ ___ ___ when you sew.
3. Pins should have ___ ___ ___ points.
4. Assorted sizes in needles might be sizes ___ ___.

DOWN

1. The ___ ___ ___ ___ ___ was once called "Thum-bell".
2. ___ ___ ___ ___ ___ have a round, bent handle for your thumb and an oblong handle for your fingers.
3. Sharps are needles with ___ ___ ___ ___ eyes.
READY, SET, SEW
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet, Leader Key

Your Sewing Equipment Word Search

Find and draw a circle around the hidden words.

ACROSS

1. __ __ __ __ __ __ __ __ are used to cut threads.

2. Use the right color __ __ __ __ __ __ when you sew.

3. Pins should have __ __ __ __ __ points.

4. Assorted sizes in needles might be sizes __ __ __.

DOWN

1. The __ __ __ __ __ __ __ was once called "Thum-bell".

2. __ __ __ __ __ __ have a round, bent handle for your thumb and an oblong handle for your fingers.

3. Sharps are needles with __ __ __ __ __ eyes.
READY, SET, SEW
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Fabric or Paper Ornament

Materials Needed:
   Heavy brown or white paper, felt or firm fabric scraps
   Cotton batting
   Thread
   Sewing machine
   Pencil
   Ruler
   Ribbon
   Hand needle
   Pinking shears for paper

1. Cut 2 pieces of paper 6 × 6 inches.
2. Cut 1 piece of cotton batting 6 × 6 inches.
3. Using a pencil and ruler, draw an object on one piece of 6 × 6-inch paper. Example: Tree
4. Pin layers together in the following order: Paper, batting, paper.
5. Sew on line you drew, pivoting at corners.
6. Cut around object with pinking shears, making sure NOT TO CUT STITCHING.
7. Thread needle with ribbon and insert ribbon through the top of the object and tie ribbon in a bow.

Congratulations, you made an ornament!

68-Clothing & Textiles, Level I
What Can Be Stored in Your Sewing Box/Basket?

- Machine needles—allow an adult to help you replace machine needles when you begin to sew. Be sure to use the correct size and type needle for your fabric.
- Hand-sewing needles—come in many types and sizes, generally sizes 5 to 10. A needle should go with the kind of fabric, thread, and sewing you will be using. The needle should be small enough to slip through the fabric easily and fill the hole with thread. “Sharps” and “embroidery/crewel” needles are two kinds of needles used for handsewing. Sharps have round eyes to keep the thread from slipping out. Embroidery needles have long slender eyes for easy threading.
- Needle threader—looks like a flat piece of metal with a looped tail of wire. They are used to help you thread the needle. You slip the wire through the needle eye. Next, slip the thread through the wire loop. Then pull on the metal part of the threader to pull the wire loop back through the needle, and the needle is threaded for you.
- Thimble—used to protect the end of your finger when pushing the needle through the fabric. Thimbles come in different sizes to fit the middle finger. They may feel awkward at first, but soon you will be able to sew faster, especially on tightly woven fabrics.
- Fabric weight—anything heavy and not rusty can be used to hold the pattern down on the fabric for cutting. Cans of food make good fabric weights.
- Water soluble basting tape—holds fabric while sewing.
- 2 or 3 clothespins—hold the body of the fabric while you concentrate on stitching the seam.
- Shears—should be bent-handled to help you cut better. They have longer, stronger blades than scissors. Shears should be sharp. They should open and close easily in your hand and be comfortable to use. The blades of better quality shears will be joined with a screw. Always keep shears closed when you are not using them. Wipe the lint off the blades with a clean cloth. Occasionally, put a drop of sewing machine oil near the screw, then wipe away the extra oil. Use shears only to cut fabric. Use other shears or scissors for cutting paper, plastic or other things.
- Small scissors—used to cut threads.
- Seam ripper—has a handle and cover for the curved blade with a sharp point. It’s used to cut every second or third stitch when ripping a seam. This is a tool you may use often!
- Tape measure—the tape you choose should bend easily, but not stretch. They often are made of fiberglass or plastic-coated cloth and have metal tips on the ends. Many tape measures have both inches and centimeters. The numbers should be on both sides.
- Seam gauge—small tool used to check widths of seams and hems. They are measuring devices that look like skinny rulers with a slide on the sides. Seam gauges are available with both inches and centimeters. If you do not have a hem gauge, cut a small piece of cardboard the depth that you need.
- Iron—this equipment is second to the sewing machine in importance to sewing. Find an iron with dry and steam settings for pressing a variety of fabrics. Test the iron temperature first by pressing on a small scrap of fabric. If the iron is too hot it may melt the fabric, leave marks, or make the fabric shiny or yellow. Handle the iron carefully. The owner's manual will tell you how to use and care for your iron. Never press over pins because they can scratch the bottom of the iron. Always turn the iron off when you are finished using it.
- Pin cushion—this can be a wrist type or a tomato type, and some are magnetic and may stick to your machine. Find the type you think you will use and invest in it. It makes keeping pins off the floor and out of your feet much easier.
What Can Be Stored in Your Sewing Box/Basket?, continued

- Chalk—always pretest chalk on your fabric to be sure it will brush off rather than stain. Use the chalk to make construction markings in the seam allowance of your fabric after cutting out the pattern.
- Pins—a pin’s size refers to how many sixteenths of an inch long it is. A size 7 pin is $\frac{7}{16}$ inch (1.3 centimeters) long. Pins may be marked for how thick they are, most are .5 millimeter or .6 millimeter. Silk pins are fine, thin, and extra sharp and work well on lightweight to medium-weight fabrics. Other pins are available that have colored heads, are longer and finer than normal, or ball point for use on knits. Select the correct type of pin for your fabric.
Fabric Preparation

Clothing & Textiles, Level I, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
- How to select a fabric for a project
- The steps leading up to sewing, preshrinking, straightening, pinning and cutting

ABOUT THEMSELVES:
- How to make good decisions
- Confidence in completing a hands-on task

Materials Needed:
Depends upon activity chosen. See list of supplies on project. This may be used as two project meetings, i.e., one to choose the fabric in the store (be sure to notify store ahead of time) and preshrink and straighten fabric, and one to cut and sew the project. Or you may purchase the fabric ahead and let members choose the one they like. Use this meeting to talk about preshrinking, straightening and pinning/cutting. Then sew next meeting. (Maybe sewing guild members in your community will donate scraps of fabrics for children to learn to sew.)
- Various pattern envelopes
- Different types of fabrics

ACTIVITY TIME NEEDED: TWO SESSIONS, LIMIT TO 45 TO 60 MINUTES EACH

ACTIVITY
Fabric selection is often the most fun part of beginning a sewing project. This is where you get to be creative. The choice of fabrics are almost limitless. You may choose a fabric because you have seen it made up into something and liked it, or you may choose a fabric because it is your favorite color, or you may like the print or weave. If you want to be happy with the end product, you should think about more things than those just mentioned. We will talk about these today.

Have you ever made or seen something made that turned out to look very different than you thought it would? If you continue to sew, someday you will. Usually this is because that fabric did not compliment (blend well with) the pattern. This happens to all of us sooner or later.

One rule to remember is the more details in the pattern, the fewer details you want in the fabric. The fewer details in the pattern the more details you may have in the fabric. If you buy a busy (more detailed) pattern with lots of collar, sleeve, waist and hem special effects, they will all “get lost” if you use a bold multi-colored fabric. A plain fabric will let these struc-

Leader Notes
Welcome members, have them sit in a comfortable place if meeting in your home. If meeting in a fabric store try to have a place that is away from the hustle of the store. Have members introduce themselves if they do not know each other. Have them describe a fabric they think would be pretty. You begin. Ask about patterns (stripes, dots, horses, cartoon characters), textures (fuzzy, silky, shiny), or favorite colors, etc.

More detailed information on color can be found in Level IV, “Wardrobe Planning” section.
Have a pattern to show the members this information about suggested fabrics and knit stretch guide. Show some fabrics that are suggested and some that would not work too well. Show how to use the stretch guide for knits. Check and make sure some knits are suitable for the pattern.

Next, pay attention to the texture (feel) of the fabric. Your pattern will often suggest fabric that will be good to use for that pattern, so check this first and touch the fabric that is suggested. Shorts made of a stiff fabric will be no fun to wear, neither would very thin ones that cling to your legs. Pick a fabric that will wear well and have the right amount of stiffness. If a pattern would be good made from a knit fabric, it will say so. You can check the amount of stretch a knit fabric has by checking it against the pattern guide.

Read the end of the bolt to find out what the fiber content is. This will tell you how to care for the fabric. The price per yard and fabric width is also on the bolt end. The width is needed to figure how much fabric you need to buy to complete the project. Use the pattern back to know the proper amount of fabric needed for the project.

As you look for just the right fabric, you should look for one more thing—the grainline. This will tell you if the fabric will hang straight once it is sewn. To check the grainline look at the fabric and see if the crosswise yarns form a right angle with the lengthwise yarns. Check and make sure that these yarns are square with the fabric. If not, the fabric is off grain and will not hang evenly when cut. If they are, this fabric should work to use in your project.

After you buy the fabric you need, take it home and wash and dry (or dry clean) it as you will after it is sewn. This will allow for any shrinkage to occur before you make it. Otherwise, you might make it, wash it, and find it does not fit anymore. Preshrink any notions (i.e., zippers, hem tape, trim, all interfacing, lining) that will be used that might shrink. Preshrink iron-on interfacings in hot water and hang on a towel rack to drip dry.

Next, straighten the fabric before cutting. This is to make sure that those yarns are at right angles and the fabric will hang straight after the item is done. Have you ever bought a pair of jeans that the seam curls around to the front? This is because the fabric was cut off grain. To straighten a fabric, either:

1. If the fabric is 100 percent cotton, clip through the selvage and tear across. Do this carefully, or it may tear in the wrong direction. Stop at the selvage on the other side and clip through it with sharp scissors.

2. If the fabric does not tear easily, such as a cotton/polyester blend or a polyester warp fabric, pull a thread or two across and cut along the line of the pulled thread.

For knits, baste or pin along a crosswise yarn or course before folding a corner of the fabric to check right angle structure.
Look at the fabric carefully to see if the ends are even when folded or match the right angle of a table when laid flat. If they do, you are ready to cut. If not, the grain needs to be straightened. Here are some suggestions. (If the fabric is badly off grain or contains a durable press finish, these may not work.)

1. Pull one short corner of the fabric and let someone else pull the other short corner, see-saw like. Pull until it is even with the side of the table. You are actually pulling those crooked threads straight.

2. Fold fabric, right sides together, and baste all edges together with the grainlines aligned. Pre-wash again and let the machine agitator do the pulling of the fabric as you launder or dry clean (coin op) it. Align the edges with the edge of a water-proof table. Allow to dry and press if necessary. Press from basted edge to the fold and have an adult assist you.

Next, you are ready to lay out your pattern and cut the fabric. Follow the pattern directions to lay out.

Then, you will cut. Cutting needs to be done carefully so seams will match and be smooth. Be sure your shears are sharp and cut easily.

Use shears with bent handles for cutting out the pattern and fabric. They help you keep the fabric flat while you cut. Don’t use pinking (zig-zag edge) scissors for this unless you can cut very straight with them.

Slide the shears along the table to move forward for the next stroke. Use long, smooth strokes and cut with all but the tips of the blades. Be sure you hold the shears straight up and down. Cut the pattern diamonds toward the outside so the seam won’t be weakened.

Save some fabric scraps to test machine tension, stitch length, iron temperatures, and other pressing checks.

**DIALOGUE FOR CRITICAL THINKING:**

Share:

Q. What information is found on the end of a bolt of fabric?
A. Fiber content, price, fabric width, care instructions.

Q. How can you secure the pattern to the fabric before cutting?
A. Pins, weights, tape.

Q. What is preshrinking?
A. It is treating the fabric before it is cut according to the care instructions. This will cause the fabric to change dimensionally before it is sewn, and allow for a better fit to your body size.

Q. What is on-grain fabric?
A. When the lengthwise and crosswise yarns meet at right angles.
Process:
Q. What was the hardest thing for you to decide when selecting fabric or a pattern? Why?

Q. What similar problems have you had before when making choices?

Generalize:
Q. What could be the consequences of not preshrinking the fabric and all notions?
A. A garment that may shrink or notions that may shrink differently than the fabric after cleaning.

Q. What could be the consequences of not straightening off grain fabric?
A. A garment that does not hang well on the body.

Apply:
Q. What could be the consequences of making a poor decision or not following directions for something else you might do?

GOING FURTHER:
- Let members practice cutting straight lines on scrap fabric or volunteer to cut items needed for a civic project.
- Have different texture fabric and shears that range from dull to sharp. Have members test these on various fabrics to see the difference.
- Visit a scissor sharpener and talk about proper care of shears.
- Have members interview a person they know that sews and ask them about their most important sewing tool.
- Have members cut out dress shapes (the shape is open and the surrounding paper is solid) and allow them to place various fabrics underneath to see what a difference a change in fabric can make to the same style garment.
- Make different sized bags out of all types of fabrics that can be used and reused to wrap presents instead of using wrapping paper. A display could be shown at a fabric store or shopping center. This could be done around a holiday theme if desired.
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FABRIC PREPARATION
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Drawstring Tote Bag

SUPPLIES NEEDED:
½ yard fabric
Matching thread
1 yard cording

FABRIC SUGGESTIONS:
Burlap
Denim
Homespun
Other heavy fabric
Hand towel

STEPS TO FOLLOW:

2. Stitch ¼ inch from the edge on all four sides. This kind of stitching, through one layer of cloth, is called stay-stitching.

3. Turn the fabric to the wrong side along the stitching line. Press. Stitch close to the folded edge. This time you are stitching through two layers of fabric (or these edges could be finished on the serger.)

4. To make the headings, fold the short ends over 1 inch. Press. Pin. Stitch. Backstitch at both ends of stitching line.

5. Fold in half with right sides together. Stitch ½-inch seams on each side. Begin stitching at the fold. Stitch to the bottom of the heading. Backstitch at both ends of stitching line. Turn right side out. Press.

6. Cut cord in half. Run one piece through each heading. Knot cords together at both ends.
FABRIC PREPARATION
CLOTHING AND TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

SUPPLIES NEEDED:
3/8 yard of 38-inch fabric
2 3/4 yards of double fold bias tape

FABRIC SUGGESTIONS:
Heavy cotton
Sailcloth

STEPS TO FOLLOW:
1. Measure your book from top to bottom. Cut out a rectangle of fabric using the following measurements:
   - 10-inch book — 10 1/2 x 31-inch
   - 11-inch book — 11 1/2 x 35-inch
   - 12-inch book — 12 1/2 x 37-inch
   Draw the rectangle on the grain of the fabric.
2. With a piece of chalk, mark a fold line on the wrong side of the fabric using the following measurements:
   - 10-inch book — 5-inch from fabric edge
   - 11-inch book — 6-inch from fabric edge
   - 12-inch book — 7-inch from fabric edge
3. With the chalk, mark a cutting line at the opposite end of the fabric using the same measurement as in step 2. Cut along this line. This small piece of fabric is a strap.
4. Bind the long edges of the strap with bias tape. The wider half of the tape should be on the right side of the fabric.
5. Bind the short edges of the cover section with bias tape. The wider half of the tape should be on the wrong side of the fabric.
6. Fold the fabric on the fold line so that the wrong sides are together. Stitch the ends with a 1/4-inch seam.
7. Place the strap at the opposite end of the cover with the wrong sides together. Stitch the ends only.
8. Encase the long edges of the cover in bias tape. The wider half of the tape should be on the wrong side of the fabric. Turn in the ends of the bias tape and pin in place. Stitch from the right side of the fabric through all thicknesses.
9. Decorate your book cover. Some ideas are applique, embroidery, or iron-on designs. You may add your name, your initials, or a symbol that tells what subject your book is (plus and minus for math, question mark for English, note for music).
What Members Will Learn . . .

ABOUT THE PROJECT:
- Measuring is an important part of learning to sew
- Practice in using a measuring tool
- To determine the correct pattern size for their body

ABOUT THEMSELVES:
- Their body measurements
- Measuring is a useful skill for many things

Materials Needed:
- Pattern size chart from pattern book or envelope
- Depends upon the activity chosen to do; see activity sheets
- Tape measures
- Hem gauges
- Needles and pins or clothespins
- Sewing machine
- Pencils or pens
- Copies of Activity Sheets

ACTIVITY TIME NEEDED: DEPENDS UPON ACTIVITY CHOSEN—LIMIT TO 60 MINUTES

ACTIVITY

As you begin to learn how to sew there are some special skills you need to know. One of these is measuring. Can you tell me what measuring is? (Determining what size something is) When you measure you use math skills that you are learning in school. We are going to practice these today in our meeting.

As you can see, we measure many things around us everyday. Some measuring helps us know how healthy we are and how things are changing. If something is changing, we usually know because of a measure we have taken earlier and compared it to a later measure. Example would be a fever.

In sewing, we are creating something to fit our bodies. Since our body sizes are different from each other, we must measure our body to know what size it is. That way we can tell what size of pattern we need and how much fabric it takes to cover our body.

Leader Notes

Welcome members and have them sit in a comfortable place. Have all materials for the chosen lesson in place and ready to be used. Allow members to introduce themselves and name one thing that is measured. You begin. Examples: flour, feet, temperature, knowledge, physical ability, body size, weights of people and food (grain, fruit, etc.)
First, we will review measuring. Look at your tape measures and hem gauge. There are markings on each. The way we measure our bodies is in inches or centimeters. There are other ways to measure things. An example would be in pounds. Can we measure our clothes size in pounds? (No) Why? (Because many people may weigh the same but they often wear different clothes sizes.) Can you measure it in degrees? (No) So we use inches or centimeters to measure our bodies around the outside. Can you find how long 1 inch is on your tape measure? How long is 5 inches?

Now that you have practiced measuring, we are going to measure the item that we try to fit when sewing—you! Since you are growing so quickly your measurements will change quickly and you should be remeasured every six months. As you get older, this can be changed to once per year unless you have gained or lost weight.

When we measure you, we are trying to see which pattern size will best fit you. Several different companies sell patterns that come in many sizes and styles. These sizes are similar to ready to wear but are different enough that often you will wear a different size pattern than you buy in ready to wear.

When you measure yourself you will need someone to help you. This cannot be done alone and be accurate. It is best to measure in your undergarments, a leotard, or a T-shirt and shorts. These will be the most accurate. Use a tape measure and keep it snug, but not tight. Why do you think tape measures are bendable? (To let us measure around curves.)

Take these measurements:
- Bust or chest—across the fullest part of the bust or chest and parallel to the floor all the way around the body.
- Waist—around natural waistline.
- Hips—around the fullest part of the hips. Also record how far this measurement is down from the waist.
- Back waist length—bend neck to locate neckbone. Measure from the prominent bone to your waistline.
- Height—measure in bare feet, on a hard surface floor and against a flat wall. Place a yardstick on the top of the head straight back to the wall. Measure from the yardstick to the floor.

Other measurements to take on older persons include: (Use these with adults or older members that need remeasured or are new project members.)
- High bust
- Skirt length
- Arm length
- Arm circumference
- Shoulder length
- Bust point
- Crotch depth
- Knee
- High hip
- Pant length
- Wrist circumference
- Neck circumference
- Front neck to waist
- Instep
- Thigh
- Calf

Help members find the measures. Use a few sample items (post/index card, sheet of paper, tile square, etc.) that you have in your house and let the members practice measuring these. This could be held as a scavenger hunt looking for the person that can find the most items that are 6 inches long or the first to find and list one item in each length from 1 to 10 inches long.
Once this has been done you can compare these measurements to those in the pattern book guide and select the size and type of pattern that most closely matches your measurements. Look at the sample body measurement chart. If your sizes are very different from your top to your bottom, buy a pattern with multiple sizes or separates with several sizes in one pattern. That way you can cut the size to fit your various body measurements.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. Why do we need to measure ourselves before we begin to sew?
A. So we can find the right size pattern to use, that will fit us best.

Q. What are the units of measure we use to measure around us?
A. Inches or centimeters.

**Process:**
Q. Name three measures we need to take to compare to a pattern.
A. Bust or chest, waist, center back. (Others also acceptable)

**Generalize:**
Q. How else do we use measuring?
A. Answers will vary.

**Apply:**
Q. How will you use these measurement skills in the future?
A. As your body changes, it will be necessary to remeasure to determine your size over time. If you sew for someone else you will need to take their measurements.

Q. What are the consequences of taking inaccurate body measurements?
A. You might select the wrong pattern size and construct a poorly fitting garment.

**GOING FURTHER:**
- Bring pattern books for the members to look in for body types.
- Have members look at the ways they or their parents measure things in a day. They may want to record these and bring them back next meeting.
- Visit a local manufacturer in your area. Ask him/her to explain what and how they use measuring in their business.
- Have members guess circumference of an object, then measure to see who is closest. Offer a prize to the one closest.
- Have buttons in a jar and have members guess the amount. Let them count them and sort them by color, size, etc.
- Create posters on the difference between our (United States) methods and metric measurements.
Leader Notes

REFERENCES:
Stitch 'N Wear, Ruth Gulbrandson, Clothing Specialist, and Merry Green,
McHenry County Home Economist, Cooperative Extension Service,
North Dakota State University, Fargo, North Dakota 58105
Clothing Leader Guide, Texas Agriculture Extension Service, Alma
Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M,
College Station, Texas
Clothing Connections, Jacqueline Davis-Manigaulte, Jean McLean and
Gret Atkin, New York State College of Human Ecology, Cornell
University, Ithaca, New York 14853
Needles and Pins the Fun Begins, Meredith P. Stroh, Extension Specialist
Home Economics, and Steven D. Fisher, Extension Specialist 4-H
Youth Program, Cooperative Extension Service, Manhattan, Kansas
66506
Patterns to Sew I, Dorothy Ettl, Extension Clothing Specialist, and Julie
Curfman, Program Assistant, Cooperative Extension Service,
Washington State University, Pullman Washington

Author:
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Reviewed by:
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Extension Service, Kansas State University; and members of the Family
Living Curriculum Development Committee and Clothing & Textiles
Design Team
Wrist Pincushion

SUPPLIES NEEDED:
A 4 1/2 inch square of closely woven fabric; matching thread; sawdust, wool yarn, tiny wool scraps, or shredded plastic foam for stuffing; elastic 1/4 or 3/8 inch wide, and long enough to go around your wrist.

STEPS TO FOLLOW:
1. Cut a piece of fabric 4 1/2 inches square. Fold the cloth in a triangle with the right sides together. Pin. Stitch 5/8 inch from the edge, leaving a 1 1/2 inch opening on the side.

2. Turn right side out. Pull out points. Stuff tightly so it will stand up in a peak. Close the opening with small whip stitches.

3. Slipstitch one end of the elastic firmly to the cushion. Make the elastic fit the wrist smoothly. Slipstitch the other end of the elastic in place.
STRAIGHT AS AN ARROW
CLOTHING & TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Travel Kit

SUPPLIES NEEDED:
1 terry cloth finger towel
1 terry cloth washcloth
27 inches of grosgrain ribbon or a 27-inch shoestring
matching thread.

STEPS TO FOLLOW:
1. Fold the washcloth in half and pin the open edges
together. Cut along the folded edge. You will only
need one of the washcloth halves.

2. Fold one of the washcloth halves end to end to find
the center. Mark the center with a pin at the top and
bottom.

3. Fold the towel end to end to find the center. Mark the
center with pins and then a row of basting. Baste
along the bottom of the towel 1 inch from the edge.

4. Match the centers of the washcloth and towel. Pin the
cut edge of the washcloth on the line at the bottom of
the towel. Stitch 1⁄2 inch from the cut edge.

5. Fold the washcloth up on the towel. Pin and baste the
side edges of the washcloth in place.

6. Decide which articles you would like to carry in the
kit. Place them in the washcloth and mark the pockets
with pins and basting.

7. Stitch with one continuous stitching as shown. Make
two stitches across the top side of each pocket. Make
the bottom stitching line 1⁄4 inch from the edge of the
pocket.

8. Find the center of the ribbon or shoestring. On the
back side of the towel, find the center of one end.
Match the two centers and stitch.

9. To use the kit, fill the pockets. Fold the upper edge
down to cover them. Roll up the towel, wrap the
ribbon around and tie.
My Measurements

Take your measurements before buying a pattern. Do not try to take your own body measurements; ask someone to help you. For best results, wear undergarments of the kind you would wear under the garment you want to make. Mark your natural waistline by tying a string around your middle; it will settle where the waistline is. Do not measure too tightly and do not use a worn or stretched measuring tape. The sketches here will show you where to take measurements. Measurements 1 through 5 are the body measurements on which your pattern type and size are based. Measurements 6 through 9 are nice to have for making minor alterations. Study these sketches and record your measurements on the back.

MEASURING MALES:
1. Neck
2. Chest
3. Waist
4. Hip
5. Back neck to waist
6. Sleeve length
7. Inseam
8. Trouser length
9. Crotch depth
## My Measurements, continued

<table>
<thead>
<tr>
<th>How to Measure</th>
<th>My Measurements</th>
<th>Chart Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Neck—around the base of the neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Chest—over the widest part of the chest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Waist—snugly around the waist over the string</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Hip—over the roundest part of the seat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Back neck to waist—from the prominent bone at back</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neck base to waist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sleeve length—from the base of the neck to the wrist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bone, over slightly bent elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Inseam—from crotch to floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Trouser length—from side waistline to desired length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>along outside of leg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Crotch depth—from side waist to chair (sit on a flat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chair and use a ruler)</td>
<td></td>
<td></td>
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</tbody>
</table>
STRAIGHT AS AN ARROW
CLOTHING & TEXTILES, LEVEL I, CREATING WITH FABRICS AND FIBERS
Activity Sheet

My Measurements, continued

Take your measurements before buying a pattern. Do not try to take your own body measurements; ask someone to help you. For best results, wear undergarments of the kind you would wear under the garment you want to make. Mark your natural waistline by tying a string around your middle; it will settle where the waistline is. Do not measure too tightly and do not use a worn or stretched measuring tape. The sketches below will show you where to take measurements. Measurements 1 through 6 are the body measurements on which your pattern type and size are based. Measurements 7 through 20 are nice to have for making minor pattern alterations. Study these sketches and record your measurements on the back.

MEASURING FEMALES:
1. High Bust
2. Bust
3. Waist
4. High Hip
5. Full Hip
6. Back Neck to Waist
7. Skirt Length
8. Pant Length
9. Arm Length
10. Wrist Circumference
11. Arm Circumference
12. Neck Circumference
13. Shoulder Length
14. Front Neck to Waist
15. Bust Point
16. Instep
17. Crotch Depth
18. Thigh
19. Knee
20. Calf

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### My Measurements, continued

<table>
<thead>
<tr>
<th>How to Measure</th>
<th>My Measurement</th>
<th>Chart Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High bust—directly under arms, above bust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Bust—around the fullest part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Waist—over the string</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. High hip—approximately 3 inches below waist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Full hip—around the fullest part of the hips (about 5 ½-7 inches below the waist for girls)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Back neck to waist—from prominent neck bone down to waist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Skirt length—from waist to desired length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Pant length—from waist to floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Arm length—from shoulder bone over elbow to wrist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Wrist circumference—around wrist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Arm circumference—around fullest part of arm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Neck circumference—around fullest part of neck at base</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Shoulder length—from base of neck to shoulder bone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Front neck to waist—from highest point of shoulder over bust point down to waist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Bust point—from highest point of shoulder down to bust point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Instep—around widest part of foot between heel and toes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Crotch depth—from side waist to chair (sit on a flat chair and use a ruler)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Thigh—around fullest part</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Knee—around the knee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Calf—around calf at fullest part between knee and instep</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clothing Basics

*Clothing & Textiles, Level I, Wardrobe Planning*

What Members Will Learn . . .

**ABOUT THE PROJECT:**
- How to make a simple wardrobe plan for next season
- What needed items they should acquire for next season

**ABOUT THEMSELVES:**
- The differences between needs and wants
- How wardrobe planning can help them contribute to their family, by saving time and money (resources)
- How to set goals and plan to reach them

**Materials, Resources Needed:**
- Copies of Activity Sheets
- Pencils or pens

**ACTIVITY TIME NEEDED:** 45 MINUTES

**ACTIVITY:**

Today, we are going to talk about clothing. Why we wear what we wear and how we decide when we need more. How many of you like to get new clothes? Why? How many of you have heard your parents say they need to shop for you because you need a new clothing item? Why did you need it? (School, outgrown, special occasion, worn out.) Today, we will help you learn to know when you need a new clothing item.

Why do we spend time doing this wardrobe planning stuff? The main reason is because a well-coordinated (matching) wardrobe will make it seem like you have more clothes. Garments will match, and you can change them around to get more wear out of fewer garments. To do this takes planning, and planning means looking at what you have now, thinking about what you will need, and taking steps to get those things.

The first step is to look at what you have. To do this you have to separate all your clothing items into two piles. Things that are wearable and things that are not wearable. Take the unwearables and decide if they should be repaired to be wearable (and do it), given away, or used for some other purpose. Then remove these items from your wardrobe. For more information, refer to lesson on recycling. Next, look at your wearables. Make sure they are wearable, if they aren’t because you need something to wear with them; make a note of it.

**Leader Notes**

Welcome members and have them sit in a comfortable place where they can write to complete sheets. Allow time for all members to introduce themselves and ask that they describe their favorite outfit. Then have them write it down on the “Favorite Outfit, Least Favorite Outfit” sheet. You begin. After all members have done this, ask that they check the reasons why they like this outfit and repeat with another outfit. Have them complete this activity for their least favorite outfit and check reasons why.
Next, you need to make an activity chart. This will tell you what exactly you need for your activities. The activity chart is on the bottom of “Favorite Outfit, Least Favorite Outfit” sheet.

After you have totaled the number of hours you spend on each activity rank them from the highest number of hours to the least. This indicates the type of clothing you have the greatest need for. Now, look a season ahead and list the activities you will be having on the back of your sheet. List the number of hours you will spend in each. Complete the “What I Have” portion at home.

You should have at least one garment to wear for each activity. Some can fit into more than one category. This is great because it really stretches your wardrobe.

Look at the results to decide if you have enough clothes. Even when you have enough clothes you really like, you may want to get more. When this happens, someone in your family may say, “You don't need any more clothes, you have plenty already.” Sometimes, it is hard to tell the difference between needs and wants.

There is one way to decide on real needs. First, think about whether or not you have clothing that is right for the places you go and the things you do. You need a swimsuit for swimming. If you already have one, you may want another, but you may not need another unless your swimsuit is too small or worn out.

As you complete the sheet, you may find that you have several items that fit and that you like. You may find the reason you are not wearing them is because you lack a coordinating item. Next, pull all these items out—look at them together. You may find that one shirt or pair of pants will coordinate with many of them, thus providing you with a clue of what to purchase or make to enlarge your wardrobe.

Most often, you will find that the items you truly need will be provided for you. However, in some families the items you want may not be available to you. Because of priorities or financial resources, your family may chose to go without wants. One part of growing up is accepting that you cannot always have all your wants.

Once you have noted your needs, how might you meet them? (buy them, make them, as a gift, earn money to buy, get from sibling or friend, buy at garage sale or second hand store, swap for them, borrow, etc.)

**DIALOGUE FOR CRITICAL THINKING:**

*Share:*

Q. What is the main color in your wardrobe?
A. Answers will vary.
Q. Why is it a good idea to plan garments around one color?
A. It allows you to coordinate more garments so you have greater flexibility to mix and match outfits.

Q. How many outfits do you need for dressy occasions?
A. It varies depending on how many occasions you attend weekly/monthly.

**Process:**
Q. If you have to economize (save money) somewhere, how would you do it?
A. Answers will vary. Examples include—borrowing, sewing, buying on sale, doing with less for activities you spend less time at, doing without more wants.

Q. What is the difference between a need and a want?
A. A need is an item that nothing else can substitute for, a want is an item that you would like to have but you can do without.

**Generalize:**
Q. What are the consequences of purchasing garments without a plan?
A. Answers will vary, i.e., garments will not coordinate, different accessories may be needed, other items may still be needed.

**Apply:**
Q. How is planning a wardrobe like planning for something else you might do?
A. i.e.—planning a meal, planning a trip, etc.

**GOING FURTHER:**
- Have project members host a clothing swap meeting for themselves or the entire club. Or collect items to be donated to charity.
- Arrange for a club garage sale to raise funds.
- Help members identify other areas that they have needs versus wants. Examples include food, recreation, attention. Help them list things that are needs versus those that are wants.
- If holiday time, discuss how others may have needs and let project group adopt a group to sponsor to supply some needs.
- Have members compare the needs they have fulfilled to those of a child in an underdeveloped country.
- Have members make a list of wants. Discuss what would happen if they were all granted. Would they be happy?
- Play genie. Ask what three wishes they would like granted.
- Collect unwearable clothes of good quality and give to a clothes drive or charity.
- Prepare a poster showing how different garments can be coordinated if you plan ahead around one color.
REFERENCES:

Adventures in Clothing, Rae Reilly, Janis Stone, Charlotte Smith, Joy Banyas and Melva Burkland, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa 50011

Managing Your Clothing Cents, Betty Feather, Clothing and Textiles Specialist, Extension Division College of Home Economics, University of Missouri-Columbia, Columbia, Missouri 65211

Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
CLOTHING BASICS
CLOTHING & TEXTILES, LEVEL I, WARDROBE PLANNING
Activity Sheet

Favorite Outfit, Least Favorite Outfit

Describe your most favorite outfit.

Why I like it:
__ it looks good on me
__ it is comfortable
__ it was from someone special
__ it is in style
__ I don’t know

Describe your next favorite outfit.

Why I like it:
__ it looks good on me
__ it is comfortable
__ it was from someone special
__ it is in style
__ I don’t know

Describe your least favorite outfit.

Why I don’t like it:
__ it looks awful on me
__ it is uncomfortable
__ it was from someone I dislike
__ it is out of style
__ I don’t know

Activity Chart
List the hours of each activity you do each week.
__ school _____ work/chores
__ church/formal _____ sports, list each
__ hobbies _____ sleep
__ social activity _____ play
__ other

Now rank each in the order of most to least hours per week. The more hours, the more items needed.
# CLOTHING BASICS

CLOTHING & TEXTILES, LEVEL I, WARDROBE PLANNING

Activity Sheet

## What I Need For Next Season, What I Have

<table>
<thead>
<tr>
<th>Clothing</th>
<th>What I have</th>
<th>What I need</th>
</tr>
</thead>
</table>

### Outdoor protection:

- Outerwear:
  - Bottoms: (slacks, shorts, jeans)
  - Tops: (shirts, tops, blouses)
  - Dressy items: (dresses, slacks, tie, jumpers, skirts, jackets)
  - Shoes: (leisure and dressy)

### Sports clothing:

### Hobby clothing:

### Socks/hoisery:

### Accessories:

Now list what you need. Lay out the items that fit but do not match and look for coordinates that will match several of these items. By doing this you will save your family money and time.
What Members Will Learn . . .

ABOUT THE PROJECT:
• Some wardrobe needs—in addition to garments
• Ways to use accessories in a wardrobe

ABOUT THEMSELVES:
• “Needs” versus “wants” for wardrobe accessories
• Preferences, styles, textures, and colors
• How to recognize quality when shopping and to make wise decisions

Materials Needed:
• T-shirts of various qualities
• Copies of Activity Sheet

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

In a previous lesson, we talked about how to start planning your wardrobe. We looked closely at what clothes you have and what activities you do each day. Then, we talked about deciding if you need more or different clothes for those activities. If you did, we suggested you look at which garments you have and try to find items that will match them—to get more wear out of everything you own. We listed areas to help you decide if you had real needs or if the things you want are just that—wants. Today, we will build upon that lesson and talk about the basics “plus.” The “plus” includes things like accessories (things that are not garments, but things we wear to make garments or ourselves look better).

As you begin the next step after developing the basic plan for clothing, you need to think about other items that are part of your wardrobe. Some items are so important they are listed on your basic plan for next season. These are things like outerwear (coats, jackets, and things to protect us from the weather), shoes and socks to protect feet. But there are many other things you need to think about in addition to clothing, if you are trying to plan ahead to build your wardrobe.

Let’s list some of these general accessories now. (Allow members to name as many as possible; some answers may be: belts, backpacks, hip sacks, slips, hosiery, hats, mittens/gloves, umbrella, boots, ties, hair accessories, jewelry, watch, billfold, handbag, and special needs for hobbies or sports.) How many of these things do you have?

Leader Notes

Welcome all members and have them sit in a comfortable place. Allow time for members to introduce themselves and tell a clothing item they don’t need but want. You begin.
Now that you know what you need, it is a good idea to think about what you have before purchasing the needed item. Think about the color and textures in your wardrobe. Where and how often will you need this item? Could you buy a dark colored overcoat and wear it to school and to church over a dress? Look for ways to use an item for more than one reason. This saves you both money and time.

Decide what styles, colors, and textures you like. Some of you may like to dress in bright, shiny colors. Some of you may like to wear blue jean fabrics. You may like leather belts or colorful shiny belts. It is easier to plan if you know what you like and try to add things that match in color and texture (the roughness or smoothness). Accessories can be inexpensive so you can use these items to dress an outfit up or down. For example, if you have a denim jumper you can add a bandanna and white blouse for school or a white blouse, petticoat, and white hairbow for special occasions. The bandanna, petticoat and hairbow could be handmade or purchased on sale so the outfit can be used for many different occasions, yet not cost much. Boys can dress up a denim shirt by adding a tie and wearing leather loafers or boots.

Look for other ideas to save you money but stretch your wardrobe. Borrow and swap with other family members and friends. Remake items that would otherwise be thrown away. Shop garage sales and second hand stores, but do this after you know what you are looking for. Otherwise, you will come home with something “cute” but nothing to wear it with.

Classic or traditional items are always safe choices. Things like leather shoes, belts, and handbags in brown, black, navy blue, and tan are usually good choices because they blend with most other colors. White or black sport shoes are the same. Outerwear in dark or neutral colors (tan, off-white, white, navy, or khaki) blend well. These are choices that often will serve you well if you need to “stretch” your clothing dollars.

As you start to choose colors for your clothing and accessories, you will find one trick to help you. This technique is to choose a color that looks good on you that is “seasonless.” Take a moment and think of each season. What is a color you think of for each season?

Now, if we want a color that is seasonless, we want one that can be worn with the season colors but does not feel like any one season. Colors like tan, brown, gray, black, dark blue, off-white, and many others qualify. These are called neutral colors. If you have a navy blue pair of pants you can wear them in all seasons. In the winter you wear a sweater with them and in summer a tank top or T-shirt. This allows you to wear clothes more than one season and you can get more wear from the things you have. This is important as a growing child because you often outgrow the garments before they are worn out.

If you are going to try to purchase seasonless clothing, another factor becomes important. That is how well the item is made and whether it
needs special care, such as ironing after each washing, before it can be worn again.

Part of shopping is looking for how well an item is made. Sometimes an item is on sale to help the store get rid of it and sometimes it is on sale because the item is of poor quality. If you plan to wear an item a few times or it will not be worn hard, lower quality and price might be just what you want. But if it will be worn often or for a long time, paying a little more may, in the long run, cost less because you will still be wearing it when a cheaper item would have worn out.

How can you judge quality? We will talk a little about quality clues next. We will use a T-shirt as an example. Most of us buy T-shirts and wear them often. There are many qualities and prices for us to choose from. Here are some things to think about.

Look at the label first. If you cannot find a label, do not buy the T-shirt. If the fiber content is 100 percent cotton, know that the T-shirt most likely will shrink if dried in the dryer, and may need to be ironed. So make sure it is a little larger than you want it. If it is combed or mercerized cotton, it usually will be a higher quality T-shirt and will feel smoother and silkier. Moderate to high priced cotton/poly blends won’t shrink or stretch out of shape as much as inexpensive 100 percent cotton T-shirts.

The tighter the construction and the heavier the yarns, the better the quality of the T-shirt fabric. Pull the fabric to see if it is easy to look through. If it is very loose, the shirt may stretch out of shape.

You should always try on a T-shirt before buying because sizing and fit vary greatly. If it fits well, it should have room to move between the shoulders, a tail long enough to tuck in and not be so big as to be bulky and awkward when moving. If it is too large, the T-shirt may become a safety hazard (something that causes you harm).

There are different types of knit patterns. Those with more yarns per inch usually wear the longest. These are other quality check points:

- Binding that returns to original shape after being stretched
- Neck band that stretches enough to easily slip over the head
- T-shirt cut on grain
- Seams that give when stretched
- Shoulder seams that are reinforced for durability
- Knit loops that are nearly round and are relaxed rather than tight or stretched
- Fabric that is a firm, even, close knit
- No skipping in stitching of seams
- Seams that are finished
- Stripes that match

As you begin to become a shopper, it is wise to learn all you can about quality details in all the products you buy. This will help you make the best possible choices and save you money in the long run.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Name two accessory items that you have a need for.
A. Answers will vary.

Q. Name quality check points of a T-shirt.
A. • Binding that returns to original shape after being stretched
• Neck band that stretches enough to easily slip over the head
• T-shirt cut on grain
• Seams that give when stretched
• Shoulder seams that are reinforced for durability
• Knit loops that are nearly round and are relaxed
• Fabric that is a firm, even, close knit
• No skipping in stitching of seams
• Seams that are finished
• Stripes that match

Process:
Q. Think of a person who always looks great. What type of accessories do they wear?
A. Answers will vary.

Q. What similar experiences have you had in purchasing or choosing accessories?

Generalize:
Q. What information do you need to determine if it is a good buy?
A. Amount of discount, quality of item, how it coordinates with other wardrobe garments, care requirements.

Q. Where can you find good information to help you make wise decisions?
A. Answers will vary, i.e., cost of garment in relationship to estimated number of wearings (ask an adult), compare item with quality check points, consider present wardrobe, read the label and hangtags to learn care requirements.

Apply:
Q. What are other quality indicators would you consider if you were buying a toy? a computer game? a video?
GOING FURTHER:
• Have members look at accessories for one day and record the types of accessories they see people wearing. Return this record to the next project meeting and discuss.
• Have members make a simple accessory for themselves or someone else.
• Host a club swap or accessory sale.
• Compare other clothing items/accessories for quality checks.
• Have someone that can give tips on using accessories visit the project meeting.

REFERENCES:
Shopping for a T-shirt, Nadine Hackler, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida 32611
Sweater Shopping, Jane Twentyman, New York State College of Human Ecology, Cornell University, Ithaca, New York 14853
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A & M, College Station, Texas

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General Accessory Checksheet

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<th>Accessory</th>
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Giving and Receiving

Clothing & Textiles, Level I, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
- How to accept a gift graciously
- How to select clothing items for others

ABOUT THEMSELVES:
- Actions and words to use when receiving a gift

Materials Needed:
- Magazines or catalogues that contain pictures of clothing and accessory items for both youth and adults
- 3 × 5 ruled cards that have the following categories listed: main color in wardrobe; style of dress; accessories worn; hobbies or sports; wants and needs (refer to Clothing Basics in the Wardrobe Planning Section)
- Plain paper or a 3 × 5 card, one per member
- Pencils
- Optional: calculator (to figure gift budget)

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

Most of us at some time or another receive gifts of clothing. How many of you have ever received this type of gift? Today, we will talk about how we accept these gifts—whether we like them or dislike them. We will also talk about how to choose gifts that are suitable for others.

Why do we give gifts? When we give or receive gifts it is an expression of caring. This is important to remember as we shop for someone else. A gift given because it is expected is never as much fun to purchase or make as one that is unexpected. On the other hand, the gift that is given because of caring and affection is a joy to shop for or to make.

How many of you have ever received a gift you did not like? What did you say or do? People are all different and the things one person likes may not be enjoyed by someone else. If you get a gift you do not like, keep in mind that the person has done the best he/she can to select something for you. Maybe they cannot afford to spend much or maybe they just have different taste than you. When people are being thoughtful enough to give you a gift you should never hurt feelings by acting unhappy over it. Always say thank you sincerely. If you can think of something positive to say, add that too. For example, “It was very thoughtful of you to give me this!”

101-Clothing & Textiles, Level I
Sometimes, the first impression turns out to be wrong and that gift turns out to be your favorite. Keep an open mind. You may be surprised how much you really like the item.

If you do not like the item or if it is too small/large (and the giver offers the name of the store for return) feel free to return it, but write a note telling them what you were able to get in return. That way they can enjoy knowing you replaced it with something useful. If they don’t offer the name of the store and it is something you find you cannot use, immediately write a note thanking them for their thoughtfulness. If you know the store where it was purchased, it is permissible to exchange it. But, unless asked, you do not need to tell the giver. If you cannot use the item and it is not possible to return it, give it to someone else you believe will like the item. Usually, a charity group or someone who has admired it will be most appreciative.

A thank you note is always in good taste and it makes the giver feel appreciated. It does not have to be long. Just say “Dear __, Thank you for the __. It was nice of you to think of me. Sincerely, __.” A simple note sent is worth hundreds of long ones not written. So be a thank you note writer!

Do you know people that always seem to give unique and great gifts to others? Is there a person in the family everyone wants to draw his/her name for Christmas? Do you ever have trouble finding a gift for someone else and wonder how these people can always find the perfect one? Well, there are some things you can do to help yourself when it comes to shopping.

First, budget your money. A gift is an expression of caring, not buying affection. If you truly care for someone, it does not matter how much you spend. It is more important that you care enough to give something. If you care for someone, the last thing you want is for him/her to spend too much money on gift giving, especially on you. So as you begin to give gifts, decide how many you want to give. Decide how much money you have to spend. Divide the money you have by the amount of gifts you need to buy. This will tell you your gift budget.

One way to be prepared for gift giving occasions is to make an index card for each person on your gift list. This card helps you keep track of things this person likes, wants, favorite colors, and sizes. Use it to give yourself some terrific gift ideas.

Remember, you are wanting to buy people something the receivers want. It may be something you want also, or it may not. If possible, use the occasions you see them to get to know their likes. This will help you fill out the card. Then, when you need to buy a gift you can surprise them with something you know they will like.

If you decide to buy a clothing item, remember it is personal. You will want to make sure it is their style. Some people like jeans and cowboy
hats; others like tennis shoes and ball caps. The same goes for grandmothers. If you give a “ball cap” grandmother dainty earrings, she will say thank you but you may not see her wear them much. A new ball cap may be a better gift.

Once you know the style, hobbies, color of wardrobe, and accessories for people to whom you give gifts, you can choose items they like based on how much you have to spend on them.

If you find that your money is running tight, you might consider making something for this person. Homemade gifts may or may not save you money, but can be especially unique. Making gifts costs more in time and you may need help from an adult. Another thing you might consider is offering a service. Adults often appreciate you doing some service for them, even more than a gift. Raking leaves, doing dishes, providing childcare, and cleaning the car are all special thoughtful gifts.

As a thoughtful giver, there may be times when what you pick to give is not appreciated by the receiver. In that case, offer the name of the store so they can exchange it. And be happy if they can replace it with something they like even better—from you!

When thanked, say “You are welcome!” Never, never, say how much it cost. That is considered bragging or bad manners. You may offer that you made it yourself (if you did). Enjoy giving and getting gifts; it is one of life’s special pleasures!

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What should you say and do when you get a gift you do not like?
A. Say “thank you” sincerely. Write a thank you note.

Q. What should you do if you get a gift that does not fit?
A. Try it on while the giver is there. Usually, they will offer the store name so you can return it. If not, after a while, use it for another worthwhile purpose.

**Process:**

Q. Why does a gift budget help gift buying?
A. You know how much you have to spend and can look for items in your price range.

Q. Name two things you can notice to help you choose good clothing gifts for others.
A. The accessories they use, the main color in their wardrobe, their style of dress, hobbies, sports they enjoy.

Q. Why is it important to thank someone after receiving a gift?
Leader Notes

Generalize:
Q. How should members thank program sponsors and award donors?

Q. What might happen if 4-H sponsors are not thanked appropriately?

Apply:
Q. If you receive a gift you do not like or that does not fit, what information do you need to solve this problem?
A. Thank the giver, then if you know the name of the store, you might exchange the item, or if you think someone else will like it you may give them the item.

Q. How will others feel about this problem?
A. Answers will vary, i.e., be a gracious receiver, consider the feelings of the giver(s).

Q. What if everyone made the same decision for this problem?
A. Answers will vary, i.e., if we consider our own as well as others feelings, solutions should be satisfactory for all.

GOING FURTHER:
• Arrange a couple of hours with a local merchant for the project members to shop for their parents/guardians; after lists and budgets have been made.
• Have members volunteer to help elderly residents do gift shopping, addressing cards, to prepare for the holiday season.
• Make a simple project to give to the needy, or donate time to help a local organization that serves the underprivileged.
• Help members write thank you notes that can be filled in and mailed later.
• Role play with members receiving gifts they do not like and accepting them graciously.
• Help members design gift certificates for services they would like to give to someone.

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104-Clothing & Textiles, Level I
# Kansas 4-H Clothing Leader Notebook

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service
Clothing Personality

Clothing & Textiles, Level II, Me and My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• Recognize personality by how we dress
• To identify six personality styles reflected in dress
• Types of body forms—endomorphic, mesomorphic and ectomorphic

ABOUT THEMSELVES:
• Confidence in selecting clothing to enhance their body type
• How clothing choices express their values
• Appreciation/acceptance of their body type

Materials Needed:
• Copies of Member Handout
• Old pattern books, magazines or catalogues
• Scissors to cut pictures

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:

Clothing conveys much about our personalities. It is one of the most important clues from which first impressions are made. Our society has developed ideas as to what is best and right for people to wear. These ideas are adopted or rejected by each of us. As we form our values we may reflect, reject, or accept a portion of these ideas. Through experimentation, our clothing personality is developed. Each one of us says something by the way we choose to dress. Today, we are going to think about our own “clothing personality.”

Once you know the unique aspects of your figure you can then choose garments that enhance the best qualities of your body.

There are many figure types. Your figure type is a result of your genetic makeup and cannot be changed (like having blue eyes). Your weight and size may change a great deal over your lifetime, but your basic figure type remains the same from childhood through adulthood.

The basic figure types include:
• Endomorphic—body soft/fluffy in appearance.
• Mesomorphic—hard, muscular body appearance.
• Ectomorphic—slender, long body appearance.

Leader Notes

Have members sit in a comfortable place.
Allow time for members to introduce themselves if they do not know each other. Have each member state one thing they want their clothing to say about them. You begin. (Examples might include—stylish, rich, traditional, thrifty, friendly, competent, rebellious, cute, etc.)

Pass out copies of member handout, “Figure Type Information.”
Some individuals do not have the self-confidence to choose flattering styles and colors. Instead, they choose unflattering or “popular” styles and colors in an attempt to disappear or not be noticed.

Following, are some suggestions to enhance your body type:

**Short**—add height by using:
- simple, uncluttered silhouettes
- vertical lines
- plain colors
- small prints and plaids
- narrow belts of self fabric or same color

**Short and slender**—add height and fullness by using:
- vertical lines
- gently flared skirts and dirndl skirts
- frilly collars
- soft, full sleeves
- belts of contrasting colors

**Short and full**—to add height and slenderize use:
- large vertical details
- princess lines or semi-fitted silhouettes
- monochromatic color schemes
- contrasting collars to emphasize face and neck
- simple necklines
- jacket length to between waist and hipline

**Tall**—to balance height and horizontal emphasis use:
- separates
- long jacket lengths
- contrasting colors and large plaids
- bulky fabrics
- large pockets, wide belts

**Tall and full**—to reduce size and accent height use:
- easy-fitting silhouettes
- unbroken vertical or diagonal lines
- contrasting collars to emphasize face and neck
- V necklines
- elbow- or wrist-length sleeves

**Tall and slender**—to balance height and add width and curve use:
- soft, rounded silhouette
- horizontal detail
- turtleneck collars, soft scarves
- puff or long, full sleeves
- wide belts

In addition, you can emphasize or de-emphasize any figure part with the use of color, texture, or line. See Design Basics, Me & My Body, Level I.
Whether you believe it or not, values are reflected through the clothing we wear. Do parents and youth ever disagree on appearances? One reason may be the values each person holds. Often, youth feel a style is a statement of independence from the parents, and the parents feel the style represents values they dislike. Think for a moment how you would feel if the President and the First Lady showed up for a public appearance dressed like current rock music stars. Would the public’s opinion of them change? Do you think the outfits would become news material? That is how important your choice of clothing is.

As you grow older, you will experiment with various styles and probably find yourself comfortable with one or two style themes. Within these styles you can dress up or down to suit the activities in your life. You will achieve more clothing for your dollar by purchasing garments in your personality style than you can by accumulating many different styles. Some clothing may look terrific on you, but you will not wear it as often if it doesn’t fit your clothing style.

Clothing personality styles:

Dramatic—enjoys bold, colorful dressing. More use of large and spectacular accessories, such as jewelry, ties, scarves, etc. This person is often the first to try a new style and may tend to have a more ectomorphic body build. Everyone notices when a dramatic person walks into the room.

Sporty/Natural—enjoys dressing with a relaxed or outdoorsy feeling. Simple clean-cut lines. Easy care hairstyle. Lots of denim, khaki, and button-front styling. The natural person may also love animals, have freckles and prefer to be outside. The sporty/natural will find their style of clothes in Land’s End and Eddie Bauer catalogs.

Gamin—a smaller version of sporty/natural. The gamin figure looks almost elf-like or a bit impish with a twinkle in the eye. The gamin looks great in pixie hairstyles and sporty/natural clothing styles.

Classic—enjoys dressing in a tailored look. Classic sweaters, pleated skirts or pants. This person is naturally very neat; everything is in place and stylish in moderation, yet with everything.

Romantic—likes dressing with lots of fullness and softness. This person chooses large plaids, large printed designs on fabrics, and large details (females like large ruffles, lace and bows; males like baggy pants and full-cut shirts & sweaters). This person may enjoy spending more time on appearance and has a tendency towards the endomorphic body type.

Ingenue (on-jin-u)—fine featured and soft spoken, usually ectomorphic, looks good in small details.

As we adopt a style, we must use it within a wide range of activities. These include such things as school, leisure, hobbies, religious, cultural and formal occasions. At all of these occasions our dress reflects our
personality as well as our values, such as material comfort (economics), external conformity (belonging to a peer group), individuality (being unique), or equality of social status (wanting to belong to a different group).

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. Name two clothing styles.
A. Dramatic, sporty/natural, gamine, classic, romantic, and ingenue.

Q. Name the three body figure types.
A. Endomorph, Mesomorph, Ectomorph

**Process:**
Q. Why is it important that we accept our body type?
A. We should learn to dress to enhance our body type, since it will always affect how we look.

Q. How do you feel when someone compliments you about your clothes?
A. Answers will vary, i.e., happy and content, embarrassed and uncomfortable.

Q. Some things can be changed, and some things cannot. What are things about ourselves that we can change? What cannot be changed?
A. We can change our hair color and style, our weight, and style of dress. We cannot change our body type.

Q. What clothing personality does a person you admire have?
A. Answers will vary.

**Generalize:**
Q. Why is it beneficial to know your clothing personality style?
A. Makes purchasing easier and faster (because you have fewer garments to consider), longer satisfaction with the garment, helps with assurance that your money will be well spent.

**Apply:**
Q. How could a short, pear-shaped person enhance his/her figure when selecting clothing?
A. Dress in similar color tones with contrast color at neck. Style should be semi-fitted. Smaller print or vertical details would be acceptable. Smooth and not bulky fit through the hips and shoulder pads on a pretty collar can draw the eye up to the face for a more flattering look.

Q. What did you learn today that will effect the next clothing decision you will make?

See body types in lesson “Design Basics,” Level I

*6-Clothing & Textiles, Level II*
GOING FURTHER:
- Have members look through magazines and name clothing personality styles.
- Have members evaluate two to three adults for their styles, then have them interview these adults as to why they choose the clothing they do.
- Have members design garments to illustrate the different personalities that can be expressed and dress paper dolls.
- Have members make a poster illustrating the various personality types that are expressed in clothing and display it in a fabric store, school, fair, etc.

REFERENCES:
Clothing Speaks, Marilyn Stryker and Jereldine Howe, Kansas State University Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66056
Clothing Speaks, Joyce Ann Smith and Norma Deyo Pitts, Ohio State Cooperative Extension Service, Ohio State University

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Figure Type Information

There are three basic body shapes: endomorphs are round, mesomorphs are muscular, and ectomorphs are lean and long. Everyone is a mixture of each, in differing proportions.

**Mesomorph**—Usually is husky and strong. This individual might be best at contact sports or weight lifting but can be restricted by heavy muscles.

**Ectomorph**—Opposite of the husky build and may be prone to injury. With conditioning, this person is good at long distance running, hiking, endurance sports. Also excels at activities requiring agility, such as gymnastics, dancing, diving and many court games like tennis or handball.

**Endomorph**—Has an excess of body fat, is not fast and lacks agility. Exercises such as pull-ups may be difficult for this person, but the fat body floats high in the water and therefore well-suited to all water sports.
What Members Will Learn . . .

ABOUT THE PROJECT:
- How to blend and combine colors, hues, and values
- The importance of proportion and scale of accessories

ABOUT THEMSELVES:
- How to make decisions using design elements
- Ability to identify colors they like to wear and colors they like in a home environment

Materials, Resources Needed:
- Poster paint, (red, yellow, blue, black, white)
- Water color brushes or small soft bristle brushes
- Medium weight white drawing or construction paper, cut into three different shapes (circle, square, triangle) per member—three each of two different shapes and six of the last shape
- Scissors
- Plates, pie plates, or cookie sheets for mixing paint. NOTE: paint may stain plastic plates
- Glue
- Plastic sheets or newspapers to protect work surface
- Paper towels
- Color Wheel poster page
- Copies of Activity Sheets
- See alternative activity and materials needed in Leader Note at bottom of page 144

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:
After we study the elements of design, we must begin to use these principles as we choose clothing for ourselves. The basic elements of design are color, line and texture. A well designed outfit contains a pleasing balance of all of these. Too much of any one element as well as too little can ruin the overall look when it is put together on you.

Accessories you choose may enhance or detract from the garments or their attractiveness on you. Careful consideration of the scale (size), color, and texture must be done to ensure they look the very best possible. Accessories are like garments—what looks good on one person often looks quite different on another.

Leader Notes
Have members sit around a work area. Have the area covered with newspapers and ready for the painting activity. Have members introduce themselves and describe their favorite accessory. You begin.

Pass out member activity sheet, Kaleidoscope Colors, for information purposes. Wait to complete the activity until discussing material on the next page.
Today, we are going to discuss more about color. We have talked about color terms. Let’s review them. **Hue** is the color name—examples include red, blue, yellow, purple, pink, and so on. **Value** is the lightness or darkness. A light value is called a “tint.” A dark value a “shade.” **Intensity** is the brightness or dullness of a color. To lessen the brightness you add some of the complement color.

There are rules that help us to combine colors in pleasing ways. By using these “harmonies” you can blend different colors with the result being pleasing to the eye.

First, you should understand the color wheel. The wheel begins with three basic hues (red, yellow, blue) all other colors are made from these.

Next, the three basic hues are mixed to form the secondary hues. Red + Blue = Violet, Red + Yellow = Orange, Blue + Yellow = Green.

Next, we create tertiary colors. These result from mixing a primary plus one of it’s neighboring secondary colors. (Red + Violet = Red-violet)

Let’s talk next about different color schemes or harmonies. Remember, within these schemes different values and intensities can be used which will make the combinations almost endless.

Four major color harmonies are: (each harmony could include different values and intensities of each hue)

- **Monochromatic**—“Mono” means one and “chromo” means color. So a monochromatic harmony is based on one hue (various tints and shades of red).
- **Analogous**—Analogous means similar. Analogous or related colors are similar to each other because they share a common hue. Red-violet, red, and red-orange are examples. They are next-door-neighbors on the color wheel.
- **Complementary**—Complementary harmonies are based on hues directly across from each other on the color wheel. Orange and blue or red-orange and blue-green are examples. These are contrasting hues and tend to make very striking color combinations.
- **Triadic**—A triadic color scheme is based on any three hues which are equally distant from each other on the color wheel. Examples include red, yellow, and blue or orange, green and violet.

Proportion and scale are other important elements we must consider when designing for ourselves. For any outfit to look correct all its parts must be in proportion or balance. What accessories can be out of proportion. (Discuss clunky shoes, earrings too large or small, scarf too large, patterns not balanced, fit out of proportion, etc.)

Scale is the size of an item. Proportion is the balance of an item compared to another. Generally, accessories should be of a similar scale as the person wearing them. If you are small keep accessories small. Accessories should also be in proportion to the garment, its pattern and it’s form.
Accessories include shoes, belts, ties, scarves, handbags, hats, jewelry and hair ribbons. Depending upon the fabric color and print, the illusion (appearance to the eye) may be different than the actual scale.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. Name the complementary color for blue.
  A. Orange.
- Q. Name the three primary colors.
  A. Red, blue, yellow.
- Q. What does analogous mean?
  A. Similar colors—they share the same hue.

**Process:**
- Q. What are your favorite colors? Are these the colors of your clothes? Why or why not?

**Generalize:**
- Q. What criteria for selecting color of your clothes have you used in the past? Will you use different decision-making skills in the future?
- Q. How do you feel when sitting in a blue room? a red room? a white room?

**Apply:**
- Q. How will you use color differently in the future to create a certain “look” at home? When selecting clothing?
  A. Answers will vary, i.e., color gives an illusion that enlarges or condenses a room. The size of furniture versus the space available. The print pattern size on upholstery and even window size, shape, and placement. Wall arrangements, their shape, texture, size and placement.

Pass out member activity sheet, “Let’s Learn to Plan a Wardrobe,” and have members complete it and share with the group.

If you have extra shapes and colors, allow the members to pick a color scheme and glue it onto the sheet and label. Discuss why they chose this scheme and if they would use this in an outfit or in their environment. Discuss that colors we like are not always ones that are the most flattering to wear. But in our surroundings, we can use these favorite colors freely. Light and bright colors tend to advance or enlarge, and dark and dull colors tend to recede or diminish.
Leader Notes

Take a few minutes and allow members to critique themselves and make recommendations of accessories that would look good with the outfit they are now wearing.

GOING FURTHER:

• Have a blank sheet with various wall hanging pieces for members to cut out and experiment placing them on the wall.
• Have members bring paper dolls and clothes. Or help them make their own and experiment on proportion and scale with the doll clothes.
• Have members bring old accessories or collect some from garage sales. Allow members to try these on and judge for scale and proportion. You may want to use this for a swap meeting for members to bring an accessory they don’t like to see if they can swap for one they like.
• Use color collars that are available from some Extension offices to determine how color can be used to enhance appearance.
• Use the color collars and present a program at a retirement home or senior center.
• Help members to tie-dye T-shirts or other garments using design elements and what they have learned about color.

REFERENCES:

Home Survival and Design, Kathy Vos, 4-H Youth Development Programs, University of Wisconsin, 328 Lowell Hall, Madison, Wisconsin 53703
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

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Kaleidoscope Colors

Materials needed:
- Dull posterboard 11 × 14 inches
- Poster paints—red, yellow, blue, black, white
- Paint brush
- Ruler
- Scissors
- Compass

Cut a 3-inch strip from the long side of the posterboard. You now have a 3 × 14-inch strip and an 11-inch square. The square will be used to make a color wheel and the strip will be used to make a sample of color values.

Color Values
Select a primary color, white and black. Divide your strip into seven 2-inch divisions. Your first value will be white. Your last value will be black. Your middle value will be your primary color. In the upper two blank spaces, mix the primary hue with varying amounts of white to get lighter tints. As you mix the paints, you will be able to see that there are a large number of tints that may be derived from the mixing of a primary hue and a neutral.

The last two spaces will be filled with darker shades of the primary hue. Mix the primary hue with the black neutral. Notice again the many shades that can be derived from this combination.

Color Wheel
Find the center of your 11-inch square. Use a compass to draw an 11-inch circle. Decrease your compass to draw a 10-inch circle inside the 11-inch circle. Decrease your compass to draw an 8-inch circle inside the 10-inch circle. Cut away the corners of the 11-inch circle with a pair of scissors.

Divide the middle ring into 12 equal sections. Place the primary hues in a triad. Place the second triad of secondary hues. On either side of the primary and secondary hues, place the intermediate hues. All secondary and intermediate hues are made by intermixing primary hues, secondary hues, and intermediate hues.

Using a ruler, draw straight lines in the center of the circle to show the triads of primary hues and secondary hues. On the outer ring, label the intermediate colors.
COLOR AND ME
CLOTHING & TEXTILES, LEVEL II, ME AND MY BODY
Activity Sheet

Let’s Learn to Plan a Wardrobe—Teenage Boy or Girl

The pieces: knit shirt, sweater, button-down shirt, slacks, jeans, jacket.

Polo Shirt  Sweater  Button-down
Slacks  Jeans  Jacket

Decide your basic color. Color/design the garments (solid, stripe, print, plaid) for a coordinated grouping. Be creative. Design garments you would like.

Now you are ready to see how many different outfits you could have with these six pieces. How would you accessorize these outfits? Be creative using basis design elements.

1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________
4. ____________________________________________________________________________________
5. ____________________________________________________________________________________
6. ____________________________________________________________________________________
7. ____________________________________________________________________________________
8. ____________________________________________________________________________________
9. ____________________________________________________________________________________
10. _________________________________________________________________________________
Discovering Myself

Clothing and Textiles, Level II, Me and My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• Ways people express themselves
• “Social graces” and why they are important

ABOUT THEMSELVES:
• Everyone has feelings that need to be recognized
• To appreciate and value their own feelings
• The importance of non-verbal messages

Materials Needed:
• Worry wallet, envelope containing small strips of paper. Include these directions, sealed, to be opened at the end of the week in member’s home
• At the end of the week, separate the worries into two piles. Those that happened and those that did not happen. Then take the stack of those worries that happened and separate into two more piles—those that you could do something about, and those over which you had no control. Look at the strips remaining in the “those you could do something about.” Was your worry time worth it?
• Tape recorder and tape to record introductions

ACTIVITY TIME NEEDED: 60 MINUTES OR COULD BE USED FOR TWO SHORTER LESSONS

ACTIVITY:

Besides their dress and grooming, there is another way people tell us about themselves when we first meet them. This message comes through their “body language.” The way you say hello, your facial expressions, and your eye contact all convey a message about you. Your use of etiquette (manners) also will make either a good or poor impression on those you meet.

Anyone can learn and practice social graces. It costs nothing but your time and rewards you greatly.

Always remember to use magic words such as “please,” “thank you,” and “excuse me.” When these words are used often and sincerely, they truly are magic. They are kind words that produce courteous responses from others. Whenever someone does something for you say “thank you.” This someone may be a stranger who has opened a door for you, or maybe your mother has done something for you. Who it is is not important; your expression of thanks is.

Leader Notes

Have members sit in a comfortable place. Have members introduce the person on their right, after having a few minutes to ask this person their name and favorite activity. Tape record these introductions for analysis.
“Please” should be used whenever you are making a request of someone. This someone could be your little brother, whom you are requesting to remove his dirty tennis shoes from your clean rug, or your friends, whom you are asking to pass the pepper. The word “please” changes a command to a request, which will probably bring results without bad feelings.

“Excuse me” or “pardon me” should be used when you must impose a discourtesy on someone. This discourtesy might be walking in front of them, interrupting them, or leaving them. By saying “excuse me” you are asking their permission to do whatever you need to do. These “magic words” are verbal manners you should learn to use without having to think about it. Use them easily, often, and sincerely! They are words that help you express your consideration of others and label you as a kind and gracious person.

Graceful body movement and a pleasant voice are important in presenting a pleasing image. No matter how much time you have spent to make yourself look good, it can be completely destroyed by awkward movements and posture. An unpleasant voice and poor grammar can be just as bad. Remember the way you sit, walk, stand, hold your arms, etc., tells others a lot about you. Development of your voice, diction, and grammar is just as important as graceful body movement.

If your voice has an unpleasant quality, such as high pitch or raspiness, it is irritating. Clear pronunciation and correct word usage are as important as an adequate vocabulary. Avoid using slang words in place of “yes” and “no.” Learn to use your voice so that it is truly representative of the person you are. Evaluate your voice with a tape recorder.

A pleasant smile and eye contact are the most important items to remember about facial expressions. When talking with anyone, it is important to look at him or her. This does not mean a constant stare that may be uncomfortable over a long period of time, but an interested and alert reaction, which is natural. Eyes that are wandering around the room or are glued to the floor cannot express interest or reaction. If you want people to really listen to what you are saying, you must direct the words to them by looking at them.

Develop the practice of wearing a pleasant expression. A happy or pleasant expression on the face makes you much more approachable. Everyone responds to a smile because it makes them feel good. Think about the people you know that do smile and contrast their image with the nonsmilers. To which category do you belong?

Learn to give and receive compliments. If you honestly admire something, say so. Let others know how you feel but do not try to be anything you are not when giving a compliment. A direct and simple expression of admiration is the best kind.

For many, receiving a compliment is more difficult than giving one. Never argue with the one offering the compliment. For example, can you think of

At this point, if you wish, you can have a tape recorder and tape the members talking. Or better yet, tape them during the introduction and at this point allow them to hear their voice, diction, and word usage to evaluate. Discuss kindly the improvements that could be made. (Ask the local speech therapist for advice if concerns are serious).
a time when someone said he really liked your outfit and you responded by pointing out how old it was, its poor fit, or how shabby it had become? What you are doing is attacking the taste of the person complimenting you. It would be much more appropriate for you to smile and say “thank you,” or “thank you, I like it too!” to express your pleasure for your admirer’s thoughtfulness. Such a reply is easy to offer, and it shows you as a sensitive and gracious person.

Introductions will happen throughout your life. The most important rule to remember is to make sure you always introduce people in your presence that do not know each other. This includes introducing yourself if others fail to do it. There are rules about whom should be introduced first but we will save those for another time. (Level II, Personal Presentations) These rules are no good if you are too nervous to use them. So for now, a simple “Mom, this is my 4-H leader Mrs. Smith” or “Hi, my name is Dave” is perfectly acceptable. Practice this often so it becomes easy for you.

By practicing all of the above you will gain poise in new social situations. These manners are to help you feel comfortable in situations that are not normal for you. However, we want to turn now from the social graces to the inside part of you that makes you unique and special. This part is your feelings or emotions.

Each one of us has the ability to experience feelings. In fact, that is one thing that makes us different from animals. It is the joy of living to experience positive feelings. Likewise, it is awful to feel the full extent of painful feelings. At times feelings can overwhelm us. Feelings are real to the person that is experiencing them. Nothing is worse than someone telling you “You don’t feel that way.” With any type of feelings they are easier to deal with (especially sad, angry, frustrating types) when shared with someone else that cares.

Sometimes it is hard to share feelings. They can be so scary because they seem so strong. It is important for each of us to be able to express our feelings - the better we can explain our feelings, the better those around us can help us find solutions to our problems or share in our joys. This seems to be easy for some people, but for others it can be very difficult. All people and families are different, but all of us can learn to better share our feelings if we practice.

It is important to talk about our feelings, because if they are not shared, physical symptoms can put stress on your body until you become physically sick in some manner. By sharing our feelings with a friend of any age, we “work out” the stress so our bodies can relax.

Most people, when asked what they like best about their friends, reply “They are understanding.” Humans have a need to seek out others that listen and care for them. That is what being a friend is. Usually our closest friends are those we feel will listen to our feelings and respect them. We can and should have many different friends - some we enjoy because they are fun to be with, others share a common interest, and others may teach
This could be a good place to stop the lesson this week. The next lesson could start with a discussion of their worry wallet results. (Have members make a worry wallet—envelop containing blank slips of paper. For each worry during the week, they are to record it and put it into the wallet.)

Take a moment and ask each member to talk about a strong feeling they have had. Tell them it is OK to say whatever they felt at that time or they feel about it now. It is important that you begin. Help them to verbalize the emotion - for example - if they say “I was mad because my friend ignored me.” - ask “were you hurt?” (rejected, angry, jealous, etc.) Maybe all of these? Ask them if they ever feel their emotions physically? Give examples - butterflies if nervous, choking if sad, tight jaw when angry, etc. Let members give other examples.

Take a moment to role play with the members. Help them express their feelings and not repeat what they think you want them to say. After you give them the role play (have the roles written out to give to members), ask them what feelings they could have. Then ask them how they could state it nicely to the other person in the situation. Allow members to offer other suggestions.

Once we can recognize our feelings and practice social graces, the last thing we need to learn is how to share these feelings with those that are not friends, but we need to talk with about a certain problem or situation. Sharing feelings with friends will lighten the load, but feelings are often our clue that a situation needs to be dealt with. By combining what you know about speaking up and doing it nicely - many of your problems can be handled with minor discomfort to you and others. But this takes practice!

1. Your uncle wants to dance with you at your aunt and uncle’s wedding dance. He is the loud embarrassing type. Many of your friends from school are there. Talk about how you feel and what you would say to your uncle.

2. One of the kids in your class has called you a name—it was in front of all your classmates. Talk about how you feel.

3. You have saved money to buy the “coolest” tennis shoes. On the second day you wear them another student comments “I can afford three pairs of those in different colors. I would never wear the same pair two days in a row.” What would you say?

4. Your parents are still buying junk food after you said you want to start eating more nutritiously. How would you feel, and what would you say?

**DIALOGUE FOR CRITICAL THINKING:**

**Share**

Q. What do social graces mean to you?

Q. What is important to remember about your facial expression?

A. Pleasant smile and/or eye contact.

**Process:**

Q. Why do we need to talk about our feelings?

A. To help find solutions to problems, to share our sorrow and joy, to ease physical symptoms that result from bottled up feelings, to enjoy life to its fullest, to form lasting bonds with caring others.

Q. Do boys have the same feelings as girls?

A. Boys and girls can have the same feelings. (i.e., sadness, tenderness, joy, anger, competitiveness, etc.)
Q. Can crying be beneficial for everyone: male/female, old/young? Why do you think that?
A. Allows us to release strong emotions physically. This helps us stay healthy. Everyone needs to cry at times.

Generalize:
Q. What did you learn about how you handle your feelings?
A. Answers will vary. Encourage members to talk about how people vary in their ways of expressing their feelings.

Q. How can your learning to express your feelings affect a relationship with a friend? with a sibling? parent? other adult (teacher)?
A. There can be a more honest, open sharing and understanding of feelings. Since we cannot know what someone else feels unless they express themselves as we listen for understanding.

Apply:
Q. How would you use what you learned in this lesson if you went to a fancy restaurant? If you brought a friend home from school?

GOING FURTHER:
• Invite mental health worker to visit and talk with members about feelings.
• Have members list ways to deal with feelings: talking it out, exercise, ignoring it, help them to see what the outcome will be by the various choices they make.
• Present a badge made from construction paper, gold seals, and ribbon to the member who uses the most magic words at the meeting or who gives the best compliment.
• Keep a diary of when and how you used “magic words” for one day.
• Role play different types of handshakes (wet dishrag, bone cruser, pump handle, straight arm shake, cooze squeeze, octopus grip). Discuss what is wrong with these handshakes, then practice an appropriate handshake.
• Prepare and present a funny skit to your club or other group about handshakes and other greetings.
Leader Notes

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Shapedown, Just For Kids, Laurel M. Mellin, M.A., R.D., University of California, San Francisco, Balboa Publishing, 11 Library Place, San Anselmo, California 94960

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What Members Will Learn . . .

ABOUT THE PROJECT:
- What posture is
- What poise is

ABOUT THEMSELVES:
- Practicing poise and posture will give members more self confidence
- Good posture and poise are skills anyone can develop with practice
- The importance of verbal and non-verbal communication

Materials Needed:
- Video camera and TV, optional
- Bowl, containing posture poses on paper slips, cut apart and folded
- Full-length mirror

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
How many of you have ever seen a mime? Have you ever played the game charades? How do people tell us something when they don’t use words?

As you can see, people do communicate without using words. We can use gestures which involve our hands or we may use facial expressions to get a message across without using words. That is called non-verbal communication.

The way we hold our body is called posture. A person that stands straight and tall conveys a feeling of self-confidence and authority. Unfortunately, good posture does not come naturally to most people. The best way to develop good posture is to practice it, not only when standing, but also when walking and sitting.

Suggested posture poses:
- Leaning forward, leading with head.
- Measured, steady pace.
- Dragging feet, in no hurry.
- Slouching body, eyes looking downward.
- Bouncy step.
- Exceptionally erect body, chin slightly lifted.
- Graceful and flowing step, as a model.
- Heavy and thumping step, too far apart.
- Nervous, darting steps.
- Briskly exciting, arms swinging vigorously.

Leader Notes
Welcome members and have them sit in a comfortable place in a circle. Have each member introduce themselves and act out a feeling without using words. Have the other members guess the feeling. You begin.

Have members draw a “posture pose” out of the bowl, taking turns dramatizing the following postures. Have the other members tell what that posture suggests about that person. (Do one as an example first.)
• Comfortably straight posture, hips tucked under.
• Protruding stomach and rounded slumped shoulders.
• Swaying hips.

As you can see, posture tells things about a person they may not even be aware of. Besides giving a positive first impression, good posture also allows for better figure proportion, better fit for clothing, and allows the insides (organs; i.e., stomach, lungs, heart, intestines) of your body to work better.

When standing, good posture means that your head, shoulders and hips are in a vertical straight line. (Allow members to practice. If a full-length mirror is handy this can be helpful.)

When walking, good posture means head above shoulders, arms swing naturally. Legs should swing from the hips with feet parallel and reasonably close together.

To sit, place one leg against the edge of the chair seat. The other should be slightly ahead to provide balance. Sit straight down (do not lean forward), lower your body SLOWLY into the chair with back against the back of the chair.

There is one other thing you can do to help develop good posture, and that is to exercise every day. Good posture takes strong muscles and the best way to get strong muscles is to form an exercise habit. Any exercise will help if you do it several times a week. Some exercises include bike riding, swimming, dancing, gymnastics, basketball, running and walking.

Have you ever heard of poise? What does this mean? Poise is the feeling of self confidence a person has when exposed to different and unusual circumstances. It is the ability to think, act, and react under pressure. These actions are positive and so we say the person has poise. Persons that react negatively by getting angry, demanding, whining, or complaining, are said to lack poise.

Poise, like any skill, gets better the more we practice it. To practice poise we must put ourselves into social situations where we need to be well mannered and polite, so we can gain more confidence to continue facing new social situations.

An important part of poise is being able to put your feelings into words. If you only listen and never say how you feel to others, you will quickly find that you do not enjoy yourself or others as much as you should. You have the right to have feelings about many topics. Others are also allowed that right. These feelings do not have to be the same, for everyone has a different view of the world because of different experiences. A person with poise will allow others to disagree, and also be able to kindly state their feelings and not always expect agreement. Always take time to listen to others and if you are unsure of the message, ask them to explain it again. Often misunderstandings come from poor communication.
are not sure what someone has said, ask again rather than make assumptions. Good manners include good posture, poise, and making others feel comfortable when you are around.

It is more fun to be with people who have good manners. Therefore, it is easier to make friends if you practice good manners while still being true to yourself. Remember, you do not always need to agree with your friends to still be friends.

- You are demonstrating at county fair days and forgot the paint for your demonstration.
- You are modeling the outfit you purchased when you realize the reader is reading the wrong description.
- You are at a friend’s house where you were just introduced to someone from another school. You have already forgotten their name.
- You are at your grandparents’ anniversary sit-down dinner and you spill your drink.
- Your friend has invited you to spend the night. Your family has no special plans; you just don’t want to go. Tell your friend.
- Continue with others you or members can think of.

NOTE: Sometimes fewer words show more poise than blaming or excuses.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q: How do you develop good posture?
A: By practicing it, by exercising, and other good health habits.

Q: How do you develop poise?
A: By practicing it, trying new social situations, and gaining self-confidence.

Q: What is good standing posture?
A: Head, shoulders, spine, and hips in a vertical straight line.

Q: What is good sitting posture?
A: Place one leg against the edge of the chair seat. The other is slightly ahead. Sit straight down slowly lowering your body down into the chair with your back against the back of the chair.

**Process:**

Q: Why should we be able to state our feelings?
A: Because they are an important part of who we are and we feel better when people recognize how we feel.

Q: Why is it important to be aware of non-verbal messages?

**Generalize:**

Q: How does posture influence the impression that other people form of you?
A: Answers will vary, i.e., professional, lazy, hick, ambitious, confident.

Practice role playing the following situations. Stress the need for the members to verbalize their feelings in a positive way.
Q: How does posture affect the way you feel about yourself?
A: Answers will vary.

Q: How does posture affect the way you perform at home, school, work, etc?
A: Answers will vary, i.e., will feel energetic, sloppy, tired, lively, cooperative.

Apply:
Q: What will you do differently in the future because of what you learned from this lesson?

GOING FURTHER:
• Invite a model to visit to show modeling stances and techniques.
• Have members talk about their most embarrassing moment and what they would do different if a similar situation would happen again.

REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A & M, College Station, Texas
Your Appearance Counts, Louisiana Extension Service
Strategies for Clothing, Rae Reilly, Iowa State University, Ames, Iowa 50011

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Personal Presentation—Modeling

Clothing & Textiles, Level II, Me and My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• Basic modeling steps
• Making introductions

ABOUT THEMSELVES:
• Gaining self-confidence through modeling
• Building self-esteem in social situations by making proper introductions

Materials Needed:
• Copies of Activity Sheet
• Pencils
• Modeling mat (borrow from the Area Extension Office)
• “The Spotlight is On You” video (borrow from the Area Extension Office)
• VCR and TV
• Video camera and monitor (optional)

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:

There are many times each of us must stand before a group alone. It may be at a program, public speaking occasion, or at a ceremony such as a wedding, bar mitzvah, or special ceremony. At these times our personal presentation skills are on display. Just as in any sport, it takes practice to polish these skills. The more polished you become the more confident and impressive you will be. Some people spend much effort in avoiding these situations. However, sooner or later we all must stand before a crowd. You may prefer to spend your effort in practicing good personal presentations skills instead of avoiding those new social situations.

We have talked before about the importance of daily grooming. This, in addition to flattering clothing choices, pleasing body gestures/expressions, and polite social manners, will help you get a head start on a positive personal presentation. When an important occasion comes along, you won’t have to be as concerned about an embarrassing slip-up, because good manners will be second nature to you.

For presentations you know you will do in public, concentrate on the task at hand—not on your feared nervousness. You may be introducing someone, modeling a sewing project, attending a wedding, party or other function, or presenting a talk. Your best confidence builder will be to

Leader Notes

Have members introduce themselves and talk about themselves for 30 seconds.
Tell them that it is important for them to be able to talk about their interests, etc., if asked. You begin. After each introduction have other members say what they liked best about the self-introduction and how “poised” (at ease under stress) each member appeared. Do not force members, but strongly suggest they do as much as possible. Keep evaluations positive!
practice what you will do. Just as actors, athletes, and speakers have hours of practice behind the performance, you, too, will be more confident with enough practice.

In those situations for which you cannot practice—like your 30 second introduction—instead of feeling tongue-tied focus instead on the others in the situation. What would they like to know about you? What do you need to know about them? People love to talk about themselves. Remember a good conversationalist does not talk all the time. In fact the person best at conversation usually gets others to talk and they generally talk the least. Think of each person you meet as a treasure chest and you need to find the treasure within them. Ask about common interests and new areas from which you can learn. Also look for diversity (differences) and special things about the other person—enjoy the way they are different. If you are genuine in your interest in others, it will be apparent, and you will seldom experience a stalled conversation.

Also offer recognition whenever possible. People like to be recognized for their outstanding qualities, and they will be impressed that you remember and mention it to others.

Throughout your whole life you will be meeting new people almost daily. Being able to do this easily is one of the first and most important steps in making friends.

When you are being introduced remember to smile because you are happy to be meeting this new person. Try to think about making the other person feel at ease, then you won’t have time to feel nervous or uncomfortable. Remember to be warm and friendly, look the other person in the eyes, be sincere in what you say and either stand up or step forward. In response to the introduction, you might say:

- How do you do?
- Hello, how are you?
- I am glad to meet you.
- I have been looking forward to meeting you.
- How do you do, ___?

You have to find what is most comfortable and natural for you to say. This comes only through practice. The most important thing is to say something! No one wants to feel ignored.

When are introductions necessary? You should always introduce:

- Members of any small group.
- All guests to the guest of honor.
- All guests at a small party.
- Dinner partners.
- Your partner to the host and hostess who have included her or him on your invitation.
- Friends at a dance who come up to speak to you.
- All players in a game involving a few players.
- Any guest whom you bring into your home to all family members.
When you need to introduce two people, a few simple rules help. When introducing a man to a woman, say the woman’s name first, such as, “Mary Brown, I would like you to meet Jim Oliver.” When introducing an older person to a younger person, say the older person’s name first such as, “Grandmother, this is a friend of mine, Jennifer Davis. Jennifer, this is my Grandmother, Mrs. Smith.” Some other phrases you might use are:

• “___, please meet ___.”
• “___, I would like for you to meet ___.”
• “___, have you met ___?”

After your two friends have had a chance to speak to each other, it is thoughtful to give them something to be able to talk about. For example: “Mark, I think your cousin goes to school with Eric.”

When introducing a person to a group, do so in the order they are sitting or standing. For the sake of simplicity mention the newcomer’s name first, “Mark, I would like for you to meet, Matt, Jackie, Michael and Chris.” All guys stand and shake hands as they are introduced. The girls may remain seated. Each should say, “How do you do?” or “Hello, __________” or something similar, as his or her name is mentioned.

A woman rises for an introduction when the introduction is made by or to an older woman. A host and hostess rise to greet their guests. They should also shake hands with each guest, both men and women.

What do you do when you forget the name of someone? If there is not time to ask a third person, you will just have to say, “I’m sorry, but I just can’t remember your name at the moment.” An experienced person will supply his/her name without having to be asked when he/she sees your hesitation.

Remember, if you are offered a handshake in greeting don’t ignore it. Grasp the hand and shake it firmly but avoid the bone-crusher grip. Likewise, shake firmly enough that your handshake could not be labeled a dishrag. Usually men put out their hands to shake when they meet other men. When a man is introduced to a woman, she usually puts out her hand first. Gain confidence in your handshaking to make a positive first impression.

After meeting a person, begin polite conversation with a neutral topic. Ask about interests, hobbies, families, school, etc. Also, think about what you would want the other person to discuss. Avoid politics, religion, death, family problems, personal topics that could cause someone to become uncomfortable.

Kissing a relative or friend in public is proper only if you are greeting them or saying good-bye, and it should be brief and discreet.

If you are a boy that wears a hat in public, proper etiquette calls for you to tip your hat whenever you say “excuse me,” “thank you,” speak to, or are
spoken to by a girl. To tip your hat, merely lift it slightly off your forehead by the brim of a stiff hat or by the crown of a soft one, and then replace it.

You should take off your hat indoors if you are being introduced to someone, attending a burial, when a funeral procession is passing, and when the national anthem is playing or the flag is passing.

You always take off your hat indoors. You may leave your hat/cap on in lobbies or halls of hotels, office buildings, stores or churches. And, no matter if you are indoors or out, you should always take off your hat when you are eating.

So far, we have talked about good manners, now let’s discuss and practice some good modeling skills. For girls, the basic stance finds your feet in a “T” position. Right foot forward and weight on left foot. Both feet should be pointing forwards. For boys, stand with your feet apart, squarely under your hips.

To turn: for boys
1. Step forward with right foot, make a half turn to the right, bring left foot around. Your back will be to the audience.
2. Step forward again with right foot, bringing left foot around. You will be facing the audience and will have completed a full turn.
3. Step forward again on right foot and continue down runway.

To turn: for girls
1. Keep your feet in the basic stance. Transfer your weight to the balls of your feet for smoother turning and better balance.
2. With your weight on the balls of both feet, slowly rise so heels are slightly free from the floor.
3. Pivot toward the left until you are turned in the opposite direction.

There may be times that you will be modeling on a stage only and may be required to make a complete pivot more than once. At times, only a quarter or half turn may be necessary. If you remember to always lead off with the same foot, and turn in the same direction, you will find all turns simpler and more natural.

DIALOGUE FOR CRITICAL THINKING:
Share:
Q. When you introduce someone to a group whose name should you give first?
A. The newcomer.

Q. When may a boy leave his hat or cap on when eating?
A. Never!
Process:
Q. What did you do best in your mock fashion revue exercise?
A. Answers will vary.

Q. Name one way to help keep a conversation going.
A. Ask about interests, hobbies, family, look for similarities, differences. Try to think what the other person may want to know about you.

Q. Name some subjects that are inappropriate when engaging in polite conversation. When and with whom would these be appropriate?
A. Politics, religion, death, family problems, personal topics that may cause someone to become uncomfortable. They are appropriate with someone you know well.

Generalize
Q. If you were at a party and you needed to introduce Mr. Smith, your neighbor, to John, your younger cousin, how would you do so?
A. Mr. Smith, please meet John. John, I would like for you to meet Mr. Smith. Others may be offered.

Q. What can you do to help everyone feel at ease when a new person joins a group, i.e., 4-H club, class?
A. Introduce the new person to each member. Share information with the group members regarding the new member’s interests, etc., so they will be aware of similarities to discuss.

Apply:
Q. How is practicing good manners like practicing a sport?

Q. Describe a situation when you have needed to introduce someone. What would you do differently next time?

GOING FURTHER:
• Have members role play new social situations. Giving an introduction, presentation, or other.
• Have project group present to the total 4-H club the above ideas and allow some time at a meeting for persons to get into small groups and practice the introductions and conversation starters.
• Take project members to an area nursing home for them to practice these techniques.
• Suggest project members teach this lesson to others their own age, perhaps their class in school or a community after school program.
• Borrow the color analysis kit from Area office and have members select their color season.
REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A & M, College Station, Texas
Clothing Speaks, Marilyn Stryker, Naomi Johnson, and Zelda Zimmerman, Clothing and Textile Specialists, Kansas State University Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66056
Clothes Strategy, Naomi Johnson and Zelda Zimmerman, Clothing and Textile Specialists, Kansas State University Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66056
The Spotlight is On You (video), The McCall Pattern Company, 1991. Order from: McCall Pattern Company, Education Department 9119, 615 McCall Road, Manhattan, Kansas 66502-9919, include check for $19.95

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
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PERSONAL PRESENTATION—MODELING
CLOTHING & TEXTILES, LEVEL II, ME AND MY BODY
Activity Sheet

Clothing & Textiles Presentation Evaluation Scorecard

Standards for the Exhibitor
1. To understand and demonstrate a wardrobe plan
2. To understand how selected garment(s) and accessories enhance their personal/public presentation
3. To understand the value of this garment/outfit and how it fits into the family’s clothing budget
4. To be able to describe how they have accepted personal responsibility in caring for their garment/outfit
5. To visually demonstrate personal fitness and grooming and clothing/accessories comfort and safety
6. To be able to describe how they have cared for the garment/outfit and how it has proved to fit into their wardrobe plan over time

To be completed by member prior to judging
Attach a photo of the garment being worn
Name ____________________________ Age ____________________________ Level enrolled _________________
Class name ________________________________________________ Class no. _________________
List garments/accessories purchased or made by another person:
___________________________________________________________________________________________
List garments/accessories constructed by you:
___________________________________________________________________________________________
1. Describe any recycled materials used in your presentation, and your plan for what you will do with this garment/outfit when you are through with it:
___________________________________________________________________________________________
2. Describe how you have or will care for this garment/outfit:
___________________________________________________________________________________________
3. How do you see this garment/outfit as it compliments your body style and its suitability to your wardrobe needs? ________________________________________________________________________________________________
4. (To be completed by members in Levels 3 & 4): calculate the estimated cost per wear of this garment/outfit. ________

Scorecard
<table>
<thead>
<tr>
<th>General appearance &amp; knowledge—70%</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Suggestions for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Posture, poise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Personal grooming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Garment condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Fit of garment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Modeling skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Accessories used to create a total look</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Knowledge of wardrobe plan (see #3)</td>
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<table>
<thead>
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<th>Construction appearance &amp; lifecycle knowledge—30%</th>
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<th>Good</th>
<th>Fair</th>
<th>Suggestions for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Quality of construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Appropriate finishing techniques used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Plan for clothing care &amp; lifecycle (see #1 &amp; #2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Able to calculate value per wear (see #4)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Additional Comments:

Circle Placing: Purple Blue Red White

31-Clothing & Textiles, Level II
Mystery Stain Removal
Clothing & Textiles, Level II, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• What a stain is
• When and how to treat stains for successful removal
• What techniques and products are used in stain removal

ABOUT THEMSELVES:
• How they can apply what they’ve learned in identifying and treating stains
• Responsibility when spills and stains occur
• Teamwork to contribute to household chores

Materials and Resources Needed: KEEP ALL OF THESE LAUNDRY AIDS OUT OF THE REACH OF YOUNG CHILDREN.
• Alcohol (rubbing, denatured or isopropyl) 70 to 90 percent concentration
• Household Ammonia, without added color or fragrances
• Amyl acetate, or non-oily fingernail polish remover
• Bleaches—chlorine, oxygen or hydrogen peroxide
• Detergents—liquid form
• Dry cleaning solvents—sold as spot and stain removers
• Enzyme presoak
• Prewash spot and stain removers
• Rust removers
• Waterless hand cleaner
• White vinegar
• Absorbent materials—white paper towels, facial tissue or lintless white cotton or rayon cloths
• Aluminum foil
• Cotton fabric samples
• Drying Rack
• Dull knife
• Hot and Cold Water
• Measuring cups and spoons
• Plastic wash tubs
• Sponges
• Spot and Stain Removal for Washable Fabrics, Kansas Extension Bulletin C-638
• Stainless steel spoon
• Substances to stain swatches—pen ink, blood, catsup, chewing gum, chocolate, cosmetics, fingernail polish, grass, grease or oil, soft drinks
• Toothbrush or other soft bristle brush
• Copies of Activity Sheets
ACTIVITY TIME NEEDED: 45 MINUTES

BEFORE THE MEETING:
Prepare the samples: Prepare 12 × 10-inch swatches using bleached muslin fabric. Apply stains to these fabrics. Use the substances listed above. Using the mystery code symbols found in the activity guide, label each stained fabric using a waterproof, permanent laundry pen. Show examples: i.e., a prepared sample of soft drink stain should look like this.

ACTIVITY:

As we learn to care for our clothing and textiles, one problem we will all face some day is having to treat a stain. Today, we are going to talk about stain removal and what we can do to increase our chances of successfully removing stains that we may get on our clothing. Acquiring skills to care for your clothes will save lots of time and money now and throughout life. Stain removal is one effective means of extending the life of your clothing. When done properly, you can save many garments that may have otherwise been ruined.

Stains are often the reason some garments are no longer worn. Either the stain did not come out or the method of stain removal caused damage to the garment. Stains should be treated promptly with correct methods and products. Remember, stains do occur on clothing worn to school or during other times when a parent is unable to treat or remove the stain. Some stains become more difficult or even impossible to remove if not treated promptly. Research shows that after one week, one-fifth of stains can not be removed satisfactorily. Almost one-half of all stains are impossible to satisfactorily removed three weeks after staining occurred. Removing stains in a timely manner is important!

We are going to talk about instructions and procedures that apply to washable items. If the care label states “dry clean only,” the stain is best removed by a professional dry cleaner. Valuable sources of information are the care label and fiber content labels, which tells us one successful way to care for the product, and information included on the fiber content label helps us determine the most suitable method of stain treatment. Two categories that stains are often classified into are dry or greasy stains and wet or non-greasy stains.

For greasy stains follow these steps:
1. Sponge with dry cleaning solvent or prewash stain remover.
2. Launder and air dry.
3. Repeat until stain is out.

For Non-greasy stains follow these steps:
1. Sponge with cool water.
2. Soak in cool water 30 minutes.
3. Treat with soap or detergent.
4. Launder and air dry.

Leader Notes

Have all members sit around a table or work area with all the above supplies assembled. If members have not met before have everyone introduce themselves and tell a stain they have gotten on an item of clothing in the past. You begin the introductions.
If the stain is a combination of both, treat first as a greasy stain, then as non-greasy. Never dry with heat in dryer or on line as the heat in many cases will set the stain. If you will be using a stain remover, be sure to test on an unseen portion of the garment to test for colorfastness. When the specific stain is known, you should refer to a stain removal chart and follow the procedures given.

**Summarize Safety Rules**

Remember that one important precaution is to work in a well ventilated room and never mix cleaning agents. These are chemicals that if mixed or used improperly can cause serious harm. **KEEP ALL THESE PRODUCTS STORED AND USED AWAY FROM YOUNG CHILDREN.** ALSO, **DO NOT USE ANY OF THESE MATERIALS NEAR THE SOURCE OF AN OPEN FLAME (I.E., A GAS PILOT LIGHT), AS SOME ARE COMBUSTIBLE.**

1. **Sponging**—place right side down on absorbent cloths. Using another cloth on wrong side, brush from outside to center of stain. Avoid circular motion. Change absorbent pad frequently.
2. **Tamp**—place stained side against clean hard surface. Strike a brush lightly on the stain (hammering fashion). Not for use on delicate fabric.
3. **Spoon method**—use bowl of stainless steel spoon. Place stain on work surface (no absorbent pad). Add stain remover. Hold spoon by bowl and move back and forth. Do not press or use on delicate fabrics.
4. **Flush**—to release stain and remove chemicals from fabric. Clean liquid is poured through stain area to rinse away stain and remove chemicals. As these are removed, a ring may appear, usually in light, smoother fabrics. To prevent, use smallest amount of remover necessary and change blotter frequently. Brush from outside in and blot away moisture before air drying.

Have everyone use their decoded samples. Pass out “Spot and Stain Removal for Washable Fabrics,” Kansas Extension Bulletin (#C-638). Go over safety rules on handout and page 6 of Bulletin. Pass out coded stain swatches and Activity Sheet which contain the safety rules and breaking the code. Tell members they are going to be trying some stain removal techniques. Have members decode and identify the stain they will be treating. Make sure they have correctly identified the stain they will be treating.

Teach stain removal techniques: Demonstrate as you explain.

Members should now refer to the “Spot and Stain Removal for Washable Fabrics,” page 9, and treat their stain accordingly. Launder to see if stains are removed. Congratulate members for successfully removing the stain or having made a good attempt. Remind members that some stains are difficult to remove and some are impossible to remove and to be prepared to accept some failures. Members interested in going beyond learning good maintenance skills may want to consider careers in clothing care, including the research on textiles and the development of new fabric finishes and care techniques.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. When is the best time to treat a stain?
A. As soon as possible.

Q. What did you do to remove a stain?

Q. Was it easy or difficult to do? Why?

Process:
Q. What can you do if you are home alone and stain an item?
A. Read the care label to determine fabric care and fiber content. If washable, treat according to greasy or non-greasy method. If dry clean only, have an adult take to the dry cleaner.

Q. Why is stain removal important?
A. Save money by allowing garment to continue to function in your wardrobe.

Q. What are dangers involved in stain removal?
A. Use of chemicals, inhaling fumes, mislabeling bottles, possible poisonings, never to be used around young children.

Generalize:
Q. How can promptly removing stains reduce the amount of waste going into our landfills?
A. The product can be used longer, which reduces the total amount of waste generated.

Q. How would you go about deciding what stain you have and how to treat it?

Apply:
Q. Considering that you will not experience 100 percent success in removing stains and that professional stain removers employed by reputable dry cleaners have much more experience, knowledge, and access to materials than an amateur, what are some circumstances when you would send the stained product to a professional?
A. When cleaning methods recommended on the label are those that you can not do, i.e., leather cleaning; or the product is very expensive, i.e., carpet; or your cost of failure is very high; or when tested on an inconspicuous area, the dye bleeds or transfers or in some other way leaves a spot.

Q. What will you do differently as a result of what you’ve learned from this lesson?
GOING FURTHER:
• Visit dry cleaners for stain removal lesson.
• Read labels on cleaning agents for active ingredients and potential cautions.
• Assemble stain removal packs for home use that include guidelines for removal.
• Conduct experiment “Discover Types of Stains”
• Do more stain removal, trying a variety of stains and circumstances.
• Keep records as suggested in Mystery Stains Part II Sheets.

REFERENCES:
Care and Maintenance of Clothing, 1990 Computer Program, Linda Heaton, Clothing and Textile Specialist, University of Kentucky, Agriculture Engineering Department, Lexington, Kentucky 40546-0276, and Nadine Hackler, Clothing and Textile Specialist, University of Florida
Stain and Odor Removal from Washable Fabrics, Bette Jo Dedic, Agriculture Engineering Department, Lexington, Kentucky 40546-0276
Capable Kids Can and Spot and Stain Removal for Washable Fabrics, Deanna Munson, Clothing and Textile Specialist, Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506
Care, Self Concept, Consumerism, Looking Good Inside and Out, University of Wisconsin, Cooperative Extension Service, Madison, Wisconsin 53703

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
MYSTERY STAIN REMOVAL
CLOTHING & TEXTILES, LEVEL II
Activity Sheet

Safety Rules

Rule 1: Read the product label carefully. Note how to use, store, and dispose of product and container. Pay particular attention to warnings or hazards.

- **DANGER/POISON** indicates high toxicity
- **WARNING** indicates moderate toxicity
- **CAUTION** indicates slight toxicity

Rule 2: Use a product only for its intended purpose. Look for ventilation precaution and protective clothing or equipment needs.

Rule 3: Do not mix household chemicals. Toxic gases, heat, or explosion could result.

Rule 4: Store laundry products in original containers with all label information. Keep out of reach of children and pets and in recommended temperature and storage conditions.

Rule 5: Dispose of leftover household chemicals and their containers properly. Follow label precautions and hazardous waste recommendations.

In addition to these general safety precautions, review and follow the important precautions listed on page 8 of the “Spot and Stain Removal for Washable Fabrics” bulletin.

Break the Code and Destroy the Evidence Mystery Stain

Decode the secret word on your fabric sample using the following position code to identify your mystery stain.

- check with your leader to see that you have decoded your stain correctly.
- using the Bulletin “Spot and Stain Removal for Washable Fabrics” locate the stain you are attempting to remove on pages 10-12
- follow the procedure on page 9 of that bulletin to remove that stain

Congratulations. You have either successfully removed your stain or have made a good attempt. Realize that some stains are difficult to remove and some are impossible to remove. Be prepared to accept some failures.

You are now ready to remove many stains that accidentally occur. You also have the necessary skills to prepare soiled articles for laundry.

FOR MORE INFORMATION
“Gone With The Wash,” video and educational packet, Maytag company, Consumer Education, Newton, IA 50208, 1987

Clothing Care Video, The Learning Seed, 330 Tesler Road, Lake Zurich, IL 60047, 1986

Laundry Guidelines C-65, Kansas State University, Umberger Hall, Manhattan, KS 66506

Spot and Stain Removal for Washable Fabrics C-638, Kansas State University, Umberger Hall, Manhattan, KS 66506
MYSTERY STAIN REMOVAL
CLOTHING & TEXTILES, LEVEL II
Activity Sheet for Going Further Activities

Discovering Types of Stains, Part I

Materials Needed
Two small glasses, or 2½ pint jars
Cleaning solvent
Two aspirin
Small stick for stirring

1. Place one cube of sugar, one aspirin, and a tiny pinch of solid fat or lubricating oil in a glass or jar containing water. Stir with stick. Observe results.

2. In the other glass or jar, put a small amount of cleaning solvent. Place one cube of sugar, one aspirin, and a tiny pinch of solid fat or lubricating oil in the cleaning solvent. Stir with stick. Observe results.

3. Discuss what this experiment tells about removing stains:
   • Sugar and aspirin dissolved in water shows that stains containing these or similar substances should be treated with water. Solid fat or lubricating oil remained solid; shows that water could not effectively remove oil/grease stains.
   • Solid fat or lubricating oil dissolved in the cleaning solvent shows that oil/grease stains can be removed with a cleaning solvent. Sugar and aspirin remained solid; shows that carbohydrate stains, such as, soft drinks and some other types of stains cannot be removed with a cleaning solvent.

Mystery Stains, Part II

Materials Needed
3-inch squares of white or light-colored plain fabric that has been washed (old T-shirt or sheet). Good stains to try: chocolate, grass, coffee, dirt, mustard, lipstick, blood. Have two samples of each stain, let one dry overnight.

Spot and Stain Removal for Washable Fabrics, C-638 bulletin from Kansas State University

Cleaning Supplies
1. Practice removing the stains. Use your information from Part I and Spot and Stain Removal for Washable Fabrics.
2. Try to be scientific. Use different water temperatures and several stain removal methods on each type of stain.
3. Keep notes on a chart like the one below:

<table>
<thead>
<tr>
<th>Stain Removal Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of stain</td>
</tr>
<tr>
<td>soft drink</td>
</tr>
<tr>
<td>chocolate</td>
</tr>
<tr>
<td>chocolate</td>
</tr>
</tbody>
</table>

4. Try to identify the mystery stains.
5. Discuss mystery stains:
   • which stain is easier to remove: the dry or fresh one? why?
   • is it easier if you know what the stain is? why?
   • does the fiber content of the fabric make a difference?
   • what would you do for stains on carpet or upholstery?

39-Clothing & Textiles, Level II
MYSTERY STAIN REMOVAL
CLOTHING & TEXTILES, LEVEL II
Activity Sheet

Discovering Types of Stains, Part I, continued

Hint: Set up two work stations and have two teams experiment and report their results.

Resources: Stain Removal from Washable Fabrics, North Central Regional Extension Publication #64 (available from your county Cooperative Extension Office).

More Ideas:
• Make a poster with stain samples that shows the effects of different treatments
• Learn more about how detergents work, or the purpose of specific agents used in stain removal
• Make your own stain removal kit for use at home
• Give a demonstration to others on stain removal methods

To Do On Your Own: Do several family washings, then report and discuss problems and concerns, such as, never emptying pockets and unreported stains. Discuss how your family can share in the laundry workload.

Compare the cost of shirts done at the laundry with the cost of doing them at home. Consider the cost of detergent, energy and time spent washing and ironing, as well as the finished product.
Basic Mending Techniques
Clothing & Textiles, Level II, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to repair a garment instead of throwing it away
• Basic mending skills
• Cost savings of mending versus discarding

ABOUT THEMSELVES:
• Satisfaction of self-mending personal items
• Self-confidence in assessing the need for clothing repair
• Their ability to preform a basic mending task

Materials, Resources Needed:
• Copies of the Member Handouts
• Various samples to attempt mending tasks

ACTIVITY TIME NEEDED: 45-60 MINUTES

ACTIVITY:

Often, mending is a chore that is put off indefinitely. The appeal of mending fades in comparison to purchasing. However, mending is a necessity that can have big pay offs later. By keeping clothing in good repair, that clothing can save valuable clothing dollars and allow your wardrobe to last longer. Before you begin mending, you must examine the garment and ask yourself these questions.

Questions to ask before mending:
1. How extensive is the damage?
2. Do I have the skill to repair or must I ask someone else to do it?
3. Is it worth repairing? (age, fashionability, fit, and use)
4. How much time will it take to repair?
5. Can I afford to replace it?
6. Will I wear it after mending?

If upon examining the garment damage and use, you conclude that mending is worth the effort, you must then determine the repair needed. All basic mending supplies should be kept together and all members of the household, male and female alike, need at least a basic mending kit.

Repairs may vary from basic, simple, and quick to more creative and time-consuming, depending on the location and type of damage.
TYPES OF MENDING:

Preventive Mending
This type of mending is done upon purchase to delay major mending. It includes things like clipping and tying loose threads, securing buttons with thread shanks, sewing outerwear buttons with a reinforced button on the underneath side, securing snaps and hooks and eyes with double threads, restitching seams, especially ones that will receive stress or are split/raveling, repair raveling button holes, check and resecure hem. (Further directions to complete many of these repairs are included in activity sheet.)

Basic Mending
May include some of the above procedures. In addition it would include:

Darning—“reweaving” the fabric. Can be machine or hand done. Good hand darning is time consuming and requires much patience and skill, and is usually best done by a skilled professional. Dry cleaners can sometimes provide such services. Machine darning is more noticeable and will vary by machine. Follow instructions in your sewing machine guide to learn how to darn by machine. TIPS: Threads must be a close match to garment color. If none match, choose one shade darker than fabric. Tweeds, plaids, and textured fabrics darn more invisibly. Use lighter-weight thread than the weight of the fabric to darn. For denim, use matching navy or blue thread on top and gray in the bobbin and loosen the upper tension. If area needs reinforced after darning, use zigzag or decorative stitch. If it is a large area to darn, a patch or applique may be the best solution.

Patching—Suitable for use on areas when damage is large or cannot be darned. Evaluate the garment as to the beginning criteria to decide best method for patching and most suitable materials to use. Materials that might be considered are self-fabric, contrast fabric, lace, or trim. Methods for patching include fusing, gluing, hand or machine stitching, or any combination of the above. TIPS: Clean garment before patching. Purchase iron-on patches that are compatible with the fiber color and texture. Use fusible web to make iron-on patches. Make patches at least 1 inch larger than the area to be patched. Surface patches look neater and last longer if edges are hand or machine stitched. When applying hand-stitched invisible patch, use single thread. By trimming damaged area to a square or rectangle shape, application and stitching are easier. For invisible patches cut patch fabric from same grain and design as the damaged area. Secure with matching thread. Decorative patches can give the garment a new feel.

Replacement—This requires the removal of a section or part of a garment so a new one can be installed. This includes replacements such as zippers, elastic, waistbands, etc. This usually requires more time and a fair amount of skill.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. Do you like to mend clothes? Why or why not?

Q. What is a simple mending technique? A difficult one?

Process:
Q. How does mending function like recycling?
A. Use again, save resources of time, money, landfill space.

Q. What ideas does this give you about mending clothing?
A. Answers will vary.

Generalize:
Q. What kind of personal qualities does it require to properly mend clothing?
A. Patience, desire to save, good hand/eye coordination, etc.

Q. What would you consider before deciding to mend a garment?
A. Its use, age, extent of damage, skill to repair, cost to repair, replace, or do without.

Apply:
Q. How will you use this information in the future in making clothing decisions?

Q. What are some real life situations when you have observed mending skills were needed?

GOING FURTHER:
• Use Member Handout “Methods to Use When Mending,” and practice some mending skills.
• Members may want to volunteer services to mend for elderly in care home or apartments.
• Members may want to assemble basic repair kits for themselves or others.
• Have a “fix it” day to mend and repair clothing. Members bring items from home and repair. Supplies: items to repair, mending tools.
• Design appliques for repairing holes. Supplies: paper, pencils.
• To do outside the meeting: Interview three people to learn what items most often need repair. Share your findings. Supplies: paper, pencil.
• Show or collect pictures from magazines that represent creative repairs.
• Make a display of different methods of mending and repairing clothes.
• Demonstrate methods for repairing various items of clothing.
• Have a “Clothing Repair Clinic” for those who cannot do for themselves.
• Volunteer at an organization such as Salvation Army or at a clothing drive to help with clothing repair.
Leader Notes

- Volunteer at a nursing home or for a shut-in to mend or repair clothing.
- Make a scrapbook of ideas for pediatricians’ waiting rooms that relate to self-help clothing for children. (Examples: large buttons, zippers, pockets, patches, etc.)

REFERENCES:
Care and Maintenance of Clothing, 1990 Computer Program, Linda Heaton, Clothing and Textile Specialist, University of Kentucky, and Nadine Hackler, Clothing and Textile Specialist, University of Florida
Care Self Concept, Consumerism - Looking Good Inside and Out, Kathleen E. Voos and Cynthia Jackson, University of Wisconsin Cooperative Extension Service
Clothing Leader Guide, Ann Beard, Alma Fonesca, Teresa Criswell, and Melia Hunter, Texas Agricultural Extension Service, Texas A&M University System, College Station, Texas

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Basic Mending Kit

Basic Mending Kit
- Portable box or basket
- Hand needles—assorted sizes (3/9)
- Stainless steel pins
- Safety pins
- Scissors
- Glue stick
- Liquid fray preventer
- Thread—five basic colors: white or beige, navy, brown, black, medium gray
- Thimble

Additional mending supplies
- Snaps—assorted sizes
- Hooks and eyes
- Seam ripper
- Needle threader
- Seam gauge or 6-inch ruler
- Pin cushion
- Assorted buttons
- Fusible bonding web
- Iron-on mending tape
- Bodkin
Split Seam Repairs
One of the most common mending tasks is to repair a split seam. Of course the easiest remedy is to repair with machine straight stitching. However, a sewing machine may not be available when you need to make the repair.

Try to determine the cause of the split seam and repair the garment so the seam is strengthened. Some stress seams in garments wear out and split before others. These include seams in the crotch, underarm, and pockets. As a preventative measure, these seams should be reinforced. Some seams may split because the garment is too tight. The seam may need to be let out a bit to add extra space. The thread in seams may wear out and break if the thread is all cotton and the fabric is long-wearing polyester. When repairing, check the fiber content on the label, and use the same fiber thread. Seams in knits often split because they were sewn with a straight stitch instead of a stretch stitch, or with thread that was not strong enough to “give” with the fabric.

After you have determined the cause of the split seam, there are two methods of repair.

**Machine-stitch:** first remove loose threads from the seam. Overlap stitching about ½ inch at each end of the broken seam. If the seam needs reinforcing, stitch another seam ⅛ inch from the original seam, inside the seam allowance.

**Hand-stitch:** using needle and thread, secure ½ inch from broken thread and use a backstitch to repair. The backstitch is one of the strongest hand stitches. It is especially useful for repairing hard-to-reach seams that have ripped. It has the appearance of a machine stitch on the right side, but the stitches overlap on the wrong side. With right sides together, following the seamline, bring the needle through the fabric to the upper side. Take a stitch back about ⅛ inch forward on the seamline. Keep inserting the needle in the end of the last stitch and bringing it out one stitch ahead. The stitches on the underside will be twice as long as those on the upper side.

Hemming Repairs
Repairing a hem that has pulled out only takes minutes. You can make temporary emergency repairs with double-faced mending tape or glue stick. Non-sewing repairs can be made with fusible web strips. A hem repaired with fusible web can be washed and drycleaned. Hems can be permanently repaired by hand-stitching or machine-stitching. When hand-stitching, use a blindstitch for woven, ravelly fabrics finished with seam binding or an overcast edge; a catchstitch for flat hems in pants, knits, and heavy fabrics; or a slipstitch for woven fabrics with a turned-over edge.

Machine-stitching takes less time and is sturdier than hand-stitching. A machine blindstitch provides an invisible hem. Follow your sewing machine manual for instructions. A straight-stitched hem shows on the right side. It is used to hem and finish the raw edge in one step or to add decorative detail.

Button Repairs
To prevent the loss of a loose button, resew it as soon as you notice threads that are starting to fray. Check all other buttons at this time.

If you lose a button and cannot find a perfect match, you can rearrange the buttons on the garment. Place the “odd” button near the hem, where it will be less noticeable.
Methods To Use When Mending, *continued*

It may be necessary to replace all the buttons if the missing one cannot be matched. Always select buttons the same size and type as the original buttons, so they will fit the buttonholes.

When a button is torn off, it may leave a hole in the fabric. If this happens, put a patch on the fabric before sewing the button back on. Follow these steps: (1) Cut off any loose threads around the hole. (2) Cut a piece of fabric, the same color as the garment and a little bigger than the hole, to use as a patch. (3) Put the patch between the facing and outer fabric. (4) Sew the edge of the hole to the patch using small stitches sewn close together.

Buttons should be sewn on with a shank. The shank raises the button away from the garment to allow for the thickness of the buttonhole. The shank should be $\frac{1}{8}$ inch longer than the thickness of the fabric to allow the buttonhole to lie smoothly when the garment is closed. (See Lesson, “Sewing on a Button,” Level I.)

Match the color of the thread to the color of the buttons. Use a crewel needle (large eye) for easy threading. Use four strands of thread to save time. Sew on the button with two stitches through each hole.

*Tears, Cuts, and Holes*

Repair rips, tears, cuts, and holes as soon as possible. What starts as a worn spot or small tear may become a hole. The longer it is ignored, the larger it becomes.

It is possible to repair rips, tears, cuts, and holes without sewing by using fusible interfacing, iron-on mending tapes or fabric, or fusible web with a patch of matching fabric. The fusible prevents further tearing or raveling and will barely be noticeable on most fabrics. On lightweight or sheer fabrics, however, fusibles add stiffness and bulk that may not be desirable. Always test the fusible on a hidden area of the garment before making a repair.

Patches can make your clothes look new. Use brightly colored appliques or quilted patches for a decorative effect. Consider machine-stitching if fusing the patch will add too much stiffness to be comfortable. Machine-stitching takes longer, but is softer than fusing. Hard-to-reach areas that need patching may have to be hand-stitched with a backstitch or blanket-stitch.

To blanket-stitch a decorative patch, use three strands of embroidery floss or a single strand of buttonhole twist. After securing thread under patch, bring needle to right side. Hold thread loop down with thumb and bring needle through patch and garment and over thread. Pull up the stitch. Continue around the patch, making stitches $\frac{1}{8}$ to $\frac{3}{8}$ inch apart. Secure thread on the inside.

*Creative Repairs*

Turn repairs into design features. Disguise tears or holes with lace, ribbon, pockets, or appliques.
Pressing Basics

Clothing & Textiles, Level II, Care and Maintenance

What Members Learn . . .

ABOUT THE PROJECT:
• Tools used in pressing
• Why pressing is important
• Safety precautions when using heat

ABOUT THEMSELVES:
• Their appearance tells others how they feel about themselves
• Their ability to master a task safely
• How family members can work together to accomplish household chores

Materials, Resources Needed:
• Steam/spray iron
• Ironing board
• Copies of Member Handout with illustrations or these following items:
  Tailor’s Ham and/or pressing mitt
  Press cloth
  Sleeve board
  Seam roll
  Point presser/clapper
• Various fabrics 10 x 10 inches square
  Cotton muslin
  Polycotton muslin
  Corduroy
  Acetate/delicate fabric

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:
Not too long ago when your grandmothers were your age, ironing was a major chore. For most families it consumed one whole day a week with mother and all the children helping. It not only took hours and hours of time but a strong back as well. Clothing had to be starched and ironed with heavy metal irons. The work was slow and tiring as well as hot, especially in the summer time.

Most of us don’t enjoy ironing and because of advancements in irons and fabrics today we don’t spend as much time doing this task. Electricity served to lighten the weights of irons which has been one major improvement. Also new fibers (man-made) and finishes (perm-press) have reduced the wrinkling of garments which decreases the need for ironing. Many

Leader Notes
Welcome members and have them sit in a comfortable place. If they do not know each other have each member introduce themselves and tell where their grandmother lives/lived or is from.
Leader Notes

people even consider ironing before purchasing an item. If it will require ironing they don’t buy it. Most people however will have some items that at least occasionally will need ironing. If you ever attempt any home sewing project you will definitely use an iron for pressing. The right equipment for all your pressing/ironing needs, whether you are sewing or ironing your laundry, makes a big difference in the finished appearance and the ease of the task. Today, we will introduce you to the iron, when it is used and how to safely use it.

Ironing can make a garment look crisp, fresh and new. The lack of ironing can give a dishevelled, sloppy look. Ironing does take some time but can be worth the effort. The neat appearance that results gives the impression that here is a person that takes pride in their appearance. It says I respect myself and want you to respect me also. Pressing when sewing is an absolute necessity and makes the difference between an item that looks “homemade” or looks like it was purchased at a store.

Ironing and pressing are often used to mean the same thing. They are two different methods of using the iron and its important to know the difference.

**Ironing** means gliding the iron over the fabric with pressure and is usually used on whole garments. Iron with straight strokes lengthwise or crosswise to the grain of the fabric. Diagonal or circular strokes can stretch the fabric.

**Pressing** is raising and lowering the iron on a small area without a gliding motion, using minimum pressure. Lift and move on to another section. Use a pressing technique for details and intricate areas or during construction.

**CAUTION:** The iron is an electrical appliance that gets hot! Never forget that you are in a situation that you can get hurt. Follow these safety precautions:

- Always turn off an iron when finished or if called away (phone call).
- Never use around a sink of water or if water is on the floor.
- Unplug a steam iron when filling with water.
- Check cord for frayed edges and replace immediately if seen.
- Never play around iron and ironing board.
- Plug into and out of wall sockets by grasping plug—never use cord.
- Never touch fabric immediately after pressing—it can be hot enough to burn.
- Use only with adult supervision. Don’t iron when parents are not at home.
- Never iron over the cord.
- If you are burned, run cold water over the burn immediately and tell your parents.

**Pressing tips to use when sewing:**

1. Do in batches—sew as many areas as possible before breaking to press.
2. Follow pattern directions.
3. Press each stitched seam before crossing with another.
5. Remove pins to protect iron.

Ironing tips:
1. Do in batches.

Different fibers and finishes need different temperatures for best results. To know what temperature to use, read the care labels for recommended safe procedures. If no mention of ironing is listed then it is safe to iron, you may steam or spray at any temperature. As a general rule most natural fibers need more pressing and man made fibers require less. Special durable and permanent press finishes (added after the fiber was woven) may not need any ironing or if needed, may call for a cool iron. Let's see how the samples that you have respond to ironing.

There are some other pressing tools that may be handy for you to acquire as you have additional ironing needs. These include:
- **Sleeve Board**—looks like two small ironing boards attached together. Used for pressing seams and details of small areas (sleeves, necklines).
- **Point Presser/Clapper**—hardwood appliance with two pieces attached together appliance. Used to press seams open in corners and points. Used in tailoring.
- **Tailor’s Ham or Pressing Mitt**—used for curved areas, sleeve caps, darts, curved seams, collars. They are both firmly packed cushions, the mitt fits over your hand.
- **Seam Roll**—a firm cylindrical cushion for pressing seams. The bulk of seam is pressed to the side so no seam imprint remains on the right side.
- **Press Cloth**—prevents iron shine and used for applying fusible interfacing.
- **Needleboard**—(or a self fabric or fluffy terry towel) to prevent flattening when pressing napped fabrics.
- **Table Top Ironing Board**—small version of the floor type but sits on a table top. It saves space and is portable. Handy to keep in sewing area.
- **Hand steamer**—lightweight iron providing concentrated steam at a low temperature setting. No press cloth is needed when using a steamer.

**DIALOGUE FOR CRITICAL THINKING:**

Share:
- **Q.** What is the difference between pressing and ironing?
  - **A.** Pressing is in small area, little pressure. Ironing is gliding over large area using pressure.

- **Q.** Do you like to iron or press clothes? Why or why not?

- **Q.** What are some tools used for pressing?
  - **A.** Iron, sleeve board, point presser, tailor’s ham or pressing mitt, seam roll, press cloth, needleboard, or hand steamer.
Leader Notes

Process:
Q. When is a neat appearance especially important?
A. Always, but special occasions like church, family gatherings, weddings, funerals, dances, parties, job interviews, dates, fashion revues, etc.

Q. What are three safety precautions when using the iron?
A. Never use near water, plug in and out with plug not cord, don’t touch fabric immediately after ironing, for others refer to lesson.

Q. When might you do a lot of pressing?
A. Answers will vary, but some type of sewing project should be a common answer.

Generalize:
Q. No matter what kind of iron you use, what do they all have in common?
A. They get hot, and can ruin fabric, burn you, or start a fire if used improperly.

Q. If you do not have some of the special ironing tools (i.e., press cloth, tailor’s ham, etc.) what might you do?

Apply:
Q. What losses (financial, personal, physical, emotional) might a family and/or community experience as a result of a fire started by irresponsible ironing practice?

Q. How would you feel if you lost all your belongings while living in an apartment building or college dormitory that burned down because a neighbor left a hot iron on an article of clothing?

Q. What are other heat-producing appliances in your home that require safe use?

GOING FURTHER:
• Discuss different parts of the iron and their use.
• Practice correct techniques for pressing various items of clothing, i.e., skirt, blouse, pleated garment, jacket.
• Role play safe and unsafe use of the iron.
• Bring and clean irons.
• Visit a store alteration department, a tailoring establishment, or a drycleaners to observe pressing skills.
• Do a sensitivity experiment using different temperature settings on the iron and fabrics of differing fiber content.
• Take a field trip to compare various irons, features, and costs.
• Leader will demonstrate the proper use of all pressing/ironing equipment.
• Set up an exhibit in a laundromat of swatches of fabric pressed at too high temperatures.
• Iron for someone in a nursing home or for someone else who cannot iron.

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PRESSING BASICS
CLOTHING & TEXTILES, LEVEL II
Member Handout

Pressing Matters

Equipment
The right equipment for all your pressing/ironing needs, whether you are sewing or ironing your laundry, makes a big difference in the finished appearance and the ease of the task.

A steam/dry combination iron is the best. Make sure the temperature control indicates a full range of settings for synthetic as well as natural fibers.

A cordless iron is convenient, easy to use and handle, but does not get hot enough to press/iron cotton and linen fabrics. It is also much more expensive than a combination iron.

An automatic shut-off iron will turn itself off if left idle for a few minutes. This is a safety feature designed for those people who often forget to turn the iron off. This is inconvenient for the homesewer, however, because the iron has to be turned back on and allowed to reheat after the timed shut-off.

Ironing boards should be adjustable to various heights and rigid enough to withstand pressure. Padding helps reduce shine. Cover type is a personal preference. Muslin or cotton canvas covers are attractive and easy to put on; however, they scorch more easily than silicon-treated covers. On the other hand, silicon-treated and metallic-coated covers may cause fabrics to shine and can cause heat to bounce back and damage heat sensitive fabrics. Covers must be removed for laundering. Both padding and cover must be smooth to prevent wrinkles that may press through to the fabric.

A sleeve board is composed of two small ironing boards or a small ironing board on a wooden base or stand. It enables you to press seams and small sections of garments as well as sleeves. It is designed to allow the sleeve seam to be pressed without pressing in creases and to shrink out fullness in the top of the sleeve cap.

A point and seam presser is made of hardwood. Some point and seam pressers provide many different shaped surfaces for pressing points, curved seams, and straight edges. Others are designed to press points and straight seams only. The thin flat edges provide a surface that allows the seams to be pressed open without a seam impression showing on the outside of the garments. The point presser allows the seam at the tip of the garment section to be pressed open. (As a substitute for a point presser, use a pointed wooden dowel or several layers of cardboard the shape of the garment section).
A tailor’s ham is a firm, rounded cushion that is covered half in wool, half in cotton. Use if for pressing areas that need shaping, such as darts, curved seams, sleeve caps, or any defined rounded area. (As a ham substitute, use a small hard pillow or a tightly balled terry cloth towel pinned securely to hold its shape.)

A seam roll is a narrow, cylindrical cushion used for pressing long seams and hard-to-reach areas. This prevents seam ridges on the right side. (As a substitute, place strips of paper under the seams before pressing or cover a tightly rolled magazine covered with scraps of wool or cotton fabric.)

A tailor’s mitt, also called a press mitt, is similar to the tailor’s ham but is smaller, with a pocket on the side to fit your hand or clip over the sleeve board. It is used for hard-to-reach areas that need steam shaping.
Pressing Matters, *continued*

**Press cloths** prevent fabric shine or iron marks on the fabric. For pile fabrics, use a scrap of self-fabric, placing nap to nap. Commercial iron soleplate covers such as Iron-allR and Iron-safeR eliminate the need for a press cloth.

A **clapper or pounding block** is a shaped length of wood used to pound and flatten seams and faced edges as they are steamed. It is used mainly for tailoring woolens and difficult-to-press fabrics.

A **needleboard** is a bed of steel wires mounted on a flat piece of heavy canvas that is placed between the ironing board and piled fabric to prevent flattening the nap. (As a substitute, use the right side of a piece of self-fabric or a fluffy terry towel.)
Pressing Matters, continued

Safety
Irons, like other electrical appliances have cords that can trip you. This can cause the hot iron to fall and burn you. Some irons have resting bases that are more unstable than others, and a slight push will tip them over. If they do tip over, you can be burned by hot water or by the hot face of the iron itself. Other hazards associated with irons include the risk of a small child climbing on a chair and touching the hot iron; the risk of being hit by the iron if it is pulled off the ironing board or off a shelf; and the risk of electric shock, which can occur if water spills on parts carrying electric current. Follow these safety tips.

- Always unplug the iron and put it out of reach of small children even if you leave for just a few minutes.
- Use a sturdy ironing board and place the board as close as possible to a wall and the outlet where the iron is plugged in. This should reduce the risk of tripping over the cord or causing the ironing board itself to fall. Use the proper temperature setting for the fabrics you are ironing. Fabrics will scorch or melt if the temperature is too high, and many fabrics will ignite if the iron is left on them too long.
- Unplug a steam iron when filling it with water because you could get an electrical shock if water spills on live electrical components of the iron.
- Use demineralized or distilled water in a steam iron because normal tap water may leave mineral deposits and these can clog steam and vent openings.
- After you have finished ironing, empty the iron if water has been used, coil the cord so that it is not kinked, and put the iron up high to cool.
- If you must use an extension cord, remember that an iron is a high amperage (current) device, which requires an extension cord capable of carrying that current.

Iron Care
Keep the iron clean at all times. If finishes or fusible materials are allowed to gum the soleplate, pressing is impossible. To remove excess buildup, clean the iron.

To clean the soleplate of the iron, use commercial iron cleaner available in fabric stores, grocery stores, and some variety stores. To remove mineral deposits from the inside of a steam iron, fill it with equal part of water and white vinegar. Let it steam for several minutes, then disconnect and let sit for 1 hour. Empty and rinse out with distilled water.
PRESSING BASICS
CLOTHING & TEXTILES, LEVEL II
Member Handout

Pressing Matters, continued

Ironing Techniques
Ironing and pressing not only reduce wrinkles in clothing, but also help to retain details of tailoring, such as creased pant legs, smooth plackets, and crisp pleats. With modern synthetic fibers and blends, ironing is not the chore it used to be; however, pressing and ironing are still a routine part of clothing care.

Ironing is gliding the iron across the fabric; pressing is raising and lowering the iron onto the fabric without any gliding motion. Iron with straight strokes, lengthwise or crosswise to the grain of the fabric. Diagonal or circular strokes can stretch the fabric. To enhance details, such as pleats, darts, etc., use a pressing technique, rather than ironing.

Organize routine ironing by doing in batches. Begin with garments requiring the lowest steam setting. Then empty the iron for garments that need to be ironed with dry heat.

When ironing or pressing garments, avoid wrinkling parts that have already been ironed. Do large areas last and, after ironing the garment, touch up important parts, such as the collar and cuffs. Be sure ironed clothing is dry and cool before storing.

Pressure, moisture, and heat are the variable factors that must be controlled to ensure professional results and to protect your fabric. Use of spray starch and water mist may aid iron. It is good procedure always to test press the fabric.

Ironing and Pressing Tips

While pressing the great majority of fabrics, keep the weight of the iron in your hand, exert light pressure on the fabric, and never rest the full weight of the iron on the fabric. A careful lifting and lowering motion is the rule when pressing with the iron. Additional pressure is necessary only for crease-resistant and firmly woven fabrics.

Most fabrics require moisture for pressing, but excessive moisture will spot, ruin the texture, or give an overpressed look in some cases. To avoid damage to your fabric, use a press cloth when it is necessary to press on the right side.

Never use a wet press cloth on any fabric—it should just be damp. When dampening the press cloth, control the amount of moisture by wetting a third of the cloth, rolling it up, and wringing it to distribute the moisture. Check the heat settings on your iron and test press the fabric. Some fabrics can deteriorate or become harsh and brittle under excessive iron heat.

Precautions must be taken when pressing fabric on the right side since using an iron that is too hot, or a press cloth with too much moisture, will cause iron shine. Use a press cloth or a steam iron cover that fits over the soleplate of the iron to help prevent this. The best press cloth is a small piece of fabric in the same fiber content as the garment (wool for wool, cotton for cotton, etc.). In an emergency, heavy brown paper can be used as a substitute for a press cloth. Padding under the ironing board cover will also help prevent shine.
Use a little spray starch or fabric finish (sizing) to keep lace, linen, and cotton crisp looking.

Do not press or iron clothes that are dirty or stained. Heat will set the stains.

Press napped fabrics carefully to avoid crushing the nap. Place the garment, wrong side up, over a thick towel. Use steam and apply little pressure.

Keep a pump-spray bottle of water handy for misting stubborn wrinkles or creases.

Fabrics will retain their pressed appearance only when cool. Be sure garments are cool before you move them or what you pressed in will fall out. Fabrics should be cool and dry before you put them back into the closet, and remember to allow a little breathing space between hanging items.

You may eliminate daily touch-up pressing by choosing the next day’s clothing and placing them on a hook outside the closet so slight or minor closet wrinkles will hang out overnight.
Garment Life
Clothing & Textiles, Level II, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• What “Garment Life” is
• How proper care lengthens garment life
• How care labels, cost of care and daily care work together to affect garment length of service
• How to extend “Garment Life” by recycling

ABOUT THEMSELVES:
• The impact of their consumer decisions beyond the “price of garment”
• How responsible care of personal items can save money
• How decisions they make about expanding, recycling, or discarding wardrobe items affect the environment

Materials and Resources Needed:
• Meridian VHS Tape “Stretching Your Clothing Dollar” (available from the Area Extension Office)
• TV & VCR
• Copies of Member Handout

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:

Many factors influence “garment life.” The life of the garment means the length of time you will use the item and it’s appearance and properties will continue to be satisfactory for your expectations. All of these factors influence a garment’s life: storage, wear, cleaning, textile properties, garment construction, and fashionability. One factor that may have no effect on garment life, but has a major effect on the decision to buy, is price.

Leader Notes
Welcome all members to the meeting. Have everyone sit in a comfortable seat or on the floor. If members do not know each other have them introduce themselves and tell about an old garment they or someone in their family owns but are no longer using. Have them discuss why they think this garment is no longer being used. Some reasons may be it was not a wise purchase, it wasn’t cared for properly, it no longer fits, or it is out of fashion. You begin introductions with yourself. If you have time, you might suggest they bring the item with them to the meeting.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Explain what is meant by “garment life”?
A. The length of time you will use a garment and it’s appearance and properties continue to be satisfactory for your expectations.

Q. Name three types of storage that, when used correctly, can help extend the life of a garment.
A. Hanging, flat and seasonal.

Q. How can you extend a garment’s life?
A. Don’t wash after each wearing unless dirty, after wearing air overnight and store promptly, use seasonal storage, keep in good repair - mend at first indication of need, use proper cleaning procedures stated on the care label, consider alternate use or recycle when garment is not suited for your purposes.

Process:
Q. Name three ways to recycle an unworn garment?
A. Remake, give to charity, convert to dust cloths.

Q. What items do you have that require seasonal storage?
A. Heavy coats, mittens, hats, swim wear, towels, boots, sandals, sweaters, long and short sleeved garments.

Q. Do you have items that you no longer wear? Why?
A. Most will say yes. Reasons may include: out of fashion, needs mending or repair, unflattering style, don’t enjoy wearing, hidden in storage, color unbecoming.

Generalize:
Q. What other items than clothing or textiles require seasonal storage?
A. Snow sleds, school books, Christmas decoration, etc.

Apply:
Q. How could you extend the life of school books or Christmas decorations based upon storage and recycling principles you have learned for this lesson.
A. By passing school books on to a younger sibling, selling at a used book store, sending to children in another country, or by carefully packing Christmas decoration in appropriate flat containers and storing in a dry, ventilated, insect free area.

GOING FURTHER:
- Have members pad hangers by wrapping with old hose.
- Visit dry cleaners or firm that offers seasonal storage.
- Visit second hand store to view garments offered and let members envision remakes or enhancements that could be done on clothing offered for sale.
- Make muslin clothing storage bags to give as gifts.
• Have members bring old item to remake for project.
• Have members estimate the total cost of clothing (purchase price) that their family gives away in one season or year as non wearable items.
• Discuss different storage practices of family members.
• Discuss the influence of storage on the appearance of clothing.
• Discuss ways of keeping clothes orderly and the relationship of orderly storage to longer wear.
• Critique pictures of closets and discuss improvements to make.
• Have each member bring an example or picture of a storage accessory and discuss how each might be used.
• Tour a container store, hardware store, discount store, etc., and identify storage possibilities.
• Demonstrate proper folding of sweaters or stretchy garments.
• Construct aids for storing and arranging clothing using handouts from the EHE teaching plan, Closet Organization.
• Give members a list of clothing that is to be stored. Plan for the storage of each of these garments.
• Demonstrate the correct mothproofing procedure.
• In small groups, list clothing items found in dresser drawers of a project member. Plan for the best storage/organization of these items.
• Have an entomologist discuss moth and beetle prevention/treatment.
• Demonstrate construction of inexpensive storage items.
• Prepare an exhibit on efficient use of closet and storage space.
• Design clothing storage/closet organization for a physically disabled person.
• Write a news article or radio spot on correct mothproofing.

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Clutter’s Last Stand

The long life and fresh appearance of clothing depends on proper storage as well as proper cleaning. How you handle your clothes from day to day and how you store out-of-season clothing affect the life and look of your wardrobe.

1. Storage
Organization is the key to keeping clothes neat and in good condition. Clothing in a properly organized closet maintains its shape, stays clean and unwrinkled, and saves you time and energy. Use your existing closet space to its fullest potential with closet accessories and hardware to expand the available space. Out-of-season clothes have special storage needs. Prepare these garments properly to protect against moths, mildew, and staining.

You should be able to see everything every time you open the closet door. Notions departments, hardware and office supply stores, mail-order catalogs, and closet shops are great sources for storage and organization aids. Plastic and ceramic hooks, metal or fabric shoe hangers for the backs of doors, and pegboard can be used to extend limited closet space.

Hang everything you can. Do not put anything in drawers that you can hang or stack on open shelves. Double your hanging space by creating two hanging levels so you can see tops in relations to bottoms. You will be amazed at how many new combinations suddenly appear! Buy a system or make your own—use screw eyes, S-hooks, chain and a dowel for a super easy system. Create functional doors. Use the inside of doors for extra hanging space. Add towel bars for sweaters or scarves, mug racks for jewelry, nails for belts, or shoe racks.

See-through plastic boxes are great for dust-free shelf storage. Look for easier to use slide-out drawers, rather than lift-off lids so that you can stack them.

Make your closet light and bright. Avoid investing in professional wiring; buy a battery operated light from the hardware store. Or use a clamp-on spotlight directed toward your closet.

Hang clothes in categories according to color to easily coordinate:

<table>
<thead>
<tr>
<th>jackets</th>
<th>skirts</th>
<th>pants</th>
</tr>
</thead>
<tbody>
<tr>
<td>blouses or shirts</td>
<td>dresses</td>
<td>sportswear</td>
</tr>
<tr>
<td>evening clothes</td>
<td>sleepwear</td>
<td>outerwear</td>
</tr>
</tbody>
</table>

Hang two-piece dresses and suits separately. This will maximize the wearing of each top and bottom. Some stretchy garments, such as sweaters, will keep their shape better if folded on a closet shelf in easy view, placed on a shelf in clear plastic vertical bags, or placed in clear boxes on shelves.

Hanging storage: Use the following hangers for appropriate items. Plastic tubular hangers for firmly woven, light weight shirts and blouses. Padded, shaped and suit hangers for sheer fabric blouses, dresses, jackets, suits and tailored garments. Hangers with horizontal bar padded or enlarged to hang slacks or pants at thigh, or slacks can be suspended by the cuff or waist to prevent creasing at foldline. Standard clip-style skirt hangers leave impressions in both real and synthetic suedes unless you protect the garment by tucking a scrap of medium- to heavy-weight fabric between waistband and clips or use hangers with rubber tips. Avoid wire hangers—they can
Clutter’s Last Stand, continued

rust, paint peel and rough metal may snag delicates. If you do use wire hangers, cover them with white paper. Look for and use garment loops found in many ready to wear items. Garment loops distribute weight and prevent distortion of the garment. If not present, you can prevent shoulder distortion in better dresses by adding long loops of seam tape anchored to front and back waistline seams. Loops should be slightly shorter than waist to shoulder length to prevent stretch. In the closet, allow for air movement between garments. This assists in decreasing wrinkles. If the garment has fasteners, secure the top one to hold on the hanger. Keep the closet clean, by airing and washing down at least once a year. Never hang soiled clothes or items needing mending back in the closet until they have been cleaned and/or repaired. Be sure garments do not touch the floor when hanging. Leave closet door open occasionally to allow air circulation. Scented odor devices and sachets are nice but avoid direct contact with clothing.

Flat Storage: Most people need more of this than they have available. Items suited for flat storage include: sweaters, other knit wear, heavy stretchy items, delicate and fragile clothing, handbags and other small unhangable items. Guidelines for flat storage are as follows:

• fold at construction or natural wearing lines (waist, knee)
• use tissue between folds to prevent creasing
• don’t fold the same way each time
• roll appropriate items (socks, underwear) - reduces space needed and prevents wrinkles
• paint shelves and line drawers to protect clothing from snags, stains, and degradation caused by natural oil and acid in wood
• avoid stacking heavy items; if you must, put the heaviest on the bottom
• clean and air the area at least once per year
• don’t allow scented devices or sachets to come in contact with stored items
• flat storage such as stackable clear plastic boxes, kitchen bins, and covered baskets can be used to extend limited closet space

Seasonal Storage: Proper seasonal storage will enhance garment life. The months during the year that garments are not suited for wear can be a time of deterioration if not properly stored or can be a time of rest that will result in a refreshing garment to resume wearing. Important points to remember about seasonal storage:

• properly clean garments before storing; making sure they are completely dry and that wool drycleaned garments have been moth proofed. Do not trust cedar lined closets or commercial wood chips as only new cedar woods contain the oils that are a repellent to clothes moths. Because of their vulnerability to moths and carpet beetles, woolen garments should be stored according to certain procedures. To ensure elimination of any moth larvae present, launder or dryclean clothes before storing. Even man-made fabrics and those with moth-resistant finishes can be damaged if food spots and stains attract insects. Mothproofing is a must when the temperature is 50 or more. Air conditioning is no defense against moths! Scatter mothproofing crystals or balls liberally throughout all stored items using layers of tissue paper to prevent them from touching clothes. Do not use with leather or fur. Keep drawers and doors shut tightly or use garment bags and sealed boxes to confine the vapors as much as possible. If you cannot stand the smell of traditional mothproofing, look for lavender scented varieties. Cedar chests keep out moths if airtight, but cedar does not kill moth larvae, the real culprit. Herbal mixtures won’t either, but they may repel egg-laying moths. Vapor from mothballs can be effective if sealed in the area/container with the items, and this is difficult to do. Try suspending crystals

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from mesh bag from top of storage area. Do not let clothes rest or touch the bag. Seal and leave alone for several days. Follow all product directions and do not inhale fumes from any storage substances. If closets and clothes are clean and sealed as tightly as possible, they will do a good job keeping the enemy away.

- select area that is clean and dusted, away from extreme dampness, heat, grease and fumes, and away from direct sunlight to prevent sunfading.
- don’t wrap in plastic bags; they can be so airtight clothes cannot breathe and mildew can develop. They can also give off chemicals that react with fabric. Use cloth garment bags or canvas garment bags, either hanging type (closet) or bags for flat storage. Some garment bags can hold hangers at the top and folded items at the bottom.
- trunks and suitcases may be used; items placed in pillow cases allow for suitcase use during storage time
- wrap natural fiber items in white (acid free preferred) tissue paper or pillow cases
- fold items as few times as possible; fold at seamlines
- don’t over pack into storage areas
- if your household is short on storage space talk to a dry cleaner to see if they may offer seasonal storage
- inexpensive portable clothes racks and under bed storage boxes can expand your storage space. Or, use a wicker chest or a foot locker. They can do double duty as tables in your room.
- air clothing upon removal from storage
- wool and wool blend and specialty hair fiber fabrics can be renewed by hanging them on a rod in bathroom with steam. After steaming, allow to hang undisturbed for several hours. Gently press out remaining wrinkles.

Besides clothing, other household items (blankets, linens, etc.) are stored off season by the same storage principles.

2. Wear and Fashionability - recycle or discard? By deciding to recycle you are making an effort to continue the usefulness of this item for someone else or for another purpose. Here are various forms of recycling most unused items can fit into. Choosing one of these categories will save a garment from taking useless landfill space. Some of these categories are quite simple while others require more time, effort and cost. All should be considered when faced with a garment no longer being worn.

- Customize or revitalize
- Give to charity
- Convert to rags or dust cloths
- Give to children for “dress up”
- Use in mending or patchwork
- Convert to cloth strips for use in tying up plants
- Quilt making
- Craft projects/doll clothes

Clutter’s Last Stand, continued

66-Clothing & Textiles, Level II
Clutter’s Last Stand, continued

Recycling a garment can be simple as cutting jeans off for “cut offs” or much more complex where a garment is disassembled and actually reassembled. Really creative ideas can add the personal touch to items you may otherwise dismiss as useless. Here are a few suggestions but your own creativity will help you visualize what will work for you.

- Lengthen by adding bands of fabric (sewn on old hem line) repeat at sleeves or neckline if possible to draw garment together
- Turn short dress into tunic
- Make a blouse from a dress
- Alter garment into a new fit
- Cut off sleeves and face with a complimentary fabric
- Update with new buttons
- Convert dress into jumper (remove sleeves and lower neckline)
- Make a child’s garment from an adult’s
- Add width by inserting bands, pleats, gores, yokes or tucks
- Add contrasting collar and/or cuffs
- Reshape garment: create a new waistline, narrow pant legs, narrow shoulder length by taking tucks or pleats
- Make knit hat or cap from old sweater
Care Labels

*Clothing & Textiles, Level II, Care & Maintenance*

**What Members Will Learn . . .**

**ABOUT THE PROJECT:**
- What information is found on a care label
- Where to find care labels
- How to use care labels in laundry decisions

**ABOUT THEMSELVES:**
- Consumers have a right to know about the garments they purchase
- Informed consumers can make better purchasing and laundering decisions by reading labels carefully

**Materials Needed:**
- Copies of Activity Sheet
- Several garments with care labels, one per member (if you have recently purchased a garment that still has all the hang tags, use it; if not, you can probably borrow some garments with hang tags from a local retailer)
- Colored pencils, crayons, or markers in colors named on the Activity Sheet

**ACTIVITY TIME NEEDED:** 30 MINUTES

**ACTIVITY:**
As you buy clothing you will notice many tags and labels attached to a garment. We are going to talk about a very special label that must be attached to every item you buy; a care label. As you shop for clothing have you ever seen a label or tag attached to an item? What information did that tag give you? (Answers will vary, price, size, care, brand, fiber content, etc.)

Let’s talk about some of the different tags and labels you will find. Do you ever see a tag that is hanging from a sleeve or waistband? This is called a hang tag, and often includes optional labeling. This tag tells price and size and special features about this garment the manufacturer wants you to know.

Most garments will have a brand label somewhere on the inside of the garment. This tells the company or line who produced the garment. It is usually found around the back of the neck or waistline.

**Leader Notes**
Have members sit in a circle. Pass out a garment to each member. Ask each member who wants to volunteer to point out the brand label of the garment they hold.
Next, let’s talk about mandatory labeling. There are laws (Apparel Product Care Labeling, Textile Fiber Products Identification Act, Wool Products Labeling Act, and Fur Products Labeling Act) that say that every item sold in the United States must have an attached label that tells how to care for that item and also the fiber or fur content. Fiber content is the amount and types of fibers used in the item.

Specifically, mandatory labeling is information that must be provided to the consumer at the point of purchase. It may be on a package wrapper, hang tag, etc.; it need not be permanently attached or durable for the life of the product. This information includes:

• identifying the fiber by generic name
• giving the percentage of fiber by weight
• identifying the manufacturer; name and RN/WPL number
• identifying the country of origin where processed or manufactured
• species of animal if fur
• whether dyed, colored, or bleached if fur
• whether recycled if wool

One piece of information that must be permanently attached and durable the life of the product is the care label which lists one acceptable way to care for the product.

Optional labeling may be in the form of a hang tag, attached or accompanying leaflets, included on the permanently attached cloth label, or any other method of labeling or informing. This information includes:

• price of product
• size of product
• finishes applied to product
• color information, i.e., color, lot #
• design or other brand information
• explanation of special features or other aspects related to the product

Care labels are usually found behind the brand label or on the side seams. See if you can find the care label on your item. The care label must be permanently attached to the garment.

Each care label must give one acceptable way in which to care for that item. There may be other ways that are acceptable, but the manufacturer is not required to give you more than one acceptable way. In the U.S. it must be in written form. The European form uses symbols which may also be included, but are not necessary. (See Member Handout for symbols.)

Next, let’s sort these items according to the care label.

The important thing to remember about the care label is that if you use it to care for a garment and the garment does not perform as you would expect, you can return the garment to the retailer or manufacturer for a replacement or refund. If it is ruined because you used another method than the one stated on the care label, you can not seek restitution (ask for it to be replaced or refunded) for the ruined garment.
Next, write a care label for the garment in your hands. Remember, only one acceptable method needs to be stated.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. What label information must be permanently attached and durable the life of the product?
  - A. One way to care for a product.

- Q. What is some information a manufacturer may tell you on a label that they don’t have to according to laws?
  - A. Price, size, finish, color.

**Process:**
- Q. If you buy by brand label alone, how much do you know about an item?
  - A. Very little.

- Q. What don’t you know from just looking at a brand label?
  - A. Fiber content, correct care, cost of care compared to another similar item.

- Q. Why is it important to understand garment labels?
- Q. Why is it important to follow the care label instructions?
  - A. To increase the garment life, so the item will look good after washing, if cleaning harms the garment you can get a replacement or refund.

- Q. How might reading the care label change your mind about buying an item?
  - A. Special cleaning is too much bother, or expensive, fiber content not what expected.

**Generalize:**

- Q. What other things besides clothing come with care instructions?
  - A. Appliances, cars, cookware, computers, etc.

- Q. Have you always followed garment care labels? What happened if you didn’t?

**GOING FURTHER:**
- Visit retail outlet to compare care labels of one item (example—sweaters) to see the range of differing care that is listed.
- For older members—compare the cost of hand washing versus machine versus dry-cleaning for a garment, not only in cost but in time.
- Have the members write a letter stating that an item did not meet the standards expected after following the care label.
Exemptions to the Care Label Rule exist. These include: reversible products with no pockets (information must be provided on a temporary label); products that can be washed, bleached, dried, ironed or dry-cleaned by the harshest method must have a temporary label that reads “Wash or dry-clean, any normal method”; certain other specific exemptions granted by the FTC. Write the Federal Trade Commission (see address in reference section) for a copy of this information. Study the law to determine what other exemptions exist.

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*Fabricare News*, June 1991, International Fabricare Institute, 12251 Tech Road, Silver Spring, Maryland 20904, 301-622-1900


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CARE LABELS
CLOTHING & TEXTILES, LEVEL II, CARE & MAINTENANCE
Activity Sheet

Labeling

Level II: 9-10 year olds should be given only labels 1-4 and instructed to find the information on labels that lists one acceptable way to care for the product and to color that information red.

Levels III and IV: 4-H’ers should be given all labels and instructed to color code the information as follows.

Find information on the care labels that:

Mandatory Information

Blue: identifies the fiber by generic name
Green: gives the percentage of fiber by weight
Orange: identifies the manufacture (name and RN/WPL number)
Purple: identifies the country of origin where processed or manufactured
Brown: identifies the species of animal (if fur)
Black: identifies whether dyed, colored, or bleached (if fur)
Yellow: identifies whether recycled (if wool)
Red: lists one acceptable way to care for the product

Optional Information

Gray: gives the price of product
Dark green: gives the size of product
Sky blue: identifies any finishes applied to product
Maroon: identifies color information, i.e., color, lot #
Dark yellow: gives design or other brand information
Pink: provides explanation of special features or other aspects related to the product

1.

100% polyester WPL 10913
Machine wash warm
tumble dry: remove promptly.

2.

MADE IN THE U.S.A.
100% RECYCLED WOOL
Hand or machine wash separately
Dry flat

3.

55% DACRON POLYESTER
35% COMBED COTTON
MACHINE WASHABLE

4.

Scandinavian Mink
Fur Origin: Sweden

5.

50% FORTREL POLYESTER
50% AVRIL RAYON
EXCLUSIVE OF DECORATION

Fortrel, a licensed trademark, is awarded to fabrics of proven performance. Celanese laboratories continuously evaluate samples of the fabric in this garment against rigorous performance standards.

A Durable Press Fabric with Fortrel. Touch-up ironing may be desired.

CARE INSTRUCTIONS
• Machine wash—use warm water
• Machine Dry—use warm or wash/wear setting remove as soon as dry
• If ironing is desired, use a steam iron or a dry iron at the warm setting
• If line or drip dried, this fabric will be easy to iron
CARE LABELS
CLOTHING & TEXTILES, LEVEL II, CARE & MAINTENANCE
Activity Sheet, Leader’s Key

Labeling

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Optional Information
- Gray: gives the price of product
- Dark green: gives the size of product
- Sky blue: identifies any finishes applied to product
- Maroon: identifies color information, i.e., color, lot #
- Dark yellow: gives design or other brand information
- Pink: provides explanation of special features or other aspects related to the product

1. 50% FORTREL POLYESTER 50% AVRIL RAYON EXCLUSIVE OF DECORATION Fortrel, a licensed trademark, is awarded to fabrics of proven performance. Celanese laboratories continuously evaluate samples of the fabric in this garment against rigorous performance standards.
   A Durable Press Fabric with Fortrel. Touch-up ironing may be desired
   CARE INSTRUCTIONS
   • Machine wash—use warm water
   • Machine Dry—use warm or wash/wear setting remove as soon as dry
   • If ironing is desired, use a steam iron or a dry iron at the warm setting
   • If line or drip dried, this fabric will be easy to iron

2. 100% polyester WPL 10913 Machine wash warm tumble dry: remove promptly.

3. 100% recycled wool Hand or machine wash separately Dry flat

4. Dyed Mink
Scandanavian Imports
Fur Origin: Sweden

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CARE LABELS
CLOTHING & TEXTILES, LEVEL II, CARE & MAINTENANCE
Member Handout

Care Labels

A care information tag is required in most clothing sold in the United States. These written instructions will normally give only a single care method for your garment; using care methods not mentioned may carry some risk.

When an international care symbol tag is also present, all care methods will usually be shown.

Drycleaning

- Do not dryclean.
- Dryclean.
- Dryclean with any solvent.
- Use any solvent except trichloroethylene.
- Dryclean, tumble at a low safe temperature.
- Use petroleum or fluorocarbon only.
- Underline indicates “sensitive.” Reduce cycle and/or heat.
- Underline indicates “sensitive.” Reduce cycle and/or heat.

Ironing

- Do not iron or press.
- Iron at a low temperature (up to 110°C, 230°F). For example, this is recommended for acrylic.
- Iron at a medium temperature (up to 150°C, 300°F). For example, this is recommended for nylon and polyester.
- Iron at a high temperature (up to 200°C, 390°F).
- Cool. 120°C, 248°F
- Warm. 160°C, 320°F
- Hot. 210°C, 410°F
- Iron at a high temperature (up to 200°C, 390°F). For example, this is recommended for cotton and linen.

Bleaching

- OR Do not use chlorine bleach.
- OR Use chlorine bleach with care. Follow package directions.

Drying

- Dry on flat surface after extracting excess water.
- “Drip” dry—hang soaking wet.
- Hang to dry after removing excess water.
- Tumble dry at low temperature and remove article from machine as soon as it is dry. Avoid over drying.
- Tumble dry at medium to high temperature and remove article from machine as soon as it is dry. Avoid overdrying.
CARE LABELS
CLOTHING & TEXTILES, LEVEL II, CARE & MAINTENANCE
Member Handout

Care Labels, continued

Do not wash.

Machine wash in lukewarm water (up to 40°C, 100°F) at a gentle setting (reduced agitation).

Machine wash in warm water (up to 50°C, 120°F) at a normal setting.

MACHINE—very hot (85°C) to boil, maximum wash. HAND WASH—hand hot (45°C) or boil
Spin or wring

White cotton and linen articles without special finishes. Cotton, linen, and rayon articles where colors are fast to 40°C (104°F) but not at 60°C (140°F)

MACHINE—Hot (60°C) medium wash
HAND WASH—Hand hot (48°C)
Spin or wring

Cotton, linen, and rayon articles without special finishes where colors are fast to 60°C (60°C=140°F) (48°C=119°F)

MACHINE—Hot (60°C) maximum wash
HAND WASH—Hand hot (48°C)
Cold rinse, short spin or drip dry.

White nylon; white polyester/cotton mixtures.

MACHINE—Hand hot (48°C) medium wash
HAND WASH—Hand hot (48°C)
Cold rinse, short spin or drip dry.

Colored nylon; polyester; cotton and rayon articles with special finishes; acrylic/cotton mixtures; colored polyester/cotton mixtures.

MACHINE—Hand hot (48°C) medium wash
HAND WASH—Hand hot (48°C)
Cold rinse, short spin or drip dry.

Washable pleated garments containing acrylics, nylon, polyester or triacetate; glass fiber fabrics. (40°C=104°F)

The following color codes explain what various colors indicate on care labels:

Red = Do not do/use
Amber = Use caution
Green = Go ahead
Blue or black = Color has no significance.

INTERNATIONAL FABRICARE INSTITUTE, 12251 Tech Road, Silver Spring, Maryland 20904,
The Association of Professional Drycleaners and Launderers

76-Clothing & Textiles, Level II
Basic Laundry Skills - Gone With The Wash
Clothing & Textiles, Level II, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
- To identify basic laundering concepts such as reading care labels, sorting, and proper water temperature and cycle selection
- To understand the purpose and correct use of laundry additives
- How to properly operate a washer and dryer
- To gain practical experience in doing their own laundry

ABOUT THEMSELVES:
- Pride in being able to complete a household task
- Confidence in being able to care for their personal belongings

Materials and Resources Needed:
- Check out the Video “Gone With The Wash” from local extension office or area extension office
- Home VHS video player and television set
- Copies of Activity Sheets

ACTIVITY TIME NEEDED: 40 MINUTES

ACTIVITY:
Not too many years ago households spent up to two whole days a week doing the household task of laundry. This is one area that we have made some great advancements. Today, we spend but a fraction of the time we did 100 years ago doing laundry. With all the new appliances, fabrics and fabric finishes, as well as laundry products, the biggest problem we face today is coordinating all of these to get the cleanest garment possible. It can be very confusing. Let’s watch as another group of young people try their hand at laundry.

A. Chlorine bleach should always be measured, not “dumped.” A liquid chlorine bleach dispenser automatically dilutes the bleach before it reaches the clothes. If no bleach dispenser is available on the washer, the bleach must be diluted in four parts water before adding it to the wash. Improper care results in cottons that look like Swiss cheese or polyesters, nylons and acrylics that lose their color.

B. Avoid overloading the washer. Unfolded clothes should be put in loosely so they can circulate freely. Overloading results in poor cleaning as well as excessive lint and wear. It is best to load the washer with different sized garments. For instance, combine no more than two or three sheets (or other large articles) and add smaller items to complete the load.

Leader Notes
Have everyone gather in a comfortable room around the television set. Begin by having everyone tell a funny story about laundry. You begin by sharing your story first, then introduce today’s lesson.

Begin the video. Pass out the Activity Sheet (one for each member) and have members fill out Lesson One of the activity sheet.

When used with the film, Lesson One serves as a “pre-test.” If used alone, the activity can survey members knowledge about doing the wash. The problems are not difficult to spot, and discussion will teach members to avoid these pitfalls.

Ask members to study the various laundry practices depicted, then have them write what they think is wrong with each picture. Compare and discuss answers.
C. Fabrics with similar texture should be washed together. Washing a towel and corduroy pants in the same load is not a good idea. Terrycloth and chenille are “lint-givers,” while other fabrics such as synthetics, corduroy or permanent press are “lint-catchers.”

D. White and colored clothing should be kept apart, as should light colors from bright or dark colors. Washing jeans with undershirts may result in pale blue undershirts and faded jeans.

E. Pockets should be emptied before laundering. Tissues, pens, coins or lipstick may damage garments—and the washer.

F. Different fabrics require different cycles, water temperature settings, and wash times. Delicates and washable woolens need cold water with short agitation, while regular fabrics (towels, jeans, underwear, etc.) need hot or warm water and vigorous washing. Permanent press/no-iron garments require a cool-down rinse to minimize wrinkling.

Remember to separate very dirty clothes from lightly soiled ones; close zippers and other fasteners before washing to avoid snags; mend items with rips or tears to avoid further damage; and treat spotted, stained or heavily soiled garments with liquid detergent, pre-dissolved granular detergent, or a special prewash product before washing.

Detergent
Detergent is the most important product added to wash water. Two common types of cleaning agents are soap and detergent. Soap can only be used in extremely soft water (0 to 3 grains). Detergents comprise 95 percent of all laundry washing products and are available in liquid or granular form. Cleaning results will vary depending on water hardness (available from local water utility), water temperature, types of soil, detergent formulations, and fabric type.

Remember to follow detergent instructions. Very heavily or very lightly soiled items can justify adjusting recommended amounts, as can very soft or very hard water and very large or very small loads.

Bleach
There are two types of laundry bleach—chlorine and oxygen. Chlorine bleach is stronger. While safe for most fabrics, it should not be used on wool, silk, spandex, non-colorfast fabrics, and some flame-retardant finishes. Chlorine bleach generally can be used for synthetics (except spandex), permanent press, and most colored fabrics.

Some washers have automatic liquid bleach dispensers. The user simply pours the correct amount into the proper receptacle before loading the washer to prevent spills on dry clothes. If no bleach dispenser exists, members should mix one part bleach to four parts water and add it after the washer is filled with water and is agitating. If too much bleach is used or it is used incorrectly, fabric damage (holes and tears) or color loss may occur.

Ask the members to post this chart (Lesson 2 in the Activity Sheet) in the laundry room at home. (Your copy can be posted near classroom laundry equipment.) Emphasize the need to refer to garment care labels and to follow directions when using laundry additives. Point out the importance of separating white and colored clothes, permanent press fabrics from lint producers, delicate fabrics (loosely knit or lace-trimmed garments) from sturdy ones, etc.

Here is some additional information to share with 4-H’ers as they do Lesson 2 or 3 about the most widely used types of laundry products.

Stress the importance of reading and following washing instructions and directions from the manufacturer found on garment labels. Also, stress the importance of the instructions for washers and dryers and on laundry product containers. The illustrations in this activity deal with varied problems.

After the video, refer members to Lesson Two on the Activity Sheet.

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Less strong than chlorine, oxygen bleach is safe for all fabrics and can be added to the wash with the detergent. Oxygen bleach does not give the immediate whitening effect of chlorine bleach but regular use helps keep fabrics bright.

**Fabric Softeners**
Fabric softener reduces or eliminates static cling in synthetic fibers; makes fabrics softer, fluffier, and easier to iron; minimizes wrinkling, and helps prevent lint from sticking to fabrics. There are three types: rinse-added, dryer-added, and detergents plus fabric softener.

*Rinse-added fabric softeners* are added to the washer during final rinse. Many washers have dispensers that add it automatically, otherwise it must be added manually. *Dryer-added fabric softeners* are added during drying. The heat of the dryer plus fabric-to-fabric contact transfers the softening agent throughout the dryer load. *Detergents plus fabric softener* are convenient products because both detergent and fabric softener can be added simultaneously as one product. They are available in liquid or granular form.

**Pretreat Products**
Some stains and large soiled-areas may be difficult to remove by washing alone. For complete removal, a pretreat product provides concentrated cleaning power on areas that need it. Liquid laundry detergent, a paste of granular detergent and water, or a special pretreat product may be used. The main advantage of special pretreat products is their convenience. Remember to be careful when using these products, as some can soften fingernail polish, which could transfer to items being treated.

**Energy Savings**
A. Members should be sure to use the proper amount of water. The simple math problem presented in lesson 4 will show how much water can be carelessly wasted in a year. (Answer - 624 gallons)
B. Remind members that collecting enough clothes for a big load is more economical than washing several small loads. However, water levels may be adjusted for smaller loads when clothing is properly sorted.
C. Leaving permanent press clothes in the dryer after the drying cycle is completed causes wrinkles. Promptly removing clothes from the dryer eliminates ironing and thereby saves energy.
D. Improper temperature settings and wash cycles result in inferior cleaning and mean rewashing. But don’t use hot water unnecessarily—it is wasteful.
E. Joe can save energy by: (1) running the dryer just long enough to dry the load; (2) cleaning the lint filter after every load; (3) operating the dryer fully-loaded (but not overloaded); and (4) promptly reloading so that the dryer doesn’t have to reheat between loads.

Lessons 3 and 4 of the Activity Sheet could be used at this time, depending upon how much time, depth, review and expansion of concepts brought out in the video will benefit or interest your group of members. Have members list clothes they wear in a week and sort them (on paper) into the four load categories as indicated in Lesson 2. Then, with the aid of Lesson 2, have them “wash their clothes” by filling out the chart, determining the proper wash cycle, water temperature, and laundry additives for each load.

Have the members bring in detergent, bleach, fabric softener, and other laundry additives and determine how much should be used by reading product directions. Encourage students to discuss their charts and correct each other’s errors.

Lesson 4 offers energy-saving information, while presenting several humorous situations regarding energy conservation in the laundry room to which teens can relate.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. When you launder something that is not really dirty, how does that affect the garment? The environment?
A. It weakens the fibers so it won’t last as long. It may fade the colors. It wastes water, detergent, money, energy.

Q. What is a “lint-giver?”
A. Towel, velor, etc.

Process:
Q. Where is the best place to check on the recommended care for a garment?
A. The care label.

Q. What was something new you learned from this lesson? Why is that important to you?

Generalize:
Q. Compare how we do laundry to an underdeveloped nation?
A. They use rivers, stones, homemade soap if any, dry over tree limbs.

Q. How has laundry changed in American homes during the past three generations?

Apply:
Q. Considering all the resources needed to do laundry is cloth or paper napkins the best choice?
A. Cloth considered better because of the resources needed to produce the paper product (trees, energy, etc.) uses more resources than ones needed to clean.

GOING FURTHER:
• Have members total the gallons of water their household uses per week to do laundry.
• Compare labels of cleaning products, their ingredients, and safety precautions.
• Compare cost of cleaning products and the way in which they are marketed. (Packaging cost, advertisements, display, colors, etc)
• Tour a plant that manufactures cleaning products or equipment.
• Demonstrate a hard water test.
• Ask members to add their own examples to the Lesson 1 Activity Sheet and challenge the group to identify incorrect laundry techniques.
• Ask members to survey local self-service laundries to see which ones have programmable washers and multi-cycle dryers.
• members might visit appliance or department stores to examine washers and dryers, comparing ease of use and construction quality.
• Have members try doing a load of wash at home according to the chart and share their results.
• Some members may be interested in comparing the per-load prices of the laundry products brought to class.
REFERENCES:
Gone With The Wash, Maytag Co., One Dependability Square, Newton, Iowa 50208, copyright 1987
Clothing Care Computer Program, Cooperative Extension Service, University of Kentucky, Room 252, Agriculture Engineering, Lexington, Kentucky 40546-0276, copyright 1991
Clothing Care, Capable Kids Can, Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506

Author:
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To order the video, “Gone With the Wash,” contact Scheduling Center, Modern Talking Picture Service, 5000 Park Street North, St. Petersburg, Florida 33709, 813-541-7571
Where There’s a Wash, There’s a Way

Although doing the laundry may seem like a mystifying and complicated task, it’s really not so hard to get good results if you follow a few simple guidelines. The people you see here are having some trouble. In the space provided underneath each picture, “right” their wrongs—then do it right the next time you do a load of laundry.
Different Suds for Different Duds

Post this chart in the laundry room at home or take it with you to the self-service laundry. Always remember to read garment care labels and follow the directions on laundry products.

<table>
<thead>
<tr>
<th>Type of Load</th>
<th>Wash Water Temperature</th>
<th>Rinse Water Temperature</th>
<th>Wash Cycle</th>
<th>Wash Time</th>
<th>Water Level</th>
<th>Laundry Aids</th>
<th>Dryer Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent Press/Knits</td>
<td>Hot (whites or heavily soiled)</td>
<td>Cold</td>
<td>Permanent Press/Knits</td>
<td>5-10 minutes</td>
<td>Adjust to size of load, but never use less than Medium</td>
<td>Granular or liquid laundry detergent Chlorine or Oxygen bleach Fabric softener</td>
<td>Permanent Press Cycle Temperature*</td>
</tr>
<tr>
<td>Regular Fabrics</td>
<td>Hot (whites or heavily soiled)</td>
<td>Cold</td>
<td>Regular</td>
<td>4-12 minutes</td>
<td>Adjust to size of load</td>
<td>Granular or liquid laundry detergent (Use liquid or predissolved granular in cold water) Chlorine or Oxygen bleach Fabric softener</td>
<td>Regular Cycle Temperature*</td>
</tr>
<tr>
<td>Delicates</td>
<td>Warm or Cold (bright colors)</td>
<td>Cold</td>
<td>Gentle or Delicate</td>
<td>2-4 minutes</td>
<td>Adjust to size of load, but never use less than Medium</td>
<td>Granular or liquid laundry detergent in warm water (Use liquid or predissolved granular in cold) Chlorine bleach (except for spandex); Oxygen bleach all fabrics Fabric softener</td>
<td>Regular or Permanent Press Cycle Temperature*</td>
</tr>
</tbody>
</table>
### BASIC LAUNDRY SKILLS—GONE WITH THE WASH
CLOTHING & TEXTILES, LEVEL II, CARE AND MAINTENANCE
Member Handout

#### Different Suds for Different Duds, *continued*

<table>
<thead>
<tr>
<th>Type of Load</th>
<th>Wash Water Temperature</th>
<th>Rinse Water Temperature</th>
<th>Wash Cycle</th>
<th>Wash Time</th>
<th>Water Level</th>
<th>Laundry Aids</th>
<th>Dryer Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wool</td>
<td>Cold</td>
<td>Cold</td>
<td>Gentle or Delicate</td>
<td>2 minutes agitation followed by soak</td>
<td>Adjust to size of load, but never use less than Medium</td>
<td>Liquid or predissolved granular detergent</td>
<td>Machine Dryable Woolens: Regular Cycle Temperature* “Hand Washable” Woolens: Block and allow to air dry</td>
</tr>
</tbody>
</table>

**Wool**
- Machine washable and “hand washable” woolen items
- Woolens: woolen items by soak followed never use less than Medium granular detergent
- Dryable
- “Hand Washable” Woolens: Block and allow to air dry

**Helpful Hints**
- At a self-service laundry, look for washers programmed for various fabric types and dryers that have cycles to match.
- Sort your clothes according to color, fabric type, linting characteristics, and amount of dirt, then wash each load separately.
- Empty pockets (and cuffs), close zippers and other fasteners, and remove any trim that is not washable.
- Treat stains and spots with a pre-wash stain remover (follow the directions on the label), or use the washer’s soak cycle.
- Measure the detergent according to the instructions on the package.
- Be careful with chlorine bleach. Read garment care labels and instructions on the package.
- Permanent press clothing will wrinkle if left in the dryer after it turns off. Remove these items immediately.

* For those dryers with two temperature settings, use “low temperatures” for heat sensitive items or those labeled, “tumble dry low” or “tumble dry warm,” use “regular temperature” for all other items.
**This is the Way We Wash Our Clothes . . .**

Make a list of the clothes you own (use the back of this sheet) then sort them (on paper) into the four load categories described in Lesson 2. With the help of Lesson 2, “wash your clothes” by filling out the blanks on the chart below.

<table>
<thead>
<tr>
<th>Your Sorted Laundry</th>
<th>Wash Water Temperature</th>
<th>Rinse Water Temperature</th>
<th>Wash Cycle</th>
<th>Wash Time</th>
<th>Water Level</th>
<th>Laundry Aids</th>
<th>Dryer Settings</th>
</tr>
</thead>
</table>

[Image of laundry baskets]

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85-Clothing & Textiles, Level II
Don’t Let Energy Savings Go Down the Drain

Energy can be wasted in the laundry room or self-service laundry. Take a look at these questions and see if you’re aware of some ways to conserve energy as well as have the cleanest clothes on the block. (Take this sheet home to the person who does most of your family’s laundry. Perhaps he or she can give you some additional energy-saving hints.

a. It takes 36 gallons of water to fill a large capacity Maytag washer when set for a large load. When set for a small load, the same washer uses only 24 gallons. If you wash a single pair of jeans with the washer set for a large load once a week for a year, how many gallons of water will you waste?

b. Which saves more water and energy: washing one big load at the end of the week; or washing two or three smaller loads whenever something gets dirty? (See the first question for some relevant information.)

c. How could energy have been saved in this incident? Your permanent press clothes are in the dryer as you watch TV. By the time the program is over, the drying cycle has been finished for half an hour, and the clothes are wrinkled. You end up ironing all your permanent press garments.

d. Sally washes all her clothes in hot water because that’s the easiest way: you just push one button.” Energy-conscious Bob always reads all the clothing labels and is selective about the water temperature settings on his washer. He uses hot water for whites and heavily soiled clothing, warm water for most loads, and cold water for woolens, lightly soiled garments, and bright or dark colors. Which person deserves the Energy-Saver Award? Why?

e. When Joe dries his clothes, he always sets the drying time at one hour so he can be sure everything will be dry. He infrequently cleans out the dryer’s lint filter. He dries things a few at a time, as he needs them, and lets the dryer cool off between loads. How is Joe wasting energy, and what should he do to conserve?
Putting Fabrics Together

Clothing & Textiles, Level II, Textile Science

What Members Will Learn . . .

ABOUT THE PROJECT:
• How yarns are woven or knit together to form fabric
• The difference between knit and woven fabric
• Characteristics of woven fabrics
• Characteristics of knit fabrics

ABOUT THEMSELVES:
• How fabrics and fibers affect their clothing decisions
• Improved observation skills to identify knits and wovens

Materials Needed:
• Access to a computer
• Learning Seed Computer Program (IBM or Apple software) “Fabric Identification Kit”: computer compatible with program (request to borrow copies from the Area Extension or your county can purchase a copy of the software for $10 and the Fabric Identification Kit for $12, see details in the Reference Section)
• Copies of Member Handouts

ACTIVITY TIME NEEDED: 30 TO 50 MINUTES

ACTIVITY:

We have studied the various fibers and where they come from (see lessons in Level II, “Man-made Fibers” and “Natural Fibers”). The next step after creating fibers are forming them into yarns. These yarns can be as large as knitting yarn or as small as a strand of thread and even smaller. Once these yarns are made, they are put together to form fabric. This is called fabrication. There are several ways this can be done. Today, we will be talking about how we put yarns together to make fabric.

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Name the two basic ways that yarns are made into fabric?
A. Woven and knit.

Q. What are some types of weaves?
A. Plain, basket, twill, satin.

Q. What are some non-woven fabrics?
A. Interfacing, polyester fleece and felt.

Leader Notes

Have all members meet at a location that has a computer to use for this lesson. If members do not know each other allow them to introduce themselves and state why they choose to wear the top/shirt they have on today. You begin.

Load the program and allow members or teams to read a section to the group. You can have members keep track of their quiz answers or again use teams or group consensus in answering.

After the program is complete or as much as time will allow pass out the handout that illustrated the different weaves and knits for members to take home.
Leader Notes

Process:
Q. What part of a woven is the most stretchy?
A. The bias.

Q. What was one of the most interesting things you learned from this lesson?

Generalize:
Q. Why would we want the most stretchy part of a knit to go around our body?
A. To prevent stretching out of shape as worn and because that is where the garment will be stretched as worn.

Q. What will you think about the next time you want to purchase or make an article for an athletic event?

Apply:
Q. What kind of fabrication can you identify in this room?
A. Carpet, drapes, upholstery, clothing, etc.

GOING FURTHER:
• Do basic weaving with loom or by hand. Make a bookmark. Use pot-holder looms.
• Teach basic knitting or crochet.
• Visit local person that has home knitting machines for demonstration.

REFERENCES:
*Fabric Know-How*, Sewing with Nancy Newsletter, 1987 Nancy's Notions, Ltd. P.O. Box 683, Beaver Dam, Wisconsin 53916
*Fabric Identification Kit*, The Learning Seed, 330 Telser Rd, Lake Zurich, Illinois 60047, 1-800-634-4941, (Counties and leaders may purchase their own software and fabric identification kit by contacting the Kansas State 4-H Department. Orders must be placed in multiples of 5 to get the discount price.)

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Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team

88-Clothing & Textiles, Level II
PUTTING FABRICS TOGETHER
CLOTHING & TEXTILES, LEVEL II, TEXTILE SCIENCE
Member Handout

Woven Fabrics

Examples of Weaves:

Plain Weave

Twill Weave

Satin Weave

Pile Weave
(with both cut and uncut loops)
Knit Fabrics

Lengthwise (Wale)

Crosswise (Course)

Examples of Knit Fabrics:

Single Knit

Tricot Knit
Blended Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• What a blended fabric is
• How blended fabrics are manufactured
• Why blended fabrics are desirable

ABOUT THEMSELVES:
• To use wise consumer decision-making skills
• Improved observation skills to distinguish different fabrics and their properties

Materials Needed:
• Garments or other textile products made of a variety of blended fibers and single fibers
• Copies of Activity Sheet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:
Once you have learned about the natural and “man-made” fibers and their characteristics you may notice that many garments don’t contain only one or the other types of fibers. Many items will contain some of both or a combination of two or more natural and/or man-made fibers. This information is contained on the garment label which is required by law to be on every textile product sold in the United States.

The reason that more than one fiber is often found on fiber content labels is that manufacturers often combine or “blend” two or more fibers to produce a fabric with a better set of performance factors.

Blending is the generic term used for any combination of two or more fibers into a new fiber, yarn, or fabric. The fiber industry has three classifications of fiber blending. However, most consumers call any of these “blends.”

*Blend*—An intimate mixture of fibers spun together into a yarn.

*Mixture*—A fabric with one fiber content in the warp yarns and different fiber content in the filling. (Warp is the lengthwise yarns of a woven fabric—those parallel to the selvage. Filling or weft is the crosswise yarns of a woven—those running at a right angle to the selvage.)

*Combination*—Two different fiber yarns twisted together to form a ply.

Leader Notes
Have members sit in a comfortable place. If they do not know each other, allow time for members to introduce themselves and read the fiber label on the shirt of the member next to them. You begin.
Reasons to produce fibers with different fiber contents are varied. The major reasons include:

1. To improve spinning, weaving, or finishing results.
2. To obtain a better texture, hand, or appearance of fabric.
3. For economic reasons: expensive fibers blended with less expensive fibers make them more affordable. This can be misused; check the percentage of fiber content to know for sure.
4. To get cross-dyed or new color effects, for example, heather.
5. To obtain fabrics that are easier to care for with other improved properties such as less shrinkage, wrinkling, and longer durability, with more comfort in wear.

Blending is an expensive process, but manufacturers have found it to be desirable to the consumer so it is worth the expense. Blending often results in a more uniform preforming fabric which is one intent with blending.

Blending can be done in any stage of fiber fabrication. The earlier the blending process, the better the blend. One of the major difficulties in definition and understanding blends, combinations, and mixture fabrics is that labeling doesn’t differentiate between these processes. The Textile Fabric Products Identification Act (TFPIA) requires only that fiber present in a fabric be identified; it does not require that information be given concerning how the fibers are arranged in the fabric. Most fabrics manufactured today are blends, but some combinations and mixtures are produced, i.e., using single yarns of one fiber in the warp (lengthwise) direction of the fabric and single yarns of a second fiber in the filling direction or using a blended yarn in one direction of the woven fabric and a single fiber type used in the other direction. Mixtures and combinations usually do not perform as well as blends; they may shrink in one direction or both and they may require complicated care procedures. Uneven strength may also result with weaker yarns wearing out in one direction and not the other.

Blended fiber fabrics may be made from a variety of proportions of each of the fibers involved. A typical fiber blend is cotton and polyester, and the amount of each may vary widely. Cotton may exceed the polyester, they may be equal, or the polyester may exceed the cotton. For the majority of blends marketed, optimum percentages of fibers have been established. Most textile scientists agree that in blends of polyester and cotton, the percentage of cotton should range from 35 percent to 50 percent if the fabric is to combine properties of easy care, durability, and comfort. If easy care and durability only are most important, the polyester component may be as high as 80 percent. When comfort is the most important factor, cotton may reach the 80 percent level. Some typical examples of blended fabrics and the properties they will give include:

Pass out activity sheet that rates fiber strengths. Have members blend two fibers and tell what areas will improve and what areas might be weakened by blending.
<table>
<thead>
<tr>
<th>FIBER</th>
<th>TO PROVIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester and cotton</td>
<td>Easy care, durability, comfort</td>
</tr>
<tr>
<td>Rayon and acetate</td>
<td>Appearance and draping qualities</td>
</tr>
<tr>
<td>Silk, vieana, and cashmere</td>
<td>Prestige</td>
</tr>
<tr>
<td>with lower prestige fibers</td>
<td></td>
</tr>
<tr>
<td>Linen with rayon or polyester</td>
<td>Stiffness and appearance</td>
</tr>
</tbody>
</table>

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. What is a blend?
A. A mixture of fibers spun into a yarn.

Q. What does warp mean?
A. The lengthwise yarns of a woven fabric.

Q. At what point can fibers be blended in the fabrication process?
A. At every stage.

**Process:**
Q. What would the performance of a 60 percent wool, 40 percent acrylic fabric be?
A. Comfortable to wear, less expensive than all wool, bulky, stable.

Q. Why are blends so popular with the consumer?
A. Easy care, makes expensive fibers less expensive, improves wear and garment life.

**Generalize:**
Q. How can you be more observant when selecting a garment or fabric to know if it is a blend?

**Apply:**
Q. If you were working on a space team, what textile properties would you be most concerned about? Why?

**GOING FURTHER:**
- Visit a local fabric or retail store to read and compare labels and the properties of the item when fiber content is considered.
- Try dyeing swatches of various blends to evaluate how the different fibers “take” or absorb them.
- Start a scrapbook or swatch book of various fabrics and their fiber content and compare how frequently various fiber blends are found. (Both apparel and home furnishings.)
REFERENCES:

Author:
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Reviewed by:
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# BLENDED FIBERS
CLOTHING & TEXTILES, LEVEL II, TEXTILE SCIENCE
Activity Sheet

**Properties of Fibers Used in Blends**

<table>
<thead>
<tr>
<th>Property</th>
<th>Acetate</th>
<th>Cotton</th>
<th>Nylon</th>
<th>Polyester</th>
<th>Rayon</th>
<th>Wool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion or wear resistance</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

Using the above chart, speculate what will be the most desirable, compromised or least desirable properties of the following blends:

<table>
<thead>
<tr>
<th></th>
<th>Most Desirable</th>
<th>Compromised</th>
<th>Least Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetate and Rayon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton and Polyester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rayon and Wool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rayon and Polyester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyester and Wool</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Properties of Fibers Used in Blends

<table>
<thead>
<tr>
<th></th>
<th>Most Desirable</th>
<th>Compromised</th>
<th>Least Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetate and Rayon</td>
<td>Resistance to Pilling</td>
<td>Absorbency</td>
<td>Wear Resistance</td>
</tr>
<tr>
<td></td>
<td>Absorbency</td>
<td></td>
<td>Wrinkle Recovery</td>
</tr>
<tr>
<td>Cotton and Polyester</td>
<td>Wear Resistance</td>
<td>Absorbency Resistance to Pilling</td>
<td>Wrinkle Recovery</td>
</tr>
<tr>
<td>Rayon and Wool</td>
<td>Absorbency Resistance to Pilling</td>
<td>Wrinkle Recovery</td>
<td>Wear Resistance</td>
</tr>
<tr>
<td>Rayon and Polyester</td>
<td>Wear Resistance</td>
<td>Absorbency Resistance to Pilling</td>
<td>Wrinkle Recovery</td>
</tr>
<tr>
<td>Polyester and Wool</td>
<td>Wear Resistance Wrinkle Recovery</td>
<td>Absorbancy</td>
<td>Resistance to Pilling</td>
</tr>
</tbody>
</table>
The Dye and Printing Process

*Clothing & Textiles, Level II, Textile Science*

**What Members Will Learn . . .**

**ABOUT THE PROJECT:**
- The methods used to dye fibers
- How fibers are printed
- When fibers and fabrics are colored

**ABOUT THEMSELVES:**
- The importance of following directions for successful results
- Confidence and creativity in using color on fabric

**Materials Needed:**
- Copies of Activity Sheets
- See supplies needed in the Activity Sheets (members may decide at a previous meeting to tie-dye a T-shirt)
- *Bleach or Dye* with Janet Prey video, order by calling 800-944-0213, from Islander School of Fashion Arts, cost is $39.95 plus $5 shipping

**ACTIVITY TIME NEEDED:** 60 MINUTES

**ACTIVITY:**

We have talked before about how important color is in our decision to buy clothing. We also know where dyes come from. Today, we are going to talk about how color is added to fabric. A general rule is that the earlier the color is added in making the fabric, the better the penetration, however, the later it is added the more economical the process. Consequently, consumers often prefer fiber or yarn dyeing over piece dyeing, whereas manufacturers may prefer piece or product dyeing.

There are several different methods to dye fibers solid colors (remember fibers are tiny strands of material that when twisted together make yarns, and are about the size of a human hair). We are going to discuss each method.

**Dyeing**

*Fiber Dyeing Process*—The fiber is dyed before yarn spinning. This is an expensive method. It may be achieved at any of these stages.

1. Mass pigmentation (also called solution dyeing)—colored pigments or dyes are added to the spinning solution; each fiber is colored as it is spun. (This is used with man-made fibers and cannot be used on natural fibers.)
2. Gel stage—color is added to the fiber while in the soft gel stage.
   (Again, only used on man-made fibers.)

---

**Leader Notes**

Have everyone gather around the area in which you plan to hold the activity. Have everyone introduce themselves if they do not know each other. Also ask them what color or pattern is their favorite outfit. You begin.
3. Stock dyeing—dye is added to loose fibers before spinning (natural or man-made).
4. Top dyeing—dyeing the loose fibers left from fiber combing (natural or man-made).

The loose fibers are wound into balls, placed on spindles with holes, enclosed in a tank with dye. The dye is then pumped back and forth through the spindles.

Yarn Dyeing—The yarns are dyed after being wound on either skeins, cones, packages, or warp beams. (These are containers used by manufacturers to store yarn for specific manufacturing processes, i.e. warp beams are used to hold the warp yarns on a loom while weaving fabric.) This method is less costly than fiber dyeing but more expensive than piece dyeing and printing. This is often used to produce stripes, checks and plaids in woven fabrics. Yarn dyed fabrics often exhibit structural design. A gingham fabric is an example.

Piece Dyeing—This method is when an entire bolt or roll of fabric is dyed. This usually results in solid color fabrics. It is usually less costly and allows decisions on color to be delayed so that fashion trends can be followed more closely. Sub categories of piece dyeing include:
1. Cross dyeing—piece dyeing fabrics of different generic groups or by combining acid and basic dyeable fibers of the same generic group. The characteristics of the fibers are selective and absorb only the type of dye compatible with each fiber thus resulting in different colors in the fabric.
2. Union dyeing—piece dyeing fabrics from different fiber groups—but the result is a solid color. To achieve this, dyes of the same hue (color) are made from different compositions to be suitable to the fibers present in the piece. These dyes are mixed together in the same dye bath.

The methods for piece dyeing can vary but machines are the first method of choice because they move large amounts of fabric and are most economical. However, most methods involve the use of great amounts of water and result in waste water that may cause stream pollution. For that reason, new methods are constantly being researched.

Product Dyeing—The fabric is cut and sewn into the finished product then it is dyed. Great care is needed to get a level and uniform color throughout the product. Also any finishings, trims, etc., must be carefully chosen to accept the dye similar to the fabric or results may be disappointing.

Printing
Another method of adding color to fabric is by printing. This involves using from one to several colors to add a design to a fabric surface. To check for a print, look for clear cut edges in the design on the right side of the fabric. Color seldom penetrates completely to the wrong side. Yarns raveled will often have color unevenly positioned on them. There are many types of printing. Some of them you may have done yourself. Many
designs such as paisleys, calicos, and floral prints are often printed designs. Printing is a type of applied design.

Color designs are produced by printing, using dyes in paste form, positioning dyes in fabrics using specially designed equipment, or more recently through the media of foam. The color is dispersed (spread throughout) in foam. The foam is pressed to the fabric and collapsed. Since such a small amount of color is used the colors tend to stay put and not spread to wider areas. Various processes are used to produce printed designs.

**Direct Printing**—The color is applied directly to the fabric in the pattern desired by a stamp or roller mechanism. Some variations include:

1. **Block printing**—A costly and slow method, this dates back as an ancient textile decorative technique. It involves carving a block and dipping it in dye and stamping the pattern onto fabric.
2. **Direct roller printing**—the fabric is wrapped around a roller then other rollers (that are engraved with the design) use the direct method to apply a color to the fabric.
3. **Warp printing**—in this method the warp (lengthwise) yarns are printed on prior to weaving. The weaving is then done, using white yarns as filling to soften the print appearance.

**Discharge Printing**—In this method color is actually removed. Usually this is done on dark backgrounds. First a fabric is dyed. Then a discharge paste (chemicals to remove the color) is printed on the fabric. The fabric is then steamed to develop the design. Dyes that are not affected by the discharge paste can be added to the paste to dye the areas another color. NOTE: Discharge printing has good color penetration on both sides with some less color removal on the wrong side. Direct printing has much less color (background) on the wrong side than the right side. The chemical discharge paste may cause fiber weakening.

**Resist Printing**—This basically involves preventing color from entering a piece of fabric. Some methods include:

1. **Batik**—a hand process in which hot wax is poured on a fabric in the form of a design. When the wax is set, the fabric is dyed, light colors first. Then, more wax is added to cover portions and the fabric is redyed until the design is complete. The wax is then removed by a solvent. This method results in expensive fabrics because of the labor intensity of the procedure.
2. **Tie-dye**—another hand process where fabric is wrapped in areas with string or thread. It is then dyed and the string removed. It results in areas left undyed that make a type of starburst pattern.
3. **Ikat**—In this method the yarns are tied before dyeing, much like tie-dye. Then, they are dyed, dried and at that time woven. Sometimes, only the warp yarns are dyed, only the filling yarns or both.
4. **Screen**—this is often used on small yardages of 50 to 500 yards and for large designs. There are several types of screen printing:
   a. **Flat screen**—flat screens are laid onto a fabric with the design for a color cut out. The color is forced through the screen with a

Have the members check the garments they are wearing to see if the fabric was printed or dyed.
squeegee. New screens are placed for each different color and the process is repeated.
b. Hand process—two people place the fabric on a long table. They place a screen (with design cut out) on the fabric, apply color, move screen to a new position and repeat the process.
c. Automatic process—the fabric is on a conveyer belt. Flat screens are above the belt and lower automatically. The color is then applied automatically and the fabric is fed into ovens to dry.
d. Rotary process—this is done with cylindrical metal screens and the fabric feeds continuously. There is no need for stopping to lower screens. The metal screens are cheaper than the rollers used in direct printing. This method is offering competition to traditional roller printing.

Stencil Printing—This is similar to screen printing except the design is cut from wax paper or thin metal sheets. A separate sheet is used for each color. The color is usually applied in the form of a very thick liquid consistency.

Jet Printing—A process that uses continuous streams of dye that are forced through jets to color the fibers. This type is commonly used in printing carpets.

There are yet a few methods we have not discussed but these are by far the most widely used. You can see why it is often difficult to know just how that color in your outfit was put there. Depending on the method used the colorfastness (color remaining true after wear and laundry) can vary a great deal. That is another reason to follow your clothing care labels to ensure a longer garment life for your clothing items.

It is important to determine whether the design is a structural type (i.e. stripes woven into a fabric using yarn dyed yarns) or applied design (i.e. stripe printed onto the fabric using some type of printing process, for example direct roller or screen printing). Since structural design is a structural part of the fabric, it generally performs better than applied design, since it is usually only added to the surface of the fabric.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What kind of printing or dyeing did you try?

Q. What was the most interesting part of the process to you? Why?

Q. What natural resource is used in large quantities in the dyeing process?
A. Water.

Process:
Q. What, if any, methods of coloring have you tried on clothing or fabric before?
A. Answers will vary, tie-dye, sponge, solution dye, direct printing, etc.

Q. What is the difference between dyeing and printing?
A. In dyeing a fiber, yarn, fabric, or piece is put into a solution for it to absorb a color. In printing a color or dye is put onto certain areas of a yarn, fabric or piece, to result in a colored design.

Generalize:
Q. When have you dyed or colored something by accident?
A. Food stain, grass stain, washing dark and white clothes together, etc.

Q. Why is it important to understand how fabrics get their color?

Q. Why are some processes more costly than others?

Apply:
Q. Describe another situation you have experienced when it was very important to follow directions carefully.

GOING FURTHER:
- Tours of any coloring operation. Even non textile related will help demonstrate, for example, newspaper.
- Tour fabric store to attempt to determine method of color addition in various bolts of fabrics.
- Other dyeing or printing demonstrations.
REFERENCES:


*Clothing Leader Guide*, Ann Bearn, Alma Fonesca, Teresa Criswell, and Melanie Huntos, Texas Agricultural Extension Service, Texas A&M University System, College Station, Texas

Voss Jasper, University of Wisconsin

SewQuick, University of Wisconsin

*Bleach or Dye with Janet Prey* video, order by calling 800-944-0213, from Islander School of Fashion Arts. Cost is $39.95 plus $5 shipping.

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THE DYE AND PRINTING PROCESS
Clothing & Textiles, Level II, Textile Science
Activity Sheet

Dyeing Process and Printing Process

1. Kool-Aid as a Fabric Dye?

Material:
• Kool-Aid (without sugar)
• Crock pot
• Cotton fabric or clothing (prewashed)

Directions:
1. Place 6 cups hot water in a crock pot.
2. Turn crock pot on high.
3. Dissolve one package Kool-Aid in a small amount of the hot water. Pour into pot.
4. Wet cloth with water and squeeze out as much as possible.
5. Place wet cloth in crock pot, making sure all cloth is in the “dye” solution.
6. Leave in crock pot for 30 minutes.
7. Hang on hanger to dry.
8. Once dry, the “dye” is very permanent!

For darker colors, leave in crock pot for one hour or use two packages of Kool-Aid.

Kool-Aid flavors that work well are: Black Cherry, Lemon-Lime, Berry Blue (2 packages), Strawberry and Grape. Lemonade flavor doesn’t work!

2. Leader will show a few samples of fabric with woven or knitted designs, printed designs, and applied designs other than color. Then distribute a variety of fabrics for members to determine whether fabric design is done during construction or applied after fabric is made.

Supplies: woven and knitted designs—a variety of patterned fabric samples including as many of the following as possible: stripes, plaids, tweeds, checks, damask or brocade, argyle knit, Fair Isle knit or other knit in several colors, boucle’ fabric (knit or woven), applied designs—floral prints, printed plaids or stripes, eyelet, plisse’, paisley.

3. Examine an assortment of fabrics with constructed designs. Determine if the design is made through the use of color, texture, or a combination of things.

Supplies: samples of fabrics such as checks, plaids, tweeds, boucle’ fabrics, satin-stripe fabric in a solid color, damask, etc.

4. Tie-dye fabrics with different fibers and compare results. (consider ideas from the video)

Supplies: purchased fabric dyes, large stainless steel or glass bowls, rubber bands or string for tying fabric, samples of white fabric in a variety of fiber contents but without special finishes (e.g., 100 percent cotton muslin, 100 percent nylon tricot, 100 percent polyester lining, 100 percent acetate lining, etc.)
THE DYE AND PRINTING PROCESS
Clothing & Textiles, Level II, Textile Science
Activity Sheet

Dyeing Process and Printing Process, continued

5. Make a batik design on fabric for use in a project. (consider ideas from the video)

**Supplies:** purchased fabric dyes, wax, large stainless steel or glass bowls, stove for melting wax, inexpensive paintbrushes, batik instructions (check encyclopedias, craft books, county Extension office, etc.), white or natural cotton fabrics (members may bring their own).

6. Discuss how patterns were achieved in the fabrics being worn.

7. Design fabric patterns and print or dye fabrics for projects. Methods may include potato (block) printing, tie-dyeing, free hand painting, sponge printing or embroidering. NOTE TO LEADER: Members may wish to print on a garment, such as faded jeans or on an accessory, such as a purchased scarf or fabric purse.

**Supplies:** fabric, rubber bands or string, potatoes, sponges, purchased fabric dyes, large stainless steel or glass bowls, clean artists’ paintbrushes, embroidery thread and embroidery needles.

8. Make and use natural dyes on yarn fabric for a project. Some suggested dye sources are onions, beets, pecan or walnut shells, chrysanthemums and tea leaves. Crush the fruit, flowers, leaves, shells, etc., to be used. Heat them in water and let stand until water is heavily colored. Strain out vegetable matter. Heat the fabric in the colored water and let cool. Rinse, dry, iron if needed. (Note: vegetable dyes are not colorfast to laundering.)

**Supplies:** dye sources, water, fabric to be dyed, glass or stainless steel pans, strainer, iron.

9. Dye Colorfastness—to identify the dye colorfastness when laundering an item with other garments.

**Supplies needed:**
- 2 × 2-inch swatch of bright or dark color woven or knit fabric, small samples of white fabrics of cotton nylon, polyester, or cotton/polyester blend, pint jar with lid, laundry detergent, warm water

**Procedure:**
1. Put 1 cup of warm water and 1 teaspoon of detergent in the pint jar.
2. Add the colored fabric swatch and small white fabric swatches to the water and detergent solution. Put the lid on the jar.
3. Leave the fabric in the solution for 8 to 10 minutes. Shake the jar frequently during this time to simulate washing action.
4. Observe the color of the solution.
5. Remove the swatches from the jar. Allow samples to dry.

**Results:**
Did any of the dye discolor the water and detergent solution? Did the white fabric samples become discolored? If yes, do not wash a garment made from this particular dyed fabric with other garments. (Implication: if you have a new dark-colored garment and are not sure of the dye colorfastness, wash it separately with a sample of white fabric. Check the water and white fabric sample to see if you must continue to wash it separately.
When Clothing is More Than Something to Wear

Clothing & Textiles, Level II, Textile Science

What Members Will Learn . . .

ABOUT THE PROJECT:
• Clothing is functional as well as decorative
• The thermal function of clothing
• Special clothing is designed to meet special demands
• Special fabrics are used for meeting these special needs

ABOUT THEMSELVES:
• Selecting appropriate clothing requires good decision-making skills
• A greater appreciation and awareness of careers in the textile industry

Materials Needed:
• Swatches of special fabrics (water repellant, polar fleece, fluorescent, Gore Tex, camouflage, reflective, etc.)—ask for “Textile Up-date—‘93,” 3-ring binder from the Area Extension office, which shows example of these fabrics
• Examples of special clothing designed for a purpose or job (fireman’s coat, diver’s suit, bullet-proof vest, hospital isolation gown, astronaut’s glove, etc.)
• “Blue Sky Below My Feet, Fiber and Fabrics” video, available through your county Extension office
• Television and ½-inch VHS video player

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

When we think of clothing most generally we think of fashion, color, style or fit. These are the aesthetics of clothing. (Aesthetics—the appeal to the eye, or the art and beauty.) There are times when aesthetics take a back seat to the function of clothing. Can you name some of these times? (Hot or cold weather, work, sports, protection.)

We often choose clothing because we like how it looks on us. As the “Blue Skies” video identified, there are times we need to choose clothing for a different reason. In Kansas, most people have clothing for both hot and cold weather. Clothing has been used for protection since the beginning of time. Before the discovery of man-made fibers our choice of clothing was quite limited. For cold weather, animal skins and fur were harvested. These, along with the layering of clothing, provided warmth. With all the new fibers, yarns, fabrications and finishes, our ability to protect ourselves as well as designing special purpose fabrics is greater than ever before.

Leader Notes

Have everyone gather in a comfortable place. Allow time for them to introduce themselves if they do not know each other. Also, have each member tell one item they have worn at some time for a reason other than how it looks. (Coats, hats, mittens, catcher’s mask, football pads, reflective suit or shoes, hunter’s vest, camp clothing, apron, others.) View “Blue Sky Below My Feet, Fiber and Fabrics.”
Let’s look at the simple task of keeping warm to demonstrate how different fibers are used for different situations.

The following principals are considered in keeping warm:
1. Covering all parts of your body. Bare feet, hands, and head lose great amounts of heat. To keep heat within your body, covering all these areas will greatly help.
2. Dress in layers. Dressing in layers retains heat from the body by using the principle of “insulation.” Insulation is the property of trapping warm air in air pockets or between layers. One insulation factor of fabric is the loft (the fuzziness or pile). As a general rule the thicker the fabrics used, the warmer the garment will be. The thickness acts as the insulator to trap air and allow your body heat to warm it. Dressing in layers also allows for better moisture absorption as well as allowing for the removal of layers as the wearer becomes warm. This helps keep the body dry by avoiding unnecessary sweating.
3. Keep the body dry. A dry body has a much easier time maintaining a normal temperature. Wetness from the weather or from perspiration can cause chilling and the body temperature is more difficult to maintain.
4. Absorb energy from the environment. Try to gather heat from the outside. Dark colors are warmer to wear because they absorb heat from the sun.
5. Wear fabrics that are insulative. These fabrics slow body heat transfer to the environment. Products that are insulative are made of thick, fuzzy fabrics, or down filled and synthetic filled (i.e., Thinsulate and Polarguard) fabric systems. (Layers of different fabrics that serve different purposes.)
6. If you are in a windy environment, it is important to stop air movement within the clothing system. A windbreaker worn over layered clothing will be a very effective system.

The insulative value of a fabric is expressed as “thermal resistance.” Factors that determine this are:
1. The material’s ability to hold a large amount of air to fiber.
2. The fabric’s thickness.
3. The fabric’s resistance to moisture.
4. The orientation (placement) of fibers on the fabric surface.
5. The color and texture of the fabric.
6. The design of the structure (the weave, stiffness, etc.).

If all these are considered in keeping warm, what should we do in the summer when we want to keep cool?
1. Remove clothing cover, except for hats—they act as shades to allow the head to keep cool.
2. Reduce layers. Use thin layers to help wisk away moisture and allow it to dry. But limit layers to only a few.
3. Reflect the sun’s heat. Wear light colors to do this. They do not absorb as much heat from the environment.
4. Wear reflective fabrics. This will reduce environmental heat transfer to the body.
5. Allow for freedom of movement. Non-binding, loose clothing allows for air to dry perspiration and keeps additional perspiration from overexertion to a minimum.

There are other situations where thermal protection is needed. Some of these include: scuba diving, professions that expose workers to water at various temperatures, fire fighters, race car drivers, aircraft pilots, astronauts and occupations which expose workers to the sun. Let me tell you about one of these situations and the garment that has been designed just for this purpose.

An aircraft pilot may have to eject from a plane over water. The suit must be one piece to be worn at all times since chances are he/she will not have time to change. This suit needs ventilation since the cockpit gets quite warm. It must also protect in the water if there is the need. The resulting garment is a three-layer, one-piece suit. The outermost layer is flame resistant Nomex. This protects against a burning plane. The next layer is nylon Gore Tex, a breathable, waterproof layer. That allows for comfort on board the hot plane, but would keep water out in case of a water landing. Also, the ankles, wrists, and neck have rubberized cuffs to further keep out water. The layer closest to the skin is an inflatable thermal barrier (two-layer, thin, waterproof fabric fused together around a ventilation hole). If the pilot is caught in water he/she can manually inflate this layer to provide warmth and help float.

Other situations that have special designs just for them are impact resistant clothing. Things like bullet-proof vests, helmets, boxing gloves, sports pads, and other industrial protective clothing fall into this category. Another more recent development is in radiation protective garments. These classify as impact resistant clothing also due to the need to resist the impaction of very tiny radiation molecules, gases, chemicals, viruses and bacteria.

Another situation when clothing is more than something to wear is in the disabled designs that allow for independent living. Many persons from elderly to disabled to temporarily recuperating persons choose clothing so they can continue to care for themselves. Special fasteners, knee braces, foot mops—all these and many more allow for personal dignity in the area of self dressing and living.

Don’t forget special designs that aide in professions. Items such as carpenter’s apron, photographer’s vest, life preservers, nurse emergency smock, wide-brim hats to protect from the sun, and many others are available. There are many more to be designed—maybe by you!
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What three parts of your body lose great amounts of heat?
A. Feet, hands, and head

Q. What is thermal resistance?
A. The term used to judge how well a fabric acts as an insulator (the ability of it to hold large amounts of air).

Process:
Q. What did you learn from watching the video that was most interesting to you?

Generalize:
Q. What are any of the special textile items someone you know of uses in their work?
A. Answers will vary. Briefcases, hospital gown, boots, hard and wide-brim hats, help members think of why they would need these items.

Q. What decision-making criteria do you need to think about when deciding what to wear?

Apply:
Q. Pretend you are asked to design a garment for someone who bakes in a bakery all day, what would it look like?
A. White color to disguise the flour; cool fiber because the ovens would be hot; short sleeves for safety (can get caught in equipment); loose fitting (but not too big) to allow for coolness but not cause a safety hazard. Maybe an over-apron to wipe hands on without soiling or wetting the garment close to skin. Other suggestions may also be appropriate.

GOING FURTHER:
- Tour an industry or place of work with the emphasis being the garments used for that particular type of work.
- Begin a scrapbook about special work clothes for various professions.
- Rate various fabrics for their thermal resistance.
- Do a club project on reflective awareness for the community (runners, children, etc.).
- Begin a notebook of special fabrics, such as repellant, polar fleece, flourescent, Gore Tex, etc.
- Study how to prevent skin cancer. Check out “Protecting Against Ultraviolet Radiation—What Do We Know, What Should We Know?” (From Area Extension office.)
REFERENCES:

*Dress to Meet the Cold*, Janis Stone, Extension Clothing Specialist, Iowa State University, North Central Region Extension, Umberger Hall, Kansas State University, Manhattan, Kansas 66506


*Protective Clothing and Equipment* video, Pesticide Certification Series, North Dakota State University Extension Service, Fargo, North Dakota

*Blue Sky Below My Feet, Fiber and Fabrics*, video, produced by National 4-H Council, Kansas State University, Umberger Hall, Manhattan, Kansas 66506


*Protecting Against Skin Cancer—What Do We Know, What Should We Know?*, Area Extension offices, Kansas State University

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Color and Designs on Fabric
Clothing & Textiles, Level II, Textile Science

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to recognize dyed fabrics
• How to recognize applied designs such as printing, flocking, and embossing

ABOUT THEMSELVES:
• Creativity by self-dyeing and printing of fabrics or garments

Materials, Resources Needed:
• Samples of various printed and dyed fabrics, 10 × 10-inch samples
  If doing tie-dye:
  • 100 percent cotton T-shirts
  • Thread or rubber bands
  • One to two colors rit dye
  • Mixing container or sink
  • Hangers to hang wet T-shirts on
  • Access to water
  If doing printing activity:
  • Fabric to cut and sew later, 100 percent cotton or cotton T-shirts
  • Household utensils to print with—sponges, wooden blocks, potato masher, wire whip, forks, strainer, etc.
  • Fabric paint or crayons, various colors
  • Bleach or Dye with Janet Prey video (See reference section of this lesson for ordering information.)

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:

We have discussed how fabrics are made into a solid color. That is referred to as? (dyeing) We said dyes can be made from natural dyes and pigments, or made in a laboratory.

Most items we buy are either a solid color, a printed fabric or a mixture of both. There are several different methods used to get these looks. Today, we will talk about some of these methods.

First we will talk about dyeing. Dyeing is the process of taking a piece of fabric or yarns and putting them in a container that contains the dye solution. This allows the fibers in the yarns to absorb the color and penetrate throughout the fabric. A result will be fairly even color on both sides of the fabric.
Applied design processes are also used to add color to a surface design. Applied design processes do not produce evenness of color or design on both sides of the fabric and can be recognized by looking at the front and back of fabrics, or by raveling yarns and observing differences within the yarn. Printing is like painting on the fabric surface. It can be done by many different techniques. One way is by using blocks that are carved (much like stamps and stamp pads). Another is like stenciling—when a cutout screen or metal sheet is placed on the fabric and a color is painted on. A different cutout screen is placed on the fabric to add another color. This is repeated until a pattern is developed.

Color is added in very small amounts. This printed color will often change the feel of the fabric by adding more stiffness to it. Have you ever seen wall paint spilled on a rag or clothing item? How does the item feel when the paint dries? (stiff) Even though the amount of color on the fabric is small, it works the same way by hardening and making the fabric stiffer. One way to know a printed fabric is to look at the right and wrong sides. The right side has much more detail and color. If you unravel the yarns you’ll notice how deep the color penetrates. Since the color is printed on—it is brighter on the right side. This is a clue the pattern was printed—not dyed.

Besides adding color the same method can be done to add flocking in place of color. Flocking is a fuzzy pile that when applied forms a design.

If you find a fabric with two different patterns on each side that fabric may have been printed on both sides.

In the case of some plaids, the yarns are dyed before weaving then the plaid is made by weaving different colored yarns. Also some patterns can be done this way. Usually, the unraveled yarns are separate colors.

One other method of getting a pattern is to first dye a fabric a solid color. Then, a bleach is added in a design and the bleach removes the color from the dyed fabric in the pattern design. This leaves the design in white on the dyed background. When unraveled the color penetration would be gone on the individual yarns. Bleaching to remove color may make the fibers weak.

The last design that is sometimes seen on fabrics is embossing. This gives fabrics a design by humping up the design in the fabric. It is done separately from printing but often both methods will be done on the same piece of fabric. In this process a fabric is run through rollers pressing together. The rollers are cut in a design and the fabric is pressed between them (think of a waffle iron). As the fabric comes out it is “embossed”—the design is sticking up. If the fiber is “set”—slightly melted—by heat the design is usually more durable. This can be done with man-made fibers. If it is not “set” then the embossing will disappear when washed and/or ironed. This is most common in fabrics made of natural fibers, since natural fibers cannot be heat set. As a general rule, fabrics that have

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**Leader Notes**

At this time show a sample of a dyed fabric. Unravel yarns and let members see evenness of color on both sides. If doing tie-dye activity, direct members to tie or rubber band tightly, areas of the T-shirts. Follow package directions and dye shirts. Continue lesson while soaking or after dyeing has been completed.

Pass out samples of printed fabric for members to unravel. Let them see how the color is deeper on the right side.

If doing printing activity take time and proceed with it here. Show samples of what each utensil will look like and allow members to experiment. If fabric is used encourage members to exhibit the finished garment in the county fair. Other garments can also be exhibited, even items such as pillowcases.
applied designs, i.e., printed, flocked or embossed, are less durable than those that have structural design, i.e., the yarns are first dyed and a design is woven into the fabric.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. What happened when you unraveled a dyed fabric?
A. The yarns looked evenly colored on both sides.

Q. What happened when you unraveled a printed fabric?
A. The yarns look brighter on one side.

**Process:**
Q. What may happen in a dyed fabric that has the print made by adding bleach to remove color?
A. The fibers may be weakened.

Q. Why do some printed fabrics fade after wearing and laundering?
A. Color on the surface is washed or worn away.

**Generalize:**
Q. What happens to clothes or fabrics that are bleached a lot?
A. The colors fade; they get whiter; they wear out faster.

Q. Which would you expect to look new longer—a printed bath towel or a plaid bath towel made with yarns dyed before weaving the plaid?
A. The plaid, due to deeper dye penetration of the structural design.

**Apply:**
Q. If you printed or dyed a project, what would you do differently next time?

**GOING FURTHER:**
- Have someone do a batik demonstration.
- Tour a factory or festival that demonstrates dyeing.
- Emboss fabric with iron over household items.
- For other ideas, see Level I, “Design Basics,” or Level II, “Wearable Fiber Art.”
REFERENCES:
Bleach or Dye with Janet Prey video, order by calling 800-944-0213, from Islander School of Fashion Arts. Cost is $39.95 plus $5 shipping

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Man-Made Fibers
Clothing & Textiles, Level II, Textile Science

What Members Will Learn . . .

ABOUT THE PROJECT:
• What a “man-made” fiber is
• What “man-made” fibers are made from
• The advantages and disadvantages of “man-made” fabrics

ABOUT THEMSELVES:
• How to use the features of “man-made” fabrics in decision-making about garments
• An appreciation of science and technology in clothing production
• Personal decisions about clothing and textiles impact their environment

Materials Needed:
• Apple or IBM/IBM Compatible computer
• Compatible software “Fiber Basics” by Learning Seeds (request to borrow copies from Area 4-H Offices, or your county can purchase a copy for $10 by contacting the State 4-H Office); OR
• 9 × 6-inch samples of the following fabrics:
  100 percent polyester
  cotton/polyester blend
  100 percent nylon
  100 percent acetate
  100 percent rayon
  100 percent acrylic
  Modified acrylic
  Spandex
• Fingernail polish remover
• Iron—old one that may get dirty
• Iron cleaner
• Chlorine bleach
• Matches
• 3 to 4 Foil pie pans
• Copy of Member Handouts and Activity Sheets

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

Today, we are going to talk about the very basic ingredients in fabrics. Just like a cake, a piece of fabric is a combination of smaller units and when put together give us a new product. Fibers are the basic components of fabrics. Fibers come from two different sources. They are found in nature or they are made in laboratories from special products. Depending

Leader Notes

Have everyone sit around a table. Allow for members to introduce themselves. Have each member read the fiber content label of the clothing of the member next to them. Identify any –“man-made” fibers that are read. You begin.
Pass out samples of each for members to feel. Have members gather around computer on which you have loaded the software “Fiber Basics” by Learning Seeds, and complete the mini-units on polyester, nylon, rayon, acetate, acrylic, and spandex. Assuming in a previous session (Lesson “Natural Fibers,” Level II) the members have completed the mini units on natural fiber, cotton, wood, silk, and linen, have them finish the session with the “Fiber Match Challenge.” You may also want to give them a printed review quiz provided in the software if you have a printer available, or copy and use the Review Quiz Activity Sheet with this lesson.

Pass out member handout, “Man-made Fiber Facts” as you review this information starting with Rayon.

Heat iron. Place rag or brown paper over ironing board or surface you will press on. Lay rayon on surface. Press with iron on cotton setting. If not hot enough to scorch fabric, turn temperature up to linen setting to show what happens to rayon fabric when ironed on too high of temperature. Do the same with a portion of the acetate sample. Be prepared for the sample to melt and to clean the residue from your iron. Next, put the remaining portion of the acetate sample in foil pie plate. Take acetone containing finger nail polish remover and pour on sample (1 teaspoon should be enough) allow sample to set and observe during the remainder of meeting.

The major Man-made fibers come from two products. Petroleum products (oil) and cotton linters or wood pulp. Oil gives us polyester, acrylic, nylon and spandex. Cotton linters or wood pulp can be turned into acetate and rayon.

Rayon—The oldest man-made fiber, usually comes from wood pulp. It was first produced in France in 1889. It is very silky and smooth and was called “artificial silk” until 1924 when its name was changed to rayon. It is very versatile and can be produced with varying textures to mimic any of the natural fibers.

Advantages:
• Versatile and inexpensive. Used widely in blends.
• Very absorbent, it is comfortable to wear and takes dyes well.
• Can be made flame retardant.
• Moth resistant.
• Nice drape and soft hand (feel).

Disadvantages:
• Unless modified it is weak when wet.
• Wrinkles unless treated.
• Shrinks unless treated.
• Damaged by high temperature.
• Damaged by mildew unless treated.
• Dry clean only unless blended—then follow care labels.

Acetate—Acetate was produced after World War I. It is also usually a wood pulp product. It’s known for it’s shiny, silky appearance.

Advantages:
• Inexpensive and versatile.
• Nice look, and hand.
• Breathes more than other man-made fibers.
• Naturally bright and shiny and sun resistant.
• Can be laundered or dry cleaned and bleached.
• Resists wrinkling.

Disadvantages:
• Weak when wet, dry strength minimal.
• Heat sensitive—can be damaged by iron.
• Holds static electricity unless treated.
• Harmed by chemicals containing acetone.
Nylon—The first “thermoplastic” fiber. That means soft and moldable when heated. That is how nylon is made. It is made from oil or natural gas. After a chemical reaction takes place the oil turns to flakes. These flakes are melted together and forced through a spinneret (similar to a shower head with tiny holes) to form long fibers. These are twisted together to make yarns that are then used for fabrics.

Advantages:
- Strong wet or dry.
- Can be soft and silk-like in feel.
- Easy care, no iron, drip dry.
- Can heat set pleats and creases.
- Resists mildew and moths.
- Elastic and holds shape well—widely used in carpet and hosiery.
- Can be easily blended with other fibers.

Disadvantages:
- Does not absorb moisture well.
- Tends to yellow or gray with age.
- Holds static electricity unless treated.
- Attracts oil and grease.
- May melt in hot dryer or under hot iron.

Polyester—Research on polyester began in the 1930s. Today, it is the most used man-made fiber in the world. It is the most used of all fibers (man-made and natural) in the United States. It is produced from petroleum and/or natural gas. It is used widely in products from clothing to automobile tires. Textile research keeps improving polyester and it is becoming more like natural fibers in feel and look.

Advantages:
- Strong and durable.
- Versatile, used in many items and is easily blended.
- Resists wrinkles, shrinking, and stretching.
- Easy to launder and can be heat set.
- Easy to clean except for oil based stains.

Disadvantages:
- Does not absorb perspiration (tends to be hot in warm weather).
- Picks up oil from the skin (ring around the collar).
- Pills—tiny balls form when fiber rubbed.
- Holds static electricity.
- Repeated washing may “gray” fabric (caused by the oils in the wash water attracted to the polyester).

Acrylic—A soft, bulky fiber used in many knit items. Resembles wool in feel and warmth. Made from oil and natural gas. Is mainly used in sweaters, blankets, socks and yarns. Can be blended and used in slacks, sportswear and dresses.

Advantages:
- Easy care (wash and wear).
- Inexpensive.
- Lightweight yet fluffy and provides warmth by trapping air.
- Resists wrinkling and shrinking.
- Accepts dyes well.
Disadvantages:
• Pills.
• Uncomfortable to wear in warm weather.
• Holds static electricity.
• Damaged by high temperatures.
• Holds oily stains.

Another type of acrylic is modified acrylic. Through some chemical changes this fabric is similar to other acrylics except it has a very high flame resistance (hard to set on fire). It is used for children’s sleep wear, fake furs, wigs, and other items that are in need of flame retardancy.

Spandex—Spandex is produced from oil. It was introduced in 1958. It’s major characteristic is its stretchability. It is used in large amounts for next to the skin active wear.

Advantages:
• Elasticity—stretches and bounces back.
• Strong.
• Resists air, sweat, oil and lotion damage.
• Can be dry cleaned or laundered.

Disadvantages:
• Yellowed by chlorine bleach.
• Damaged by high temperatures.
• Repeated washings result in lost strength and elasticity and may cause “graying.”

DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What is the difference between natural and man-made fibers?
A. Natural fibers are found in fibers naturally. Man-made fibers are chemically or physically altered to become fibers, and usually takes many complex steps in a factory. Natural fibers require complex agricultural and environmental impacts of growing, harvesting, cleaning and processing.

Q. What was one of the most interesting things you learned from this lesson? Why?

Q. Where are the majority of man-made fibers produced?
A. In the United States.

Process:
Q. What do the man-made fibers have in common that make them so desirable?
A. Most are versatile and used in many non-clothing products, easy care, inexpensive, and easy to blend with other fibers.

Generalize:
Q. Since the wear life of most man-made fabrics is much longer than natural fibers, what are some problems this may cause?
A. Garments that are out of fashion before worn out, extra items to be dumped in landfills, apparel industry needing to convince consumers that new garments are needed, environmental impact of textile production (chemicals used in production).

Q. What clothing factors are most important to you when you make a clothing purchase?

Q. Are most of your clothes man-made or natural? Why?

Apply:
Q. What could your group or you do to reduce the negative impact of the clothing and textile industry on the environment.
A. Recycle clothing, sponsor “clothes swap” with another group, inform others about the energy needed to produce man-made fibers, etc.

GOING FURTHER:
• Visit textile mill, if available, have a guest speaker that has seen one give a presentation, or borrow and show slides of a textile mill.
• Demonstrate care by using various methods of non-recommended laundering samples to show before and after results.
• Have members collect socks to give to local homeless shelter. Before giving away, read fiber content and assess for durability, staining, comfort, etc.
• Use Learning Seed “Fiber Basics” Computer Program to review.

REFERENCES:
Fiber Basics, The Learning Seed, 330 Telser Road, Lake Zurich, Illinois 60047, 800-634-4941

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Man-Made Fiber Facts

Rayon—The oldest man-made fiber, usually comes from wood pulp. It was first produced in France in 1889. It is very silky and smooth and was called “artificial silk” until 1924 when its name was changed to rayon. It is very versatile and can be produced with varying textures to mimic any of the natural fibers.

Advantages:
• Versatile and inexpensive. Used widely in blends.
• Very absorbent, it is comfortable to wear and takes dyes well.
• Can be made flame retardant.
• Moth resistant.
• Nice drape and soft hand (feel).

Disadvantages:
• Unless modified it is weak when wet.
• Wrinkles unless treated.
• Shrinks unless treated.
• Damaged by high temperature.
• Damaged by mildew unless treated.
• Dry clean only unless blended—then follow care labels.

Acetate—Acetate was produced after World War I. It is also usually a wood pulp product. It’s known for it’s shiny, silky appearance.

Advantages:
• Inexpensive and versatile.
• Nice look, and hand.
• Breathes more than other man-made fibers.
• Naturally bright and shiny and sun resistant.
• Can be laundered or dry cleaned and bleached.
• Resists wrinkling.

Disadvantages:
• Weak when wet, dry strength minimal.
• Heat sensitive—can be damaged by iron.
• Holds static electricity unless treated.
• Harmed by chemicals containing acetone.

Nylon—The first “thermoplastic” fiber. That means soft and moldable when heated. That is how nylon is made. It is made from oil or natural gas. After a chemical reaction takes place the oil turns to flakes. These flakes are melted together and forced through a spinneret (similar to a shower head with tiny holes) to form long fibers. These are twisted together to make yarns that are then used for fabrics.

Advantages:
• Strong wet or dry.
• Can be soft and silk-like in feel.
• Easy care, no iron, drip dry.
• Can heat set pleats and creases.
• Resists mildew and moths.
• Elastic and holds shape well—widely used in carpet and hosiery.
• Can be easily blended with other fibers.
Man-Made Fiber Facts, continued

Disadvantages:
• Does not absorb moisture well.
• Tends to yellow or gray with age.
• Holds static electricity unless treated.
• Attracts oil and grease.
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Polyester—Research on polyester began in the 1930s. Today, it is the most used man-made fiber in the world. It is the most used of all fibers (man-made and natural) in the United States. It is produced from petroleum and/or natural gas. It is used widely in products from clothing to automobile tires. Textile research keeps improving polyester and it is becoming more like natural fibers in feel and look.

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• Strong and durable.
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• Resists wrinkles, shrinking, and stretching.
• Easy to launder and can be heat set.
• Easy to clean except for oil based stains.

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• Does not absorb perspiration (tends to be hot in warm weather).
• Picks up oil from the skin (ring around the collar).
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Acrylic—A soft, bulky fiber used in many knit items. Resembles wool in feel and warmth. Made from oil and natural gas. Is mainly used in sweaters, blankets, socks and yarns. Can be blended and used in slacks, sportswear and dresses.

Advantages:
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• Inexpensive.
• Lightweight yet fluffy and provides warmth by trapping air.
• Resists wrinkling and shrinking.
• Accepts dyes well.

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• Pills.
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Man-Made Fiber Facts, *continued*

Spandex—Spandex is produced from oil. It was introduced in 1958. It’s major characteristic is its stretchability. It is used in large amounts for next to the skin active wear.

Advantages:
- Elasticity—stretches and bounces back.
- Strong.
- Resists air, sweat, oil and lotion damage.
- Can be dry cleaned or laundered.

Disadvantages:
- Yellowed by chlorine bleach.
- Damaged by high temperatures.
- Repeated washings result in lost strength and elasticity and may cause “graying.”
Fiber Basics in Clothing Review Quiz

Name: ___________________________ Date: _______________________

1. Because rayon can be treated and finished in so many ways, it is difficult to identify without reading a fiber label.
   A. True      B. False

2. If the label says ‘rayon’ you can be sure the fabric will be weak when wet.
   A. True      B. False

3. Rayon, along with nylon, acetate, and polyester, can be made to look and feel close to silk.
   A. True      B. False

4. Which of these is a material from which nylon is made?
   A. Natural gas  B. oil  C. parachutes  D. Natural gas and oil  E. none of these

5. Acrylic can be found in blankets because it
   A. resists shrinking  B. ‘breathes’  C. is warm and light  D. resists wrinkling

6. Which of these would you NOT do to spandex?
   A. press with a hot iron  B. wet clean  C. dry clean  D. launder

7. Acrylic is often found in
   A. knits  B. sweaters  C. socks  D. blends with another fiber  E. all of these

8. Which of these is true?
   A. Acetate is comfortable  B. Acetate is very strong  
   C. Acetate resists static electric charges  D. Acetate is strong when wet

9. Which of these applies to nylon?
   A. expensive  B. does not hold its shape  C. dries quickly  D. subject to mildew rot

10. Judging by appearance, acetate fabrics could be confused with
    A. wool  B. silk  C. linen  D. cotton

11. What is the most obvious quality of spandex?
    A. sheerness  B. smoothness  C. stretch  D. poor wet strength

12. Which fiber is made from ingredients similar to acrylic?
    A. silk  B. rayon  C. polyester  D. acetate

13. Which of these is made from wood pulp?
    A. nylon and rayon  B. acetate and rayon  C. silk and acetate  
    D. acrylic and acetate  E. none of these
Fiber Basics in Clothing Review Quiz, continued

14. Which of these applies to nylon?
   A. expensive    B. does not hold its shape    C. dries quickly    D. subject to mildew rot

15. Which of these is often a disadvantage of nylon?
   A. Does not absorb water well    B. hard to wash    C. mildews easily
   D. cannot keep a crease    E. none of these

16. What comes out of a spinneret?
   A. Spun Nylon    B. Filament nylon    C. Nylon fabric    D. None of these

17. 100 percent polyester voted most popular by joggers.
   A. Might be true    B. No Way

18. Polyester is the ‘number one’ fiber in the U.S.—second in the world.
   A. Might be true    B. No Way

19. Polyester judged best for traveler living out of suitcase.
   A. Might be true    B. No Way

20. Cotton blended with polyester is less likely to shrink than 100% cotton.
   A. Might be true    B. No Way
## Fiber Basics in Clothing Review Quiz

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<tr>
<th>Answers</th>
<th>Subject Group</th>
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<td>2. B (F)</td>
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Natural Fibers
*Clothing & Textiles, Level II, Textile Science*

What Members Will Learn . . .

ABOUT THE PROJECT:
- What is a natural fiber
- Where natural fibers come from
- That fibers are used to make yarns and/or fabrics

ABOUT THEMSELVES:
- An appreciation of nature by providing fibers to use for clothing
- How fiber content may affect their clothing decision-making

Materials, Resources Needed:
- Apple or IBM/IBM Compatible Computer
- Compatible software “Fiber Basics” by Learning Seeds (request to borrow copies from Area 4-H Office or your county can purchase a copy $10.00 by contacting the State 4-H Office).
- Eye dropper filled with water or 9 × 6-inch samples of the following fabrics
  - 100 percent cotton muslin
  - 100 percent linen (not linen look)
  - 100 percent silk
  - 100 percent worsted wool
  - 100 percent woolen
  - 100 percent nylon
- Hand-held magnifying glass
- Eye dropper filled with water
- Copies of Member Handouts

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:
When we talk about clothing we refer often to the word fabric. The basic building blocks of fabrics are “fibers.” Fibers may be twisted together to form yarn which are then woven, knitted or in some other way entwined to from a fabric. Sometimes fibers are not made into yarns but directly form a fabric, such as a felt or nonwoven. Fabrics can be soft and drapable or rough and stiff. Many items we buy we choose because of the fiber properties affecting the fabric’s appearance, comfort and durability.

Textile fibers can be divided into two groups according to where they come from: natural fibers and man-made fibers. Natural fibers exist in nature. They come from the plants and animals in the world around us. People can make fibers from plastics, these are called man-made fibers. Today, we will talk about natural fibers. We will examine characteristics

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<td>Have all members sit in a circle in a comfortable place. Have members introduce themselves to each other and state a favorite clothing item and why they like the fabric. You begin. Reasons may include comfort, coolness, color, softness, silkiness, etc.</td>
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Leader Notes

All natural fibers tend to be what we call hydrophilic (water loving) whereas manmade fibers tend to be hydrophobic (water hating). Using an eyedropper, have each of the members drop a droplet of water on the cotton, linen, silk and wool fabrics and observe how the water is absorbed by the fabric leaving an intense wet spot. At the same time, have them apply a droplet of water to the manmade fabric (i.e. nylon) and observe how the water droplet beads up and remains on the surface of the fabric longer. (You will need to conduct this experiment ahead of time to be sure your samples are responding correctly and that you haven’t chosen fabrics with finishes that prevent your demonstrating the hydrophilic nature of natural fibers. For example, if you had selected a cotton fabric that had a water or soil repellant finish on it, the fabric would resist the water due to the finish, not the fiber content.) Now lead a discussion that helps members understand how the high absorbency of natural fibers will cause the fabric to be comfortable, accept dyes easily, be slow drying, resist static charge buildup, stain easily from water born stains, and make good bath towels. Some of the points to discuss include the list on this page.

- absorb moisture (are hydrophilic) which enhance comfort but causes them to dry slowly
- require extensive processing
- are only available in staple form, staple is short fiber measured in inches (except silk which is fillament in length measured in yards to miles)
- cannot be solution dyed (see “The Dye and Printing Process,” Level II
- exhibit varying degrees of flammability but do not melt when subjected to heat
- are prone to wrinkling, mildew, moths and other insects
- are highly absorbent allowing perspiration to be absorbed, which means you feel comfortable, rather than uncomfortable, which is how you would feel if the persperation were left on the surface of the skin. Also, the transfer of moisture from the skin to the environment allows evaporation to take place which cools the body.
- accept some dyes that use water as a carrier, as opposed to other chemicals. Consequently, these highly absorbent fibers can be dyed more easily and often result in intense colors.
- are absorbent fibers which hold a great deal of moisture within the fabric and causes them to dry slowly or slowly loose this absorbed moisture.
- will not build static charge (you will not get shocked) because they hold moisture in the fabric and water is a good conductor of electricity.
- will stain easily because many stains (i.e. milk, pop) are carried into a fabric by the liquid of the product, and obviously highly absorbent fibers will accept these stains more.

Based on many of the above points it is obvious that a highly absorbent fiber will make an excellent bath towel due to the fiber readily absorbing the water on the body and drying the body. Each natural fiber has its own characteristics which makes it more suitable for some uses than for others. Let’s look at each of these individually. (This can be done using the computer program, or the member handout.)
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Where does wool come from?
A. Sheep fleece.

Q. What two fibers do we get from plants?
A. Cotton and linen.

Q. What natural fiber is not produced in the United States?
A. Silk.

Q. What fiber is the most used fiber around the world?
A. Cotton.

Process:
Q. What properties do natural fibers have in common?
A. Hydrophilic properties. (absorb moisture)

Q. What will hydrophilic properties do for a textile?
A. More comfortable, dry slowly

Q. What was one of the most interesting things you learned from this lesson? Why?

Generalize:
Q. If you want a bathrobe that quickly dries your skin, in a bright color, and that doesn’t have static cling, would you choose natural or manmade fibers?
A. Natural.

Q. Why is it important to the agricultural community to develop textile finishes and processing that reduce natural fibers less desirable properties such as wrinkling and staining?
A. So they can better compete with man-made fibers and bolster the agricultural economy.

Apply:
Q. If you were a cotton grower or wool grower, develop an advertising campaign to promote natural fabrics.

GOING FURTHER:
• Demonstrate the chlorine damage to wool and silk by putting a sample of each fabric in a chlorine solution.
• Visit or invite a speaker who demonstrates wool spinning and/or combing and spinning cotton.
• Using the “Textiles,” book conduct burning and other solubility test to help members identify properties of each natural fiber.
• Look up facts about the countries that export a particular fiber.
Leader Notes

- Look at articles or advertisements for articles made of each natural fiber family: cotton, flex/ramie, silk, wool/mohair. Feel things made of each fiber. Name one or two good clothing uses for each fiber family.

- Iron sample of fabric made from each fiber to learn about response to heat and appearance after ironing.

- To do outside the meeting: select a specific fiber or fiber family and learn all you can about it—where it comes from, popular uses in apparel and home furnishing, usual care requirements, its performance characteristics and popular fabrics.

- Take a trip to see a cotton farm during harvesting (there is a limited amount of cotton produced and ginned in south and southwest Kansas). Look for a cotton gin, a spinning mill, and sheep or goats being sheared. There is “Mid-West Wool” in Hutchinson, where the grading of fleeces can be viewed. Although there are no wool mills in Kansas, encourage members to visit while on out-of-state family vacations.

- Invite a local representative of agricultural organizations such as, the Kansas Sheep Association, 1224 Road H, Emporia, Kansas 66801, 316-342-5050, to speak to the group about the fibers they represent or to speak about a career related to the production and use of natural fibers.

- Set up a “Fiber Fair” with posters and exhibits showing what you have learned about fiber sources, characteristics and uses. The “Fiber Fair” can be for your parents and friends or for a county fair.

- Make posters explaining the characteristics of different fibers to place in fabric stores to help customers learn about fibers.

REFERENCES:

Author:
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Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Cotton

Cotton is the most used fiber in the world. Of all fibers worldwide cotton accounts for half of the total. Cotton fibers exist in the seed of the cotton plant. Major countries that grow cotton include China, America, Russia, India, Pakistan, Brazil, Turkey and Egypt. It brings money into these countries when they sell their extra cotton. Cotton is linked closely to America’s history, especially during the years that slaves were used to provide the cheap labor that was needed to pick and sort the cotton. The invention of the cotton gin by Eli Whitney changed the tedious sorting of cotton fibers from man to machine. Today, the harvesting is often done by people in under-developed nations where labor remains cheap.

The length of fibers in the seed determine the quality of the cotton. The longer the fibers, the smoother the feel of the cotton. This type of cotton is not as plentiful as the medium to short fibers and is usually more expensive. You may see it called “Pima or Supima” cotton.

Cotton is used: 40 percent for apparel, 19 percent for home furnishings, 16 percent for industrial (medical supplies, piece goods, thread, etc).

Advantages of cotton: (1) strong and durable, (2) inexpensive, (3) comfortable to wear in hot or cool weather, (4) breathable (it carries moisture away from the body), (5) easy to wash and stronger wet than dry, (6) easy to blend with other fibers (twist with other fibers to make yarn that has good benefits of both).

Disadvantages of cotton: (1) damp cotton mildews easily, (2) shrinks when washed (unless pre-shrunk or treated to prevent shrinkage—“Sanforized”), (3) wrinkles when washed (it needs to be ironed with a hot iron unless it has been treated to be wrinkle resistant, (4) although cotton can withstand high temperatures it burns rapidly if set on fire.

Some common cotton fabrics:
Flannel—soft, warm and fuzzy (nap). Napped fabrics trap air and cause warmth. This principle is called “insulation.”
Denim—woven from bulky cotton yarns. Traditionally white yarns running crosswise and blue yarns lengthwise. Today, denim may refer to blends that look similar.
Mercerized cotton—cotton with a chemical treatment to give it a shine and additional strength. It also resists mildew.
Oxford Cloth—cotton woven with a basket weave, using both white and colored threads.
Terry Cloth—seen in towels and bath robes. It usually has at least one side with uncut loops. These help absorb moisture.

Flax

Another plant fiber that is not as common as cotton is flax, and used in a fabric it is “linen.” Because cotton and flax are both plant materials, they are alike in many ways. Along with ramie and other plant fibers, they are often grouped together and called cellulosic fibers. Flax is one of the oldest fibers known to man and has been found in ancient mummy burial sites as well as prehistoric dwellings in Switzerland. It comes from the stem or “bast” of the flax plant. Fibers come in small bundles from beneath the outer covering of the stem. Harvesting has not been accomplished by machine yet—so it is still done by hand. This causes a supply that is limited and is usually
Natural Fiber Facts, continued

grown in countries where labor is cheap. That is why linen is usually more expensive than other fibers. Major linen producing countries include Russia, Belgium, Ireland and New Zealand.

Advantages of linen: (1) strong fibers, (2) thick and thin fibers give a textured look, (3) nice body, (4) resists soil, (5) absorbs moisture quickly, (6) accepts dyes well, (7) resistant to insects, (8) lint free (9) can be washed and bleached easily but wrinkles and needs to be ironed at high temperatures.

Disadvantages of linen: (1) needs to be pressed when wet, (2) expensive, (3) shrinks unless treated, (4) damaged by acid and mildew, (5) low resiliency (if folded along same lines fibers may break), (6) lack of elasticity (wrinkles).

Wool

Wool is another very old fiber and the first to be spun into yarns and woven. It comes from the soft fleece of sheep that are shaved (sheared) once a year. The softest part of the fleece is the part next to the sheep and the outer edges are used for rugs and felt. The best quality wool is a product of Merino sheep. They tend to grow thinner fibers that are longer. Countries that are major wool producers are Australia, Russia, New Zealand, China, and Argentina. The United States is 10th in wool production.

Uses of wool: 73 percent in apparel, 15 percent in home furnishing (flame retardant tendencies a benefit), 7 percent in industrial felts (noise reduction when placed under heavy equipment).

Advantages of wool: (1) holds dye well (colorfast), (2) durable, (3) slow to soil, (4) wrinkle resistant, (5) can be shaped by heat and moisture (hold moisture, vapor without feeling wet), (6) initially water repellent, (7) flame retardant, (8) warm or cool depending on how the fabric is made. Wool fibers trap air because they are crinkled, and trapped air makes wool warm without being heavy; thin wool fabrics are cool because they carry body moisture away and as the moisture evaporates, it cools the body.

Disadvantages of wool: (1) weak when wet, (2) chlorine will ruin wool, (3) shrinks unless treated or blended and care labels followed, (4) scorches easily, (5) prone to insect damage, (6) some people have allergies to wool, (7) often needs dry cleaning, (8) low quality wool harsh and uncomfortable to wear; high quality wool is expensive.

Types of wool: Virgin wool—wool being used for the first time (may or may not be high quality). Recycled wool—used before as wool fabric or other product, now remade into another wool product. Worsted wools—harder, firmer yarns that are very durable. The thinness allows for a tight weave of the yarns—fabric last for years. Often made into men’s suits. Woolens—fuzzier than worsted, softer but not as strong. These are often found in sweaters.

Wool notes: Let wool garments rest before wearing. Wool may be blended with other fibers. Never hang wet wool garments—they will stretch. Other animal hair fibers include Mohair (Angora goats), Camel’s Hair (camels), and Cashmere (goat wool from particular goats in Central America).
Silk

Silk is considered a luxury fiber, because of its unique feel and look. It is a very old fiber traced back to 2640 B.C. It is classified as a protein fiber, since it comes from an animal source. The fiber is harvested from the cocoons of silkworms. Some light colored silk is from farmed silkworms. The silk is reeled from the cocoon before the worm matures into a moth. This results in an undamaged (unopened) cocoon that gives a single, long, fine fiber (miles long) or “filament.” Wild silk from cocoons of worms that feed on wild leaves result in brown or yellowish fibers. This type of silk is stiffer and more coarse. It is called “Tussah” silk. This is less expensive than the “Filament” silk. “Silk Waste” is what is produced from cocoons where moth matured or the fiber was damaged/broken into shorter fibers. It can be spun (similar to wool) to make use of the fibers. It is also less expensive than “Filament” silk. Major producers of silk are Japan, Thailand and China. Many attempts have been made to reproduce the characteristics of silk in man-made fibers.

**Advantages of silk:** (1) beautiful appearance (luster) and feel (hand/drape), (2) elastic and wrinkle resistant, (3) strong, (4) comfortable to wear (lightweight for hot weather, heavy weight for cool weather), (5) dries quickly, (6) easily dyes and prints, (7) does not shrink.

**Disadvantages of silk:** (1) weakened by sunlight and perspiration, (2) easily damaged by deodorants and chemicals, (3) can be damaged by rubbing or tearing, (4) damaged by high temperature and chlorine bleach, (5) expensive: 3,000 cocoons = 1 yard fabric, (6) prone to static cling, (7) loses strength when wet, (8) requires pressing after laundering, (9) damaged by insects, (10) required dry cleaning unless treated to be washable and so labeled.
NATURAL FIBERS
CLOTHING & TEXTILES, LEVEL II, TEXTILE SCIENCE
Activity Sheet

Fiber Basics Review Quiz

Name: _____________________________ Date: _______________________

1. Linen is more resilient than cotton but more apt to lint.
   A. True B. False

2. Linen is comfortable to wear but is fairly expensive.
   A. True B. False

3. Cotton is know as a fiber that ‘breathes.’ This means it carries heat and moisture away from the body.
   A. True B. False

4. Because cotton comes from a plant it is not strong and long lasting.
   A. True B. False

5. Linen is subject to both wrinkling and shrinking unless treated.
   A. True B. False

6. A wool sweater is most likely to be
   A. quite strong and heavy when wet B. made of a woolen fabric
   C. longer lasting than a worsted D. uncomfortable when made of merino wool

7. Wool is
   A. somewhat water repellent B. a filament fiber
   C. strong when wet D. safely bleached with chlorine

8. Silk is a
   A. synthetic fiber B. cellulosic fiber
   C. natural fiber D. man-made fiber

9. Care for wool by
   A. washing in hot water B. hanging to dry
   C. drying in dryer C. dry cleaning

10. Linen is
    A. a synthetic fiber B. a fiber used in bedsheets
    C. made form linenseed oil D. from flax plants

11. Between wearings of a wool garment it is good to
    A. keep it on a hanger while damp B. wash it frequently in a wash machine on automatic cycle
    C. let it ‘rest’ to get back into shape D. keep it in a plastic bag so moths don’t eat it

12. Which of these is a cellulosic fiber?
    A. cotton B. wool C. silk D. none of these
Fiber Basics Review Quiz, continued

13. What is a luxury fiber?
   A. silk  B. recycled wool  C. cotton  D. none of these

14. In a wool blend which percentage of wool in the blend would give you the most benefits of wool?
   A. 50%  B. 30%  C. 60%  D. 80%

15. Which of these is NOT a quality found in wool?
   A. Easy to wash and wear  B. Weak when wet
   C. Slow to show dirt  D. Usually resists wrinkling

16. What kind of bleach should not be used on silk? ____________________________

17. What person’s name is used to describe a cloth of cotton often used in towels and bathrobes?
   ____________________________

18. Silk is a fiber made by what creature? ____________________________

19. One of cotton’s main drawbacks is that when washed it will ____________________________

20. If you have a problem with moths which would be safer to hang in your closet? Wool or linen?
   ____________________________

21. Silk from uncultivated worms has a darker color because their diets are not restricted. What do we call the silk from these uncultivated silkworms? ____________________________

22. Name the kind of plant linen fibers come from. ____________________________

23. Major producers of silk are ____________________________

24. Cotton can be pre-shrunk. A common treatment to help it resist shrinkage is called ____________________________

25. Which of these words does NOT apply to silk? Strong, breathable, elastic, smooth, comfortable, shrinks. ____________________________
## Fiber Basics Review Quiz

<table>
<thead>
<tr>
<th>Answers</th>
<th>Subject Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. B(F)</td>
<td>(Linen)</td>
</tr>
<tr>
<td>2. A (T)</td>
<td>(Linen)</td>
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<tr>
<td>3. A (T)</td>
<td>(Cotton)</td>
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<tr>
<td>4. B (F)</td>
<td>(Cotton)</td>
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<tr>
<td>5. A (T)</td>
<td>(Linen)</td>
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<tr>
<td>6. B</td>
<td>(Wool)</td>
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<tr>
<td>7. A</td>
<td>(Wool)</td>
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<tr>
<td>8. C</td>
<td>(Silk)</td>
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<td>9. D</td>
<td>(Wool)</td>
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<tr>
<td>10. D</td>
<td>(Linen)</td>
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<td>11. C</td>
<td>(Wool)</td>
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<td>12. A</td>
<td>(Cotton)</td>
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<tr>
<td>13. A</td>
<td>(Silk)</td>
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<tr>
<td>14. D</td>
<td>(Wool)</td>
</tr>
<tr>
<td>15. A</td>
<td>(Wool)</td>
</tr>
<tr>
<td>16. Chlorine</td>
<td>(Silk)</td>
</tr>
<tr>
<td>17. Terry</td>
<td>(Cotton)</td>
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<tr>
<td>18. Silkworm or silk worm</td>
<td>(Silk)</td>
</tr>
<tr>
<td>19. Shrink or wrinkle</td>
<td>(Cotton)</td>
</tr>
<tr>
<td>20. Linen</td>
<td>(Linen)</td>
</tr>
<tr>
<td>21. Tussah, raw or wild</td>
<td>(Silk)</td>
</tr>
<tr>
<td>22. Flax or flax plant</td>
<td>(Linen)</td>
</tr>
<tr>
<td>23. Japan, Thailand, China</td>
<td>(Silk)</td>
</tr>
<tr>
<td>24. Sanforize or Sanforized</td>
<td>(Cotton)</td>
</tr>
<tr>
<td>25. Shrinks or shrink</td>
<td>(Silk)</td>
</tr>
</tbody>
</table>
Pattern Basics
*Clothing & Textiles, Level II, Creating with Fabrics and Fibers*

What Members Will Learn . . .

ABOUT THE PROJECT:
- How to choose a pattern appropriate for them and their sewing skill level
- How to layout and pin a pattern to fabric
- How to make minor fit adjustments to a pattern

ABOUT THEMSELVES:
- The importance of reading and following directions
- Their ability to complete a multi-step task

Materials Needed:
This lesson can be divided into two or three parts. One portion can be held in a local fabric store in which you can discuss choosing a pattern, understanding the pattern books, and selecting fabric and notions. This also may be done with pattern books or pattern envelopes in your home. The second part of the lesson occurs at the meeting when members bring their patterns and fabric for projects and they learn to make simple fit adjustments, layout the pattern, cut, and mark it or the layout, cutting and marking could be a third part. Use materials needed to complete. Some leader’s have used Nancy Zieman’s *Let’s Sew* book as an excellent resource for beginning sewing or see the North Dakota book “Stitch & Wear” in the resource section.
  - Pattern book
  - Pattern envelope or have members bring their pattern
  - Copies of Member Handout and Activity Sheet
  - Pencils

ACTIVITY TIME NEEDED: 60 TO 90 MINUTES EACH TIME

ACTIVITY:
When choosing a pattern, keep in mind that you’re in the process of learning. It’s better to make several easy items and get comfortable sewing than to become discouraged by selecting a pattern that’s much too difficult. Every pattern company offers projects designed just for beginners. These are the best choices for you. Look for patterns called “quick, simple, easy, or overnight.” Usually they have fewer details and clear directions. There are many choices, and you should have little trouble finding one you like. Be sure to take a close look, however, to see what skills are required that you have not practiced. If it contains only one or two new skills, you may be ready to try it. However, if it contains more than that, you should look for a different pattern with fewer new skills at this time.

137-Clothing & Textiles, Level II
Leader Notes

You may want to help members take their measurements or have older members help with this activity. Pass out copies of member handout, “Pattern Power.”

Have members bring their measurements. Allow them time to compare measurements to sizes and find the best pattern size. Have them write this size on their measurement sheets. This may have been done in a previous lesson. Next, you may find sections for special pattern types, like sportswear, childrens, accessories, designers, easy to sew, etc.

If you are able to help members select their patterns and fabric, you may want to do that now and stop here. Resume the lesson at a later time. If you are at your house, you may want to continue on the pattern layout and alteration. Be sure to remind members to preshrink their fabric, interfacing, zipper, and other notions.

Have members take a minute and walk through the guide, showing them the piece letters that are listed for each view. Have members circle their pattern pieces. Then have them circle the proper layout for their view and width of fabric. Show them the basic instructions and the construction directions that follow. Have them circle the steps for the garment they will be making. Have them initial their pattern and all guide sheets and pattern pieces. This will help prevent lost pattern pieces.

Have members look for these items as you discuss them. Help them to identify these on any pattern pieces they have. Pass out copies of Member Activity Sheet, “How’s Your Pattern Power.”

The pattern catalog contains a wealth of information. Each company divides its catalog into different sections; each in a different manner. Usually the fashion trends are in the beginning section. This section shows the newest styles, fabrics, trims and finishes. Some sections are for special size ranges. Refer to “Design Basics” Level I for your body type. To find this, take your body measurements and compare to the chart in the back of the pattern book. The one closest to your measurements would be the best fitting pattern for you.

Turn to the back of the pattern book. Here we find information that will help us choose the best pattern and fabric for your project. Take a minute and look through the information.

On each page you will see information about each pattern. The details will be illustrated and you can use this to determine if you would want to sew this item. For beginning sewers, it is best to look for easy-sew garments that do not have as many seams, collars, set-in sleeves, closures, tucks, pleats, or other details that take more skill and time. There is also a back view to help in determining details. Read the notions listed to help determine the difficulty of the pattern.

Once you have made your pattern choice, study the pattern envelope. It is filled with a lot of information, and should serve as your shopping guide. It will tell you:
- What type of fabric to buy: knit or woven? one-way design or non-directional print? width?

Your pattern was a big help to you in selecting your fabric and sewing notions. Now it becomes your guide in making the garment. In this pattern envelope, you will find:
- Tissue pattern pieces from which you cut out your fabric.
- Pattern guide that tells you step-by-step how to sew your garment.

You need to be familiar with all the information in the pattern guide. All guides have information on how to get ready to sew and step-by-step instructions on how to sew the garment. Most patterns contain more than one garment or more than one way to make a garment. It is best to circle the pattern pieces you will use.

Pattern pieces will tell:
- Brand or company name.
- Pattern number, size, and type.
- Garment piece (back, front, sleeve, etc.).
- Piece number or letter.
- Cutting lines (solid; if various sizes, the lines will vary in pattern).
- Stitching lines (broken; or given in guide instructions).
- Lengthen or shorten lines (2 parallel lines for altering).
- Grainline (straight line with arrows).
• Foldlines (lines with curved arrows at the ends).
• Notches and dots for matching pieces correctly.
• Dart stitching lines (a combination of circles and broken lines).
• Circles, squares, and triangles for matching points on the inside or at the seamline.
• Closures, such as buttons, buttonholes, and zippers (sketched on your pattern piece).
• Lines marking center front and center back.

Selecting a pattern designed for your figure type will minimize the number of pattern adjustments and make garment fitting much easier. You should be primarily concerned with the pattern going around you, position of darts directed toward body bulge, and the length. Pin fitting your pattern can give you a general idea. To pin fit:
  • Pin darts in the pattern piece.
  • Pin on the stitching line, joining the front and back sections.
  • Carefully slip on over undergarments to see if it will reach from center front to center back; keep the side seam at your side.

Study and compare your body measurements with those on the pattern envelope. When differences are found (greater than ¼ inch), some type of adjustment is needed. Mark on your chart those areas where adjustments are needed and whether you need to add to or subtract from your pattern.

To ensure accuracy in any alteration, be sure to follow these basic principles whenever you work with pattern pieces.
  • Pattern pieces should be flat and free from wrinkles. Press with a cool iron before making any changes.
  • All pattern pieces must be flat and remain flat when any alteration is done.
  • Pin-fit the pattern again to check adjustments.

Some simple pattern adjustments include dart changes, adding width, and lengthening or shortening a pattern piece. Here’s how:

**Darts**

Try on the pattern piece. The bust dart should point to the fullest part of your bust and end about 1 to 2 inches from it. If it doesn’t, rotate the dart as follows. Make a mark on the pattern at the fullest part of your bust. Put a point about 1 to 2 inches away form this first mark, toward the edge of the garment. Use a pencil and a ruler to redraw the dart from the new point to the original ends.

**Adding width at the side seams**

The new multi-size patterns do this for you and are your best choice if you need to add a bit of width on one garment section or another. But if the garment you want to make isn’t available in a multi-size version, use a ruler to draw new cutting and stitching lines.

Go easy on adding width. You must make the same adjustments on all the sections of the garment, so if you add ¼ inch to each of four seam allow-
To lengthen or shorten

If the pattern is slightly longer or shorter in one area than you are, you can add or subtract length to that area. Notice whether the pattern has a lengthening or shortening line or gauge printed right on it. Draw a line parallel to the shortening line exactly the distance away that you want to shorten. Fold along the shortening line and match it to the new line.

To lengthen, cut across the pattern and spread it out to lengthen it as necessary. Tape a piece of lightweight paper, such as tissue paper or wax paper between the cut edges. Do not use a newspaper as the ink will rub off. Use a ruler to redraw cutting lines.

To shorten the pattern, simply fold a tuck, being sure grain lines line up. Each pattern piece must have all alterations, and seam allowances must match. Use a ruler to redraw cutting lines.

Before we talk about marking, there are some fabrics that need extra care when you lay the pattern on the fabric. These fabrics are ones you will not want to choose for a beginning project, but you will want to use as you gain skill.

Directional fabrics

Directional fabrics have a “one-way” or “up and down” appearance because of the weave, design, or nap (way the fabric is brushed after woven). Garments made of one-way fabrics should be cut with the tops of all pieces pointing in the same direction. Napped and pile fabrics affect light reflection. The fabrics look lighter or darker in color depending on the direction in which they are placed. If the direction on all pieces does not go the same way, the garment will appear to be different shades in some areas than others.

Commercial pattern companies refer to all one-way fabrics as fabrics “with nap.” There may be different yardage requirements that are given on pattern envelopes. Be sure to check for this before you buy your fabric.

Before cutting, decide on the direction the pile will run. If it runs up, the color will be richer, but color change resulting from wear may be more obvious. Check the direction of the pile by running your hand over the fabric. It will feel smoother when you move in the direction of the nap.

Pin the pattern pieces to the wrong side of the fabric; it is easier to insert the pins in the backing. If the fabric is very thick, cut only one layer at a time. Notches are hard to cut in very thick fabric. If necessary, omit them and mark the wrong side of the fabric with tailor’s chalk. Facings can be cut from lighter-weight fabric that matches or blends in color and is of similar fiber content and care instructions.
Woven directional fabrics
Avoid a fabric with twill weave. If you do select a twill, be sure to read the pattern back to determine if the pattern is suitable for twill (directional fabrics).

When cutting, cut the garment pieces so the diagonal lines in the fabric run in the same direction. Cut the sleeves so the diagonal lines in both run as on the garment front. Match the diagonal lines of the fabric at seamlines of the garment, if possible. Cut jacquards as you would cut directional prints.

Plaids and stripes
Plaids and stripes may also be directional depending on whether they are even or uneven design. In an even plaid design, you can pick any block and find the boxes or stripes on either side will match. The same is true of an even stripe design. An even design simplifies the problem of matching patterns at seams and along closings.

An uneven plaid or stripe design is more difficult to match. Not every plaid or stripe will have boxes or stripes that match on each side. Perfectly matching the design lines of these fabrics at seamlines and other areas of construction takes extra care and time for cutting and sewing. The end result of careful matching will be a more attractive garment.

Select a pattern that has as few construction lines as possible. The focus of the garment should be on the plaid or stripe of the fabric. Plaids and stripes cannot be matched unless the garment pieces are designed with an equal amount of slant on adjoining seamlines. Choose a pattern that permits precise matching. Read the pattern envelope for recommended fabrics.

To match plaids or stripes, you must buy more material than is necessary when fabric has a solid or all-over design. The amount needed depends upon the size of the plaid, if it is even or uneven, and if it is napped or not. To determine the exact amount, measure the plaid repeat and multiply by the number of yards called for. Usually half a yard extra is enough for an average-sized plaid and a full yard for a very large plaid. It is better to buy too much than to run short.

To match plaid or stripes, pin together the identical stripes in the upper and lower layers of the fabric. An uneven plaid or stripe should be cut with all the pattern pieces facing the same direction. Uneven plaids or stripes should be treated as one-way fabrics; all pieces must be laid out and cut pointing in the same direction. Check these pattern landmarks to be sure they match:
- Seamlines
- Center fronts and backs
- Notches
- Folds and darts
- Horizontal seams or edges
- Overlay pieces
- Pieces turned to the outside

Pass out copies of Member Handout, “Plaids.”
Keep in mind width and/or length adjustments you have made on your pattern.
It may be necessary to slip baste to get a perfect match.

Marking certain stitching lines on your fabric makes your sewing easier. You want to mark darts, tucks, pleats, positions for buttons, pockets or trim, and other unusual lines or matching points. When doing a layout, fold fabric with right sides together when possible (it is easier to mark the wrong side) and it will be in position when stitching right sides together.

There are several methods for marking your fabric. The one you choose will depend on the fabric. Some methods may damage a fabric, some may push one layer of fabric over so you do not have the same marking on the two layers, or you may lose the marking before you have the garment assembled. Test your marking methods on a scrap and press to see what happens. You may use pins, tracing wheel and tracing paper, tailor’s tacks, fabric marking pens and pencils, press marking (pressing a temporary crease to mark the center), snips, chalk, or soap slivers. No one method is suitable for all fabrics. Tailor’s tacks are accurate but slow, and can be pulled out. They are good for any marks that need to be seen from the right side of the garment, such as center front, center back, and sleeve cap. Pins are fast but shake out easily—safety pins could be used to prevent this.

Always test chalk, tracing paper, and markers first on a scrap of fabric to be certain they can be removed or do not show on the right side.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. Explain how to shorten the length of a skirt.
A. Draw a line parallel to the length or shorten the line the amount you want to shorten the skirt. Fold the skirt along one of the lengthen or shorten lines and match it to the line that was drawn.

Q. Name three ways to mark a fabric with pattern guides.
A. Pins, tracing wheel and tracing paper, tailor’s tacks, fabric marking pens and pencils, press marking, snips, or soap slivers.

Q. Name five things that are found on every pattern piece.
A. • Brand or company name
• Pattern number, size, and type
• Garment piece (back, front, sleeve, etc.)
• Cutting lines (solid; if various sizes are in one pattern, the lines will vary)
• Stitching lines (broken; given in guide instructions)
• Lengthen or shorten lines (2 parallel lines for altering)
• Grainline (straight line with arrows)
• Foldlines (lines with curved arrows at the ends)
• Notches and dots for matching pieces correctly
• Dart stitching lines (a combination of circles and broken lines)
• Circles, squares, and triangles for matching points on the inside or at the seamline
• Closures such as buttons, buttonholes, and zippers (sketched on your pattern pieces)
• Lines marking center front and center back

Q. Where do you find the instructions for laying out the pattern on the fabric?
A. Pattern information guide.

Process:
Q. What was the most important thing you learned today from this lesson?

Q. What was the hardest to understand? What was the easiest? Why?

Q. Why is that important to you?

Generalize:
Q. What math concepts did you use in this lesson? Why is it important to be able to use these math skills?

Apply:
Q. What did you learn from this lesson that can be used with another project or activity?

GOING FURTHER:
• Make a copy of “Pattern Power” pieces from last page of the handout, white out the names, copy and have members use it as an activity sheet to identify pattern markings.
• Have members share with others how to do alterations and correctly read a pattern.
• Take members on a field trip to a pattern manufacturer, if possible.
• Have members collect and recycle old patterns for a club project. Or, use the patterns to practice the above alterations.
• Prepare an exhibit or poster on simple pattern alterations to display at a fabric store or school.
• Award a coupon for discounts on patterns or fabrics from a local fabric store, secured from a mailer or newspaper to the member(s) who cut(s) and mark(s) the pattern correctly.
• Help senior citizens lay out and cut patterns at the retirement center.
REFERENCES:

Start Sewing, Singer Education Department, 321 First Street, Elizabeth, New Jersey 07207

Sewing Your Clothes, Marjorie Mead, Extension Specialist, Cooperative Extension Service, University of Illinois at Urbana-Champaign, Champaign, Illinois

Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas


The Busy Woman’s Fitting Book, Nancy Zieman, Menlo Park, California, Open Chain Publishing, 1989


Author:

Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:

Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
# How’s Your Pattern Power?

Look at your pattern. Can you find the following information? Check each item as you locate it.

<table>
<thead>
<tr>
<th>Pattern Envelope Front</th>
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<tbody>
<tr>
<td>Front views of all garments</td>
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<table>
<thead>
<tr>
<th>Pattern Envelope Back</th>
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<tbody>
<tr>
<td>Back views of garments</td>
<td></td>
</tr>
<tr>
<td>Body measurement chart</td>
<td></td>
</tr>
<tr>
<td>List of suggested fabrics</td>
<td></td>
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<tr>
<td>List of notions needed for your pattern</td>
<td></td>
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<tr>
<td>Yardage chart—How much fabric do you need for the view you are making?</td>
<td></td>
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<table>
<thead>
<tr>
<th>Guide Sheet</th>
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<tr>
<td>Front and back views</td>
<td></td>
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<tr>
<td>Illustrations of pattern pieces</td>
<td></td>
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<tr>
<td>Explanations of symbols and terms</td>
<td></td>
</tr>
<tr>
<td>General sewing information</td>
<td></td>
</tr>
<tr>
<td>Pattern layouts—Circle the layout you will use for your project</td>
<td></td>
</tr>
<tr>
<td>Step by step instructions (sewing directions)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pattern Symbols</th>
<th></th>
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<tbody>
<tr>
<td>Cutting line</td>
<td></td>
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<tr>
<td>Stitching line</td>
<td></td>
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<tr>
<td>Grainline arrow</td>
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<tr>
<td>“Place on fold” line</td>
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<tr>
<td>Notches</td>
<td></td>
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<tr>
<td>Circles or squares</td>
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<tr>
<td>Lengthen or shorten line</td>
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<tr>
<td>Center front or back</td>
<td></td>
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</tbody>
</table>
Altering the Pattern

**To shorten the pattern:**
Measure from the lengthen and shorten line the amount you want to shorten the pattern. Draw a line at that point.

Fold the pattern on the lengthen and shorten line.

Bring the folded edge to the marked line. Tape it in place.

**To lengthen a pattern:**
Cut across the pattern on the printed alteration line if it is there, or draw a line across the pattern and then cut. (figure 1)

Place a piece of paper under the pattern and tape it to one of the cut pattern edges.

Measure the amount you want to lengthen the pattern. Draw a line along the added paper. (figure 2)

Place the second part of the pattern piece along the marked line, lining edges as close as possible with above pattern piece. Tape it in place. Using a ruler, match and draw in cutting lines. (figure 3)
Raising bust darts:
To raise bust darts slightly, mark the location of the new dart point above the original. Draw new dart stitching lines to new point, tapering them into the original stitching lines.

An alternative method, especially useful when an entire dart must be raised by a large amount, is to cut an “L” below and beside the dart, as shown at right. Take a tuck above the dart deep enough to raise it to the desired location.

Lowering bust darts:
To lower bust darts slightly, mark the location of the new dart point below the original. Draw new dart stitching lines to new point, tapering them into the original stitching lines.

An alternative method, especially useful when the entire dart must be lowered by a large amount, is to cut an “L” above and beside the dart, as shown at right. Take a tuck below the dart deep enough to lower it to the desired place.
Plaids

An even plaid matches both lengthwise and crosswise when folded through the center of a repeat. An even square plaid, left, also forms a mirror image if folded diagonally through the center of one design. An even rectangular plaid, shown below, is even, but not identical, both lengthwise and crosswise.

An uneven plaid may mismatch in one or both directions. When plaid is uneven lengthwise, left, a repeat folded in half crosswise matches; folded lengthwise it does not. With plaid that is uneven crosswise, below, repeat forms a mirror image when folded in half lengthwise; does not when folded crosswise. Plaid that is uneven in both directions does not match folded either way—lengthwise or crosswise.

With fabric folded: Identical intersecting bars of the repeats should be pinned through both fabric layers, every few inches. This technique minimizes the risk of slippage and consequent mismatching.

With a single layer, cutting is more accurate than with folded fabric but it takes more time. With fabric right side up, pin and cut each pattern piece once. To cut second piece, remove pattern and lay garment section right side down against remaining fabric; match bars lengthwise and crosswise; pin. For pattern piece to be cut on a fold, use method for folded plaid.

148-Clothing & Textiles, Level II
Pattern Power

Patterns are like “road maps” for your projects. A pattern helps you turn a piece of fabric into a great finished project.

Before choosing a pattern, think about what you would like to sew. Would you like to make a simple top, or a pair of shorts or pants? Or do you want to sew a pillow, a tote bag, or some other kind of project? The choice is yours!

Next, look for a pattern you like in a pattern catalog. Pattern catalogs are divided into separate sections for different types of projects. Flip to the section that includes the kind of project you want. The patterns shown in this book are merely examples. If you cannot find these specific patterns in a current catalog, look for similar styles.

For your first project, choose a simple pattern. Easy patterns have few pattern pieces and simple sewing steps. Most pattern books include special sections with patterns which are easy for beginners. Some also label patterns for beginners as “easy to sew” or “learn to sew.”

Let’s take a look at how a pattern helps you sew.

Selecting the Correct Pattern Size
Ask someone to help you take your body measurements so you can choose the correct pattern size. The measurements you will need are:
1. Bustline or chest
2. Waist
3. Hip
4. Height
5. Back waist length—measure from neck to waist

Record your measurements in the chart below. Use this information to help you determine your pattern size.

<table>
<thead>
<tr>
<th>My Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust/chest</td>
</tr>
<tr>
<td>Waist</td>
</tr>
<tr>
<td>Hip</td>
</tr>
<tr>
<td>Height</td>
</tr>
<tr>
<td>Back waist length</td>
</tr>
</tbody>
</table>

Compare your measurements to those in the size charts in the back of the pattern catalog. Choose the pattern type and size closest to your measurements. The following charts are examples of several pattern types.

If your measurements don’t exactly match those listed, use the chest or bust measurement for tops, dresses, or jackets. Use hip and waist measurements for pants or skirts.
### PATTERN BASICS

**CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS**

**Member Handout**

**Pattern Power, continued**

#### Girls’

Girls’ patterns are designed for the girl who has not yet begun to mature.

<table>
<thead>
<tr>
<th>Size (7/8)</th>
<th>S</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>26</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>23½</td>
<td>24½</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>11½</td>
<td>12</td>
<td>12¼</td>
</tr>
<tr>
<td>Approx. Heights</td>
<td>50</td>
<td>52</td>
<td>56</td>
</tr>
</tbody>
</table>

#### Young Junior/Teen

This size range is designed for the developing preteen and teen figures, about 5’1 to 5’3 inches without shoes.

<table>
<thead>
<tr>
<th>Size (5/6)</th>
<th>5/6</th>
<th>7/8</th>
<th>9/10</th>
<th>11/12</th>
<th>13/14</th>
<th>15/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>28</td>
<td>29</td>
<td>30½</td>
<td>32</td>
<td>33½</td>
<td>35</td>
</tr>
<tr>
<td>Waist</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Hip</td>
<td>31</td>
<td>32</td>
<td>33½</td>
<td>35</td>
<td>36½</td>
<td>38</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>13½</td>
<td>14</td>
<td>14½</td>
<td>15</td>
<td>15¼</td>
<td>15¾</td>
</tr>
</tbody>
</table>

#### Boys’/Teen Boys’

These patterns are for boys who have not yet finished growing or attained full height.

<table>
<thead>
<tr>
<th>Size</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>33½</td>
<td>35</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>28</td>
<td>29½</td>
<td>31</td>
<td>32½</td>
<td>34</td>
<td>35½</td>
</tr>
<tr>
<td>Neckband</td>
<td>11½</td>
<td>12</td>
<td>12½</td>
<td>13</td>
<td>13½</td>
<td>14</td>
<td>14½</td>
</tr>
<tr>
<td>Height</td>
<td>48</td>
<td>50</td>
<td>54</td>
<td>58</td>
<td>61</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Sleeve</td>
<td>22½</td>
<td>23¼</td>
<td>25</td>
<td>26¾</td>
<td>29</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

#### Misses’

Misses’ patterns are designed for a well proportioned and developed figure about 5’5 to 5’6 inches without shoes.

<table>
<thead>
<tr>
<th>Size</th>
<th>XS</th>
<th>S</th>
<th>M</th>
<th>L</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>30½</td>
<td>31½</td>
<td>32½</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26½</td>
<td>28</td>
</tr>
<tr>
<td>Hip</td>
<td>32½</td>
<td>33½</td>
<td>34½</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>15½</td>
<td>15¾</td>
<td>16</td>
<td>16¼</td>
<td>16½</td>
</tr>
</tbody>
</table>

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150-Clothing & Textiles, Level II
Pattern Power, continued

Understanding Patterns
There is SO MUCH information in a pattern! Refer to your pattern as you learn about what is included on the pattern envelope, its guide sheet, and individual pattern pieces.

Information on the Pattern Envelope
Study your pattern envelope. The front of the envelope shows all the possible variations of the pattern. These are called “views.” The views are either marked by numbers or letters.

The back of the envelope includes additional information:
1. Back views of the garments.
2. A chart of body measurements.
3. A list of suggested fabrics.
4. A list of notions needed to make your project. Notions are things like buttons, zippers, elastic, thread, snaps, and hooks and eyes.
5. A yardage chart for each pattern view. To determine the amount of fabric needed:
   - Find the view you are making on the left side of the chart.
   - Find the line under that view which lists the width of your fabric.
   - Find your pattern size at the top of the chart.
   - Follow the pattern size column down until it meets the fabric width line. This is the amount of fabric you need if no adjustment in pattern length or width has been made.

Information on the Pattern Guide Sheet
Think of the guide sheet as your instruction book. It includes:
- Illustrations of all pattern pieces for the different pattern views.
- Pattern markings—an explanation of symbols and terms used in the pattern.
- General information about interfacing, adjusting the pattern, cutting and marking, and sewing which will help you complete the project.
- Cutting layouts—these illustrations show how to place the pattern pieces on the fabric before you cut them out.
- Step-by-step instructions and illustrations showing how to make the project from start to finish.
Symbols on Pattern Pieces
Symbols on a pattern are sewing and cutting “landmarks,” similar to those found on a road map.

1. Cutting line—a solid, dark outer line. A scissors is sometimes printed on this line to let you know this is where you should cut.
2. Stitching line—a dotted line inside the cutting line. This is the line on which seams will be stitched.
3. Grainline arrow—a straight line with an arrow at each end. It is used to position the pattern on the fabric. This arrow must be parallel to the fabric selvage or length-wise grainline.
4. Place on fold line—a narrower line than the cutting line which tells you to put that line on a fold of the fabric. “Place on fold” is usually printed along the line. Sometimes a second parallel line with double ended arrows points to the foldline.
5. Notches—single, double, or triple diamonds which help you match garment pieces accurately.
6. Circles and squares—marks which help you match garment pieces. Sometimes they show where you should start or stop stitching.
7. Lengthen and shorten lines—one or more lines which show where you can add or subtract length to make the pattern longer or shorter.
8. Hemline, center front and back, and foldline—show position and/or suggested sizes of special construction details.

1. Cutting line
2. Stitching line
3. Grainline arrow
4. Place on fold line
5. Notches
6. Circles or squares
7. Lengthen or shorten line
8. Center front
8. Fold line

152-Clothing & Textiles, Level II
Interfacings
Clothing & Textiles, Level II, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to identify types of interfacing properties
• Where interfacing is used
• Why interfacing is used
• How to apply interfacing

ABOUT THEMSELVES:
• Experimenting is a good way to test for desired results
• Confidence in sewing projects by mastering a new skill

Materials Needed:
• Various samples of fabric cut into 8 × 8-inch squares
• Various samples of different weight and types of interfacings, cut into 4 × 8-inch rectangles
• Steam iron
• Ironing board
• Press cloth
• Needle and thread
• Copies of Member Handout

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
Interfacing is an extra layer of fabric that provides shape and support in detail areas of a garment. Interfacing is frequently used in collars, cuffs, lapels, necklines, pockets, waistbands, and opening edges.

The two basic types of interfacings are sew-in and fusible, also called iron-on. Both are available in woven, knitted, and nonwoven versions, and in a variety of weights, ranging from heavy to sheer weight. In addition to these specially developed interfacing fabrics, self-fabric, batiste, organza, and organdy can be used as interfacings on sheer to lightweight fabrics. The rule of thumb is that the interfacing adds the amount of body needed for a selected end use. To test the body, fold the fashion fabric around the interfacing and check the feel. For iron-on interfacing, find the one that feels right and then go two steps lighter. Always iron a sample to a scrap of your fabric to check the feel before you use fusible interfacing.

Choose an interfacing that can be cared for in the same manner as the outer fabric. Prewash washable interfacings by hand (even if they are labeled preshrunk). Line dry iron-on interfacing. Line dry or tumble dry sew-in interfacing. Warning: Iron-on interfacing cannot be dried in the

Leader Notes
Welcome members and have them sit in a comfortable place. If they do not know each other, have them introduce themselves. Ask them to tell one thing that is used to support another thing. (Wood in houses, cement in bridges, people support others, etc.) You begin with an example.

Beginning skill members may not be familiar with interfacings. You may want to show them examples of batiste, organza and organdy.
Leader Notes

dryer because the heat of the dryer causes it to fuse together. Interfacings are available in several types and weights. Sew-in interfacing must be basted in place, either by hand or machine, and fusibles are applied with an iron using heat, pressure, and steam.

Your pattern will usually tell you to interface all the appropriate places for that style; sometimes you may even add extra. Always follow the manufacturer’s instructions when applying fusible interfacing, and make a test sample before applying fusibles to the garment fabric to check compatibility. A properly fused garment is smooth and unpuckered; interfacing should be invisible from the right side; garment edges should be unstretched; and the interfacing should not significantly change the hand (how the fabric feels) and color of the fabric.

Precut and perforated fusible interfacings are available in different weights and widths for waistbands, cuffs, facings and plackets. These can save you time but may cost more than by-the-yard interfacings. Look for these on sale and stock up. Keep extra on hand, but be sure to keep a copy of the instructions with the interfacing.

Choosing between a fusible or a sew-in interfacing is usually a matter of personal preference. In general, fusibles provide slightly crisper results. This is because the fusibles “set” the yarns, they’re an excellent choice for fabrics that fray. Some fabrics that don’t work well with fusibles include metallics, sequinned, beaded, re-embroidered fabrics, rayon and acetate velvets, most brocades, fake furs, leather, vinyl, and openwork fabrics.

Most people prefer the fusible because it is quicker than the sew-in type. The trick to good results is to follow the manufacturer’s directions exactly. Fuse it twice—one on the right side, cool, then once on the wrong side of the fabric. This will help you get the best results.

The pattern tells you where you must interface the garment to achieve the desired look. You may desire more crispness in another area. If you do, you can add interfacing there. This may call for a lighter weight or heavier weight interfacing than you are using somewhere else in the garment. This is fine—use the one that gives you the hand you desire. Be sure to test the sample on a scrap of the fabric. This will help you avoid a costly mistake.

Woven and knitted interfacings have lengthwise, crosswise, and bias grains. The interfacing pieces should be cut out so the pieces are on-grain as indicated in the pattern layouts.

Nonwoven interfacings do not have a grain. This doesn’t mean that you can cut out your pieces any way. Some of these are stable in all directions, others stretch in the crosswise direction, and others are all-bias. Read the instructions that come with the interfacing and follow manufacturer recommendations for how to place the pattern pieces.
Transfer the pattern markings to the interfacing sections, rather than to the fabric. Buttonhole markings are the exception to this rule. They must be on the outside of the garment.

**Tips for Application:**
- **Sew-in type:** Trim the outside corner of the interfacing diagonally, just inside the point where the seamlines meet. Then pin or glue-baste (with water-soluble glue) the interfacing to the wrong side of the garment section and machine-baste ½ inch from the edges. Trim the interfacing seam allowances close to the stitching and trim off any hem allowance.

- **Fusible type:** Trim the corners diagonally, the same as for sew-in interfacings, and trim off any hem allowances. Trim ½ inch off of the seam allowances to reduce bulk for the heaviest of fabrics. Follow the directions for applying the interfacing exactly.

Some of the specialty interfacings have been developed for special areas, such as waistbands, collars, cuffs and plackets. They come in standard widths. Some of these are very easy to use because they’re perforated to indicate seamline and foldlines. You can read the directions to learn how to cut from your fashion fabric for use on your garment.

**TIP:** If you are worried that a fusible interfacing may show on the right side of a garment where it is applied in an area not next to a seam, you should check for a ridge on a sample swatch. To help hide such a ridge on your garment, try pinking the outer edge of the interfacing with pinking shears before fusing to soften the outside ridge. If this doesn’t work, apply the interfacing to a facing rather than the garment.

**DIALOGUE FOR CRITICAL THINKING:**
**Share:**
Q. How do you apply interfacings?
A. Sew-in and fusible.

Q. Where are the proper places for interfacings?
A. Anywhere you want more crispness in a garment or a place that needs extra reinforcement.

Q. What does “hand” mean?
A. The feel and the drape of the fabric.

**Process:**
Q. Name some common areas in which you will find interfacings.
A. Collars, cuffs, waistbands, lapels, buttonholes, plackets, sleeve caps.

Q. How do you apply a fusible interfacing?
A. Follow the manufacturer’s directions exactly. Some combination of heat, pressure, time and perhaps steam.

Allow members to experiment with the fusible interfacings on various fabrics. Check for the feel of the fabric after the fusible has been added. Press a fusible using the wrong directions and see what happens. Have each member stitch in a sample sew-in fusible. Compare to the fused samples, and talk about the “boardy” look of too stiff interfacing. You may want to allow members to try another fusing product like “Wonder Under” or “Heat ‘N Bond” and try making an applique or fuse trim onto samples. This is an important study in the use of interfacing. If you need to buy supplies, divide the cost among members. This lesson will save them money in the long run.

If you use any of these products show the members how they are used. Distribute the “Recommended Interfacing for Fabric Types” handout.
Leader Notes

Generalize:
Q. You are making a garment out of a lightweight silk fabric and need to interface the collar, but find out that the fusible interfacing you have selected changes the color of the outside fabric after it is fused because the resin shows through. What can you do?
A. Fuse the interfacing to the undercollar or use a sew-in interfacing (self fabric is even a possibility as interfacing).

Q. Describe other 4-H projects or situations at home or school when it is helpful to experiment to make the right choice.

Apply:
Q. Would you use the same type of interfacing if you made another garment of the same fabric? Why or why not?
A. Answers will vary.

GOING FURTHER:
• Visit a fabric store looking for all the various types of interfacings that are available. Determine a project and fabric that would be suitable for each type.
• Have members bring a T-shirt and some fabric to cut out a portion to make an applique. Do this at the next lesson.
• Compare the cost of the various types of interfacings, precut and packaged, to the yardage type.
• Have members create a presentation about how to use interfacings and quick tips for each. Present this to the club or other community group.
• Make a poster or exhibit of as many different types and weights of sew-in and fusible interfacings as are available. Do it on different weights of fabric. Explain the differences and how they are used.
• Make a poster on how to preshrink and fuse fusible interfacing that could be displayed in a fabric department or at the fair.
REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
Simply The Best Sewing Book Simplicity Pattern Co., 200 Madison Avenue, New York, New York 10016

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Recommended Interfacing for Fabric Types

**TIP** Sometimes one edge of the interfacing does not extend all the way to a seamline, for example, on a collarless neckline or on the front of a jacket. With a fusible interfacing, a ridge may be visible on the outside of the garment. To find out, test-fuse a piece of the interfacing to a scrap of the fashion fabric. If a ridge forms, try cutting the edge of the interfacing with pinking shears. If this doesn’t help, apply the interfacing to the facing rather than to the body of the garment.

### Fabric and Use

<table>
<thead>
<tr>
<th>Fabric Type</th>
<th>For a Soft Effect</th>
<th>Interfacing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very light to lightweight fabrics</strong></td>
<td>Batiste; organza; sew-in sheer, regular, or stretch very light-weight nonwoven; self fabric</td>
<td>For a crisp effect: Organdy; sew-in or fusible lightweight or sheer (non-woven or woven); fusible knit</td>
</tr>
<tr>
<td>(voile, gauze, crepe, challis, calico,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chambray, interlock knit, jersey,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>single knit, batiste)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium weight fabrics</strong></td>
<td>Sew-in or fusible medium weight woven; regular or stretch light to medium weight nonwoven; fusible knit</td>
<td>Sew-in or fusible lightweight hair canvas; sew-in or fusible medium weight (woven or nonwoven)</td>
</tr>
<tr>
<td>(linen, denim, poplin, flannel, garbardine, satin, duck, chino, velour, stretch terry, double knit, sweater knit)</td>
<td>Do not use fusibles on rainwear fabrics</td>
<td></td>
</tr>
<tr>
<td>Dresses, lightweight suits, active sportswear</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Heavyweight fabrics</strong></td>
<td>Soft, lightweight canvas; sew-in or fusible medium weight nonwoven</td>
<td>Sew-in or fusible medium weight woven; crisp medium or heavyweight hair canvas; fusible heavyweight nonwoven</td>
</tr>
<tr>
<td>(corduroy, worsted, camel hair, melton,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tweed, sailcloth, canvas, gabardine,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>coatings)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackets, suits, coats</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leather types</strong></td>
<td>Crisp or soft canvas; fusible or sew-in medium weight nonwoven or woven</td>
<td></td>
</tr>
<tr>
<td>(suede, suede cloth)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not use fusibles on real leather</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Waistbands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crafts</strong></td>
<td>Sew-in nonwovens in all weights</td>
<td>fusible medium to heavyweight</td>
</tr>
<tr>
<td>(belts, hats, bags, camping gear, home decorating items)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Sewing for Others

Clothing & Textiles, Level II, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• Ways to contribute to the community using their sewing ability
• Steps of a recycling project
• Advanced hand stitches

ABOUT THEMSELVES:
• How it feels to contribute to the good of others in their community
• Confidence in planning and completing a task
• The importance of teamwork to the community
• Pride in their talents to help others
• How recycling can affect their lives

Materials Needed:
• Samples of fabric, thread, and needles for each member to practice stitches
• Old sweaters that are not used anymore (source: shrunken sweaters from a thrift store). Avoid loosely woven sweaters. Have the club or project members collect these for this project. These will be made into mittens and hats
• See additional list of the tools needed in the sweater recycling activity instructions
• Yarn that compliments the sweaters that will be remade (pompon for hat top)
• A second project of your choice. Ideas include: rags from old clothes, hospital gowns, busy books for hospital or doctor’s waiting rooms, lap robes/comforters, tote bags, stuffed toys, etc.
• Copies of Activity Sheets and Member Handouts

ACTIVITY TIME NEEDED: DUE TO NUMBER OF ACTIVITIES IN THIS LESSON, IT MAY BE NECESSARY TO TAKE TWO SESSIONS TO COMPLETE

ACTIVITY:

Have you ever sewn for others? Has someone else ever sewn for you? Why might you sew for others? (save money, more personal, share something they have admired, to earn money, to give someone something unique, etc.)

There are many good reasons to give home-sewn gifts. Some of the reasons were stated above. Everyone likes to get gifts that are special to them. Sometimes, these gifts are special because they are nicer or more
Leader Notes

expensive than we could make or purchase on our own. Sometimes, they are special because they mean the person giving the gift is thinking of us. Sometimes, it is because the gift is a surprise and we are not expecting it. All of these reasons make a gift special. Today we are going to talk about giving to others, and we are going to use some of our sewing talent to create a gift for someone else. You may be surprised how much you can give when you combine your thoughtfulness and your sewing ability without much expense.

Since we are members of many different groups, what we do and how we act affects many other people. In our families, we can choose to help with some of the workload, and thus our family runs more smoothly than if we ignore our share. If you play in sports, think about the team of which you are a part. If you choose to participate only a fraction of your ability, your team will not perform as well as when all members are playing at 100 percent. So it is when we are members of a community. As members of a community, we can make a difference for others when we share our talents and abilities with others.

Today, we are going to recycle unused sweaters into usable hats and mittens and donate them to persons that may be in need of these items. By recycling these unused sweaters we are saving landfill space and helping others in our community. We also get to practice our sewing skills.

There is no limit to the number of projects you can do for others. From garment construction to simple tearing of clothing into rags—you and your skill can be the greatest gift you give someone else.

Before making your gift, we are going to briefly introduce you to some more complex hand-sewing skills. These are used in many ways and you may find that by knowing more of these stitches you will be able to polish the look of other projects. Cut the thread in lengths no longer than 18 inches to avoid tangles. Draw the thread through beeswax. This will make the thread stronger and less likely to tangle.

**Vertical Hemming Stitch.** Use this stitch if the hem allowance is finished with seam binding. Begin at a seam, fastening the thread in the seam allowance. Take a tiny stitch through the garment, picking up a single thread. Insert the needle between the seam binding and the garment and bring it out through the seam binding, about ¼ inch to the left of the first stitch. Take another stitch in the garment, ¼ inch to the left of the second stitch. Continue, alternating from seam binding to garment, and taking several stitches on the needle before drawing the thread through the fabric.

**Catchstitch.** This stitch has some built-in stretch which makes it an especially good choice for hemming knits and for holding edges, such as facings, in place. Fasten the thread to the wrong side of the hem or facing. Work from left to right, with the needle pointing to the left. Take a tiny stitch in the garment ¼ inch to the right, close to the hem or facing edge.
Take the next stitch \( \frac{1}{4} \) inch to the right in the hem or facing so that the stitches form an “X.” Continue, alternating from garment to hem or facing, keeping the stitches fairly loose.

**Blindstitch.** This stitch is useful for hemming knits and bulky fabrics. It will help prevent a ridge from forming at the hemline on the outside of the garment. Fold back the hem slightly below the hem edge and hold it with your thumb. Fasten the thread in the folded edge of the hem and working from right to left, take a tiny stitch about \( \frac{1}{4} \) inch to the left in the garment. Take the next stitch \( \frac{1}{4} \) inch away in the folded hem edge. Continue, alternating from garment to hem and keeping the stitches evenly spaced.

**Prickstitch.** This stitch, also called a half-backstitch, is a good one to know if you are inserting a zipper in a fragile or hard-to-handle fabric, such as those used in bridal or evening wear. Use it in place of the final topstitching. To assure a straight line of prickstitches, add a row of hand basting stitches as a guideline. Starting from the bottom of the zipper, fasten the thread on the underside of the zipper and bring the needle up through the zipper tape and the garment layers. Insert the needle back down through all the layers, a thread or two behind the point where it first emerged. Bring the needle up again about \( \frac{1}{4} \) inch ahead of the first stitch. Continue along the length of the zipper.

**Tacking.** This stitch helps keep facings in place at the seams. Holding the edge of the facing and the seam allowance together, take three or four short stitches in one place through both layers. Do not sew through the garment fabric. Repeat on the other seam allowance. NOTE: This same stitch can be used for permanently attaching snaps or hooks and eyes.

- Stitch-in-the-ditch technique is the quick machine alternative to hand tacking a facing in place. (See page 43 in “Let’s Sew” by Nancy Zieman.)

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. When is a blindstitch appropriate?
A. To hem knits and bulky fabrics.

Q. What is a quick way to tack facings?
A. Stitch-in-the-ditch.

Q. What hand stitch would you use to insert a zipper in a fragile or hard-to-handle fabric?
A. Prickstitch.

**Process:**

Q. What was the hardest stitch for you? The easiest? Why?

**Generalize:**

Q. How did you feel about making something for someone with a special need? Why do you think you feel this way?
A. Answers will vary.

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Leader Notes

All of these instructions are for people who are right-handed, and would need to be reversed for people who are left-handed.

At this time have members choose a sweater. Have them assemble their supplies of ruler or tape measure, scissors, pins, darning needles, and yarn in matching color. Begin the project by following steps in the handout. You may want to station different members to different jobs and do this project in an assembly line fashion. Members may not get as much satisfaction from only doing a part, however.
Q. What are some other community service projects someone could do?
A. Answers will vary, i.e., healthcare kits, school bags, laundry bags for nursing home residents.

Apply:
Q. What are examples of teamwork done in our community?
A. Examples—road work; blood drives; chamber of commerce events, etc.

Q. What landfill problems do we have in our community? How can we change our habits to reduce landfill problems?

GOING FURTHER:
• Have members volunteer to complete another community service project of their choice.
• Have members design an illustrated poster that shows the type of hand stitches, when they are appropriate, and how to do them. This can be put on display at a local fabric store.
• Host a repair clinic for the community where members donate time to repair other’s articles.
• Choose a project for the members to make for someone special, to give as a gift.

REFERENCES:
Clothing Connections, Jacqueline Davis-Manigaulte and Jean McLean and Greta Atkin, New York State College of Human Ecology, Cornell University, Ithaca, New York 14853
Simply The Best Sewing Book, Simplicity Pattern Co., 200 Madison Avenue, New York, New York 10016
Clothing Encounters, Mary Beth R. Salisbury, C.H.C., Osceola County Extension Agent, Home Economics, University of Florida, July 1991

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Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Glossary of Hand Stitches

**Vertical hemming stitch.** A durable and stable stitch best suited for hems whose edges are finished with wovenedge or stretch-lace seam tape. Very little thread is exposed, reducing the risk of fraying and breaking.

Vertical hemming stitch. Stitches are worked from right to left. Fasten thread from wrong side of hem and bring needle and thread through hem edge. Directly opposite this point and beside the hem edge, begin first and each succeeding stitch by catching only one yarn of garment fabric. Then, direct the needle down diagonally to go through the hem edge approximately \( \frac{1}{4} \) to \( \frac{3}{8} \) inch to the left. Short, vertical floats will appear between the stitches.

**Catch stitch.** Particularly well suited to a stitched-and-pinked hem edge. Take special note of the direction for working and of the position of the needle. Notice too, that with each stitch, the thread crosses over itself.

Fasten thread from wrong side of hem and bring needle and thread through hem edge. Take a very small stitch in the garment fabric directly above the hem edge and approximately \( \frac{1}{4} \) to \( \frac{3}{8} \) inch to the right. Take the next stitch \( \frac{1}{4} \) to \( \frac{3}{8} \) to the right in the hem. Continue to alternate stitches, spacing them evenly. Take special care to keep the stitches small when catching the garment fabric.
SEWING FOR OTHERS
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Member Handout

Glossary of Hand Stitches, continued

Blind Hemming Stitch. These stitches are taken inside, between the hem and the garment. In the finished hem, no stitches are visible and the edge of the hem does not press into the garment. Blind-hemming stitch is a quick and easy stitch that can be used on any blind hem.

Blind-hemming stitch: Work from right to left with needle pointing left. Fold back the hem edge; fasten thread inside it. Take a very small stitch approximately ¼ inch to the left in the garment; take the next stitch ¼ inch to the left in the hem. Continue to alternate stitches from garment to hem, spacing them approximately ¼ inch apart. Take care to keep stitches small, especially those taken on garment.

Prickstitch. A more decorative backstitch than the even or the half-backstitch. Seen from the top side, the stitches are very short, with long spaces between them. This stitch is mainly used to hand-pick a zipper.

Prickstitch is similar to the half-backstitch except that the needle is inserted through all fabric layers just a few fabric threads behind and then brought up approximately ¼ to ½ inch in front of the point where thread emerges. Finished stitches on the top side are very short, with ⅛ to ¼ inch space between them.

Tacking. Stitches to keep facing in place at seams.

With facing and garment seamlines aligned at shoulders, tack facing in place. Use either several closely spaced whipstitches (1) or a cross-stitch tack (2), catching only facing edge and seam allowances of garment.
SEWING FOR OTHERS  
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS  
Activity Sheet

Tennis Racquet Cover

Materials Needed:
½ yard sturdy 45-inch fabric (cotton duck, denim, vinyl)  
1¼ yard trim (1 inch wide)  
12 inch conventional zipper  
1 package fold-over braid  
Thread to match

Trace around racquet head and add 1½ inches for depth and seam allowance.  
Use ½-inch seams throughout.

1. Pin trim to zipper (A) mitering bottom edge along fold line to form square. Stitch trim to zipper (B).

2. Mark center line on front of racquet cover the length of zipper plus 1 inch. Reinforce by stitching ¼ inch around zipper opening line.

3. Slash along marking between rows of stitching to within ½ inch of lower edge. Clip diagonally to corners. Press slashed edges to right side of fabric along stitching line (C).

4. Top-stitch trimmed zipper to racquet cover. On inside of cover, slipstitch edges to zipper tape.

5. With wrong sides together, stitch racquet cover front to racquet cover back.

6. Apply fold-over braid to raw edges of racquet cover, turning under raw edges at neck (D).
Bandan-A-Rama

Make a bandana necklace or hatband to create an inexpensive accessory or change the look of an outfit or hat.

Materials Needed:
Bandana or 18 inch square of fabric
Sharp shears
Sewing Machine with matching thread

1. Fold the bandana or fabric square as illustrated. (figure A)

2. Sew down the middle of the folded bandana. Remember to backstitch (stitching two or three stitches back and forth on top of each other, to secure stitching at beginning and end of seams) at the beginning and the end of the bandana. (figure B)

3. Cut along the two long folded edges. Then, make cuts along both edges of the bandana from outer edge to stitching line, approximately ⅜ inch apart. Continue cutting along the entire length of the bandana. Be careful not to cut through the stitching. (figure C)

If you would like your hatband/necklace to fluff up, put it through the washer and dryer.
SEWING FOR OTHERS
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Packable Lingerie Cases

Materials Needed:
Case A, B, C—½ yard each of three different 36-inch color coordinated fabrics (18 × 36 inches)
Case D—¾ yard of 36-inch color coordinated fabric (27 × 36 inches)
3 conventional zippers:2, 10-inch and 1, 16-inch to match fabric
1 invisible zipper: 14-inch
Thread to match
1 yard decorative trim or ribbon, 2 inches wide
Cut two pieces of fabric for each case according to measurement. Cut the front of each case 1½ inches wider than back to provide seam allowance for zipper application.

Case A, B, & C:
1. Cut front pieces in half lengthwise and apply zippers according to package directions. Use centered application in Case A, lapped application in Case B, and invisible application in Case C.
2. Open zipper. With right sides together, stitch case front to case back.
3. Trim seams and corners. Turn cases to right side. Press.

Case D:
1. Stitch trim to each side of zipper (figure D1).
2. Cut front of case in half lengthwise. Turn raw edges to outside of fabric ½ inch and press.
3. Pin decorative zipper to front of case. Stitch zipper along outside edges of trim (figure D2).
4. On inside, slipstitch edges of case to zipper tape.
5. Open zipper. Pin and stitch case front to case back, right sides together. Trim seams and corners. Turn case to right side. Press.
Packable Lingerie Cases, continued

Case A: 12" x 9" (Centered)

Case B: 15" x 12" (Lapped)

Case C: 17" x 13" (Invisible)

Case D: 18" x 14" (Decorative trim)

figure D1

figure D2
SEWING FOR OTHERS
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Making a Hat

Materials Needed:
- Clean sweater with ribbed bottom edge
- Yarn in matching color
- Ruler
- Pins
- Scissors
- Darning needles

1. Lay the sweater out flat and match lower edges.

2. Measure up from lower edge 12 inches (30 centimeters) and mark with pins.

3. Cut off lower section of sweater along pin line.

4. Cut open one side seam and lay out flat.

5. Measure 18 inches (46 centimeters) and cut off. You may have enough for 2 hats, or a hat and mitten set.

6. Fold to bring short edges together, right sides inside. Pin.

7. With matching yarn, backstitch across short side ¼ inch (6 centimeters) from edge. Hand overcast or serge seam allowances together.

8. The cap is completed by placing 2 rows of running stitches, ¼ inch (6 centimeters) and ⅜ inch (1 centimeter) from the cut edge to the fabric opposite the ribbing. Instead of fastening the final thread, leave 6 inches (15 centimeters) free. Pull these threads up tight on the wrong side, tie, and fasten securely. This makes the top of the cap. Add pom-pom on the right side for a finishing touch.
Materials Needed:
- Yarn
- Cardboard—several pieces 8 ½ × 11 inches (22 × 28 cm)
- Scissors

Making a Pom-pom
1. Out of the cardboard, cut two, 4-inch circles with a ¾-inch opening in the center, to form a donut shape.

2. Place two donuts together. Thread darning needle with yarn. Wind yarn through hole until filled. Join lengths of yarn as you go by tying ends together. (figure A)

3. Snip yarns all around between cardboard rings. (figure B)

4. Wind a length of yarn four times between cardboard circles. (figure C) Tie firmly with a knot. Leave 12 inches (30 cm) of this yarn to tie pom-pom to top of hat. Cut away cardboard circles. Trim pom-pom until smooth and even. Use yarn end to attach pom-pom. (figure D)

5. Have the members put their sewing tools in their storage boxes.
SEWING FOR OTHERS
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Making Mittens

Materials Needed:
1 or 2 sweaters with ribbing at waist and/or sleeves
Brown paper for making pattern
Pencil
Scissors
Pins
Matching yarn
Darning needles
Embroidery floss (optional)

1. To make the mitten pattern, place the hand on a piece of brown paper. Trace around the thumb and fingers. Add about 1 inch (2.5 cm) around fingers and thumb, but only ½ inch (1.3 cm or less at the wrist). This is for seam allowances and wearing ease. The length of the mittens can vary.

2. Lay the mitten patterns with the wrist edge on the ribbed section of the sweater, either on the sleeves (cut open first and lay flat) or at the waistband.

3. Cut 4 mittens for the right hand and 4 for the left. One set is for lining. The pieces used for lining do not have to be cut on the rib edge if there is a shortage of ribbing. The mitten linings can also be cut from a different sweater, in which case they can be reversible.

4. Sew the mitten pieces together with 2 rows of backstitch ¼ inch (6 mm) from the outside edge, or machine serge edges together.

5. To line the mittens, put lining mitten on the hand inside out and pull outer mitten (right side out and pull outer mitten (right side out) over first. Pin wrist edges together and overcast stitch securely.

6. Decorate mittens with embroidered initials or decorative designs. Mittens can be made very quickly for any member of the family.

7. Have members return sewing tools to sewing box.
What Members Will Learn . . .

ABOUT THE PROJECT:
• Parts of the sewing machine
• Parts of the serger
• Functions of the sewing machine and serger

ABOUT THEMSELVES:
• Confidence in their ability to use and adjust the sewing machine
• Confidence in their ability to use the serger machine
• How to make wise consumer choices when purchasing a machine

Materials Needed:
• A sewing machine for all members to view
• A serger for all members to view
• Pencils
• Copies of Activity Sheets and Member Handouts

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
As with any hobby or sport, there is special equipment that is used to perform the task. In sewing, we have two special pieces of equipment that we use to complete our projects. These items are the sewing machine and the serger. Some of you may own both, some of you may own neither. Whether you have your own or borrow, it is important for you to understand how each works, its parts, and the proper way in which to use the features of each one. Such machines are major investments by the owners, usually costing at least several hundred dollars. That is why it is essential that they are used properly, ensuring they last many years.

Learning to use the sewing machine is fun. By learning the sewing machine parts and the purpose of each before using them, you will enjoy sewing more because you will know how to fix some of the problems caused by the machine when sewing. The parts can be grouped as follows: tension disc, bobbin, upper threading system, presser foot, fabric feeders, and stitching regulators. Study your sewing machine manual to learn the parts. As a group, let’s take a closer look at parts common to most sewing machines.

Leader Notes
Welcome all members. Have them sit in a comfortable place around the machine and serger you are using for models. Have members introduce themselves, if they do not know each other. Have them tell about a machine or piece of equipment used in another sport or hobby. You begin.
TENSION PARTS
- Tension control: Used to select the correct amount of tension for the stitch, thread and fabric you are using.
- Tension disc: Used to regulate the amount of tension (drag) on the thread as it comes through the needle.
- Check spring: Used to soften the sharp tugs of the take-up lever on the thread.

BOBBIN PARTS
- Bobbin winder: Holds the bobbin in place for filling.
- Slide plate: Slides or tilts to expose the bobbin area.
- Bobbin case tension screws: Used to adjust bobbin tension (on rare occasions).

UPPER THREADING SYSTEM
- Spool pin: Holds upper thread spool(s); may be vertical or horizontal.
- Thread guides: Used to guide the upper thread from spool, to tension discs, to check spring, to take-up lever, and to needle.
- Balance wheel: Controls the operation of the take-up lever and needle and is used on some sewing machines to start the sewing operation. The balance wheel loosens the clutch for bobbin winding.
- Needle screw: Used to hold the needle in place.

PRESSER FOOT PARTS
- Presser foot: Firmly holds the fabric in place against the feed dog.
- Presser foot lever: Used to raise and lower the presser foot. When raised, this releases the tension (drag or pull) on the upper thread.
- Presser control: Regulates the presser foot pressure on the fabric.

FABRIC FEEDER PARTS
- Feed dog: Moves the fabric at an even speed under the presser foot.
- Throat plate: Encloses the feed dog and provides an opening for the needle to go through to the bobbin area. Some machines have different throat plates for different stitching, such as zigzag.

STITCHING REGULATOR PARTS
- Stitch length control: Used to determine the desired stitch length.
- Stitch width regulator: Enables you to have a variety of stitch widths (from wide to narrow) on zigzag sewing machines.

As you discuss these parts, point them out to members on the model machine you have. Allow time for questions. Pass out the Parts of the Sewing Machine handout. As you name the parts, have members fill in the spaces. See page 52 of the book, *Stitch and Wear*, located in the introduction of the notebook, for parts of the serger.
• Reverse stitch: Is a lever or button which allows you to instantly reverse the direction of stitching.

• Stitching speed: Allows you to adjust the speed at which the sewing machine operates. It is either located on the body of the machine, or the foot pedal.

OTHER PARTS
• Power switch: Turns the sewing machine on and off.
• Built-in light: Illuminates the fabric in front of the needle.
• Light switch: Turns light on and off. On some models it is combined with the power switch.
• Foot control or knee lever: Controls the speed of the machine.
• Thread cutter: A sharp area for cutting sewing thread.
• Free arm: The part of a machine bed that sticks out like an arm and allows fabric to slide onto it for less bunching around curves and ease in sewing tubular shapes.

Here is a handout that will help you identify general problems that might happen to your sewing machine.

Another machine that is used for sewing is the serger or an overlock machine. A serger adds speed and ease to sewing. Sergers stitch, cut, and overcast the cut edge all in one step. They look and stitch differently than a sewing machine. From using a conventional sewing machine, you know that it has one needle with one spool of thread, and one bobbin, and that it usually stitches one row at a time. Sergers can have more than one needle and spool of thread; they have loopers instead of a bobbin.

There are several types of sergers. They are usually identified by the stitch they form and the number of threads the machine uses. Sergers do not have bobbins. Instead, they have loopers with a hole in one end through which thread is threaded. The threads from the loopers interlock and form a finish that covers the cut edge. Sergers also have a pair of very fine, sharp cutting blades to the right of the needles. The blades cut or trim the fabric before the loopers form the finish that covers the cut edge.

Sergers have one or two needles and can use two, three, four, or five spools of thread. The three and the three- or four-thread sergers are the most commonly used. A short description of each type follows.

• Two-Thread: The two-thread serger makes a chain stitch. This stitch is sturdy, but is easy to pull out.

• Three-Thread: Three-thread sergers have one needle, two loopers, and a set of cutting blades. They require three spools of thread. One spool is threaded through a needle and stitches much like a sewing machine. The other two are threaded through the two loopers. These two threads interlock to form an overcast stitch that finishes the cut edge.
Three-thread sergers are used to stitch seams and to finish the cut edges of seam allowances. The seams stitched are moderately strong. When more strength is needed, the seams should be reinforced with a row of sewing machine stitching. Some three-thread sergers can also make a rolled hem stitch and a flatlock stitch.

- **Three/Four-Thread**: A three/four-thread serger can be used either way, making it a very popular type. When used as a four-thread serger, two needles and two loopers are used. It requires four spools of thread. Two spools of thread are threaded through two needles. The other two spools of thread are threaded through the two loopers. These machines actually make a three-thread stitch with an extra row of stitches, which is stitched by the second needle. The second row of stitching is stitched through the middle of the overcasted edge. As a result, this stitch is stronger and slightly wider than one formed by a three-thread machine.

This stitch should be used on all seams that need extra strength. Examples would be the seams stitched on blue jeans and jackets. If extra strength is not needed, avoid using it, as the seam is bulkier and uses additional thread.

- **Five-Thread**: The five-thread serger operates like the four-thread, using two needles and two loopers. It contains a lockstitch to the left of the regular serging. This stitch is less flexible and is not used as often as the three- or four-thread serging machines.

**Parts of the Serger:**
- Spool holders
- Needle thread tensions
- Upper-looper tension
- Lower-looper tension
- Presser foot lever
- Light
- Needles
- Cutting blades
- Upper-looper
- Lower-looper
- Presser foot
- Power switch
- Foot control

Since serger machines use more thread than a sewing machine, it is more economical to buy thread on large spools or cones than on small spools. Serger thread is finer than regular thread. Since sergers sew so fast, a special finish is applied to serger thread to make it extra strong for high-
speed sewing. The finer thread designed for sergers makes seams less bulky and less stiff. Serger thread can be finer because there is not as much abrasion from tension guides as on a sewing machine.

Thread on large spools or cones often is available in a limited assortment of colors, so matching thread to fabric can be a problem. If a garment requires matching thread and it is unavailable, buy matching thread on a small spool for the needle thread, and use large cone thread that blends with the fabric for the loopers.

The thread tension on a serger is controlled by tension knobs or discs. The thread tension on sergers is just as important as the thread tension on a sewing machine. When the tension is balanced, stitches are even on both sides of the fabric so there is no puckering, binding, ruffling, or loose loops. Upper and lower threads lock around each other just at the edge of the fabric.

If you or your family are considering purchasing a sewing machine or serger, here are some handouts to help you make your decisions.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. Name the part of the sewing machine that moves the fabric at an even speed under the presser foot.
A. Feed dog.

Q. How does a serger speed up sewing?
A. It stitches, cuts, and overcasts all at one time, as well as sewing more stitches per minute.

**Process:**
Q. How is a serger like a sewing machine? How is it different?

Q. What do you think is one of the most important parts of the sewing machine? Why?

**Generalize:**
Q. How will you decide whether to use the conventional sewing machine or serger?
A. Answers will vary. Things you can’t do on the serger are necessary for basic clothing construction, i.e., top stitching, button holes, lock stitch seams, etc.

Q. How would the serger be useful to you in your sewing project?
Apply:
Q. Now that you know about both types of machines, do you think that having a serger is a luxury or not? Why or why not?
A. Answers will vary, i.e., time saving in our busy lives might seem to make sergers necessary to some, while the expense for some who seldom sew would rule it out for them.

Q. Why is it a good idea to use checklists when making a major purchase decision?

GOING FURTHER:
• Take a field trip to a local sewing fair, the state fair, or a local fabric shop that sells sewing machines and sergers. Have members compare and discuss features of various makes and models. Design a checksheet for members to use to compare them.
• Have members practice winding bobbins on the machine.
• Have members experiment with different tensions on differing fabrics. Record results.
• Using two different colors in the top and bobbin threads. Sew on fabric until you get a perfect tension setting.
• Have an “instruction manual” scavenger hunt. Previously find answers about the sewing machine and serger from their instruction books. Divide members into two teams and have them look for the answers. The first team to find all the answers wins.
• Have members do a demonstration at the county fair about threading a sewing machine, serger tension, comparison shopping for machines, or some other related topic.

REFERENCES:
Stitch ‘N Wear, Ruth Gulbrandson, Clothing Specialist, and Merry Green, McHenry County Home Economist, Cooperative Extension Service, North Dakota State University, Fargo, North Dakota 58105
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
Creative Clothing, Leader’s Guide, Gail Skinner, Clothing Specialist, Cooperative Extension Service, University of Nebraska-Lincoln, Lincoln, Nebraska
Selective Overlock Sewing Machines, Joyce A. Smith and Norma Deyo, Clothing Extension Specialists, Cooperative Extension Service, Ohio University, Columbus, Ohio 43210
Buying a Sewing Machine, Marilyn Stryker, Clothing Extension Specialist, Cooperative Extension Service, Kansas State University, Manhattan Kansas 66506

Member Activity Sheet, Sewing Machine Crossword Puzzle, can be given out while members are waiting to be picked up after the meeting, or sent home to be completed.
Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Parts of the Sewing Machine

Name the parts of the sewing machine.
SEWING EQUIPMENT
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Sewing Machine Puzzle

181-Clothing & Textiles, Level II
## First Aid for Sewing Machines

<table>
<thead>
<tr>
<th>Problems</th>
<th>Probable Causes</th>
<th>Problems</th>
<th>Probable Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motor doesn’t run</td>
<td>Not plugged in</td>
<td>6. continued</td>
<td>Insufficient thread pulled through needle to start seam</td>
</tr>
<tr>
<td>Power and lightswitch turned off</td>
<td></td>
<td>7. Thread snarling at start of seam</td>
<td></td>
</tr>
<tr>
<td>2. Motor runs/machine doesn’t</td>
<td>Hand wheel knob loose (set for bobbin winding)</td>
<td></td>
<td>Machine improperly threaded—top or bobbin</td>
</tr>
<tr>
<td>3. Machine won’t turn over (locked or jammed)</td>
<td>Needle threaded in wrong direction</td>
<td>Bobbin thread not pulled up through needle hole before start of seam</td>
<td></td>
</tr>
<tr>
<td>Needle in backwards</td>
<td>Seam started without both threads placed under presser foot and drawn diagonally to right rear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle bent</td>
<td>Didn’t start seam with needle in fabric before lowering presser foot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle not all the way up into clamp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle wrong style</td>
<td></td>
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<tr>
<td>Machine threaded incorrectly</td>
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<tr>
<td>Bobbin case inserted incorrectly</td>
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<tr>
<td>Empty bobbin</td>
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</tr>
<tr>
<td>Stitch length set at zero</td>
<td></td>
<td></td>
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<tr>
<td>Needle threaded in wrong direction</td>
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<td></td>
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<tr>
<td>Needle in backwards</td>
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<td></td>
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<tr>
<td>Needle bent</td>
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<tr>
<td>Needle not all the way up into clamp</td>
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<tr>
<td>Needle wrong style</td>
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<td></td>
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<tr>
<td>Machine threaded incorrectly</td>
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<td></td>
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<tr>
<td>Bobbin case inserted incorrectly</td>
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<tr>
<td>Empty bobbin</td>
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<tr>
<td>Stitch length set at zero</td>
<td></td>
<td></td>
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<tr>
<td>4. Machine turns over but won’t form a stitch</td>
<td>Needle bent</td>
<td>8. Needle thread breaks</td>
<td></td>
</tr>
<tr>
<td>Needle not all the way up into clamp</td>
<td>Spool notch in wrong position when placing spool on spool pin/reel</td>
<td></td>
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</tr>
<tr>
<td>Needle wrong style</td>
<td>Burrs around needle hole or presser foot area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machine threaded incorrectly</td>
<td>Rough or burred thread guide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bobbin case inserted incorrectly</td>
<td>Machine improperly threaded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empty bobbin</td>
<td>Bent needle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stitch length set at zero</td>
<td>Wrong size or type needle for fabric and thread</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Machine skips stitches</td>
<td>Needle not all the way up in clamp</td>
<td>9. Bobbin thread breaks</td>
<td></td>
</tr>
<tr>
<td>Needle bent</td>
<td>Bobbin improperly or over wound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle not all the way up into clamp</td>
<td>Bobbin cast not inserted properly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle incorrectly inserted (backwards)</td>
<td>Damaged bobbin and/or bobbin case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle has accumulated lint and/or sizing, especially when sewing knits and permanent press fabrics</td>
<td>Machine improperly threaded (top or bobbin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needle wrong style for machine or fabric or thread</td>
<td>Tensions unbalanced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient pressure</td>
<td>Needle thread not seated between tension discs or under bobbin case tension spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Needle unthreads</td>
<td>Started to sew without take-up lever at highest point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Seam puckering</td>
<td>Stitch length too long for fabric</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damaged or too coarse needle</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Unbalanced tensions or balanced tensions both too tight</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Presser foot pressure too heavy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feed dog sits too high</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. continued</td>
<td>Feed dog out of time (service required)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thread too coarse for fabric</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Presser foot pressure too light</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Foreign matter between teeth of feed dog</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Throat plate and/or feed in &quot;darn&quot; position</td>
<td></td>
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<tr>
<td>12. Uneven length of stitches</td>
<td></td>
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</tbody>
</table>
SEWING EQUIPMENT
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Sewing Machine Crossword Puzzle

ACROSS

3. Moves up and down to pull thread to the needle.

6. Changes the size of stitches.

8. Holds bottom thread.

10. Hole the needle goes through to make stitches.

DOWN

1. Goes through the fabric with the thread.

2. Raises and lowers the presser foot.

4. Moves needle up and down.

5. Holds fabric as you sew.

7. Controls tightness of thread.

9. Holds spool for top thread.
SEWING EQUIPMENT
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet, Leader’s Key

Sewing Machine Crossword Puzzle

ACROSS

3. Moves up and down to pull thread to the needle.
6. Changes the size of stitches
8. Holds bottom thread.
10. Hole the needle goes through to make stitches.

DOWN

1. Goes through the fabric with the thread.
2. Raises and lowers the presser foot.
4. Moves needle up and down.
5. Holds fabric as you sew.
7. Controls tightness of thread.
9. Holds spool for top thread.
Buying a Sewing Machine

A sewing machine is a major family purchase. It should serve the family for many years. When you select a sewing machine, keep in mind the machine operation as well as the type of sewing machine that will meet the sewing needs of the family. Through careful planning of your sewing machine purchase, your sewing can be made more enjoyable and the satisfaction in your purchase will be long-lasting.

To help you in choosing a sewing machine—new or used—use this checklist. Compare several machines on operation, ease of use, care, and service in order to find the machine that will best fit your family sewing needs.

<table>
<thead>
<tr>
<th>Buying Considerations</th>
<th>Machine Checks</th>
<th>Satisfactory (meets needs)</th>
<th>Adequate (meets most needs)</th>
<th>Fair (meets few needs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>#1</td>
<td>#2</td>
<td>#3</td>
</tr>
<tr>
<td>Does it stitch evenly? Do the individual form a straight line?</td>
<td>Stitch Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can speed be easily controlled? Does it start easily? Will it operate slowly? Does it change speeds easily?</td>
<td>Speed Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the stitch length control easy to read and operate? How does the machine reverse stitching? Is reverse lever easy to handle?</td>
<td>Stitch Length</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the speed control comfortable for long periods of sewing? Does the machine stop quickly when you release the control?</td>
<td>Speed Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is the machine quiet? Is it free from objectionable noise and vibration at all speeds?</td>
<td>Quiet</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Is there a well-written and illustrated instruction book explaining how to operate, adjust, and care for the machine?</td>
<td>Instructions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the controls easy to read and understand? are they sturdy?</td>
<td>Easy To Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the machine make buttonholes? Does the buttonhole it makes look good?</td>
<td>Buttonholes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can the pressure of the presser foot be easily adjusted to heavy and lightweight fabrics? Try sewing different fabrics.</td>
<td>Pressure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can the bobbin be wound easily and evenly? Is it easy to insert and remove?</td>
<td>Bobbin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the upper and lower tension controls easy to adjust?</td>
<td>Tension</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Can the feed dogs be easily lowered, raised or covered for embroidery, darning, etc.?</td>
<td>Feed Dogs</td>
<td></td>
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</tr>
</tbody>
</table>
## Buying a Sewing Machine, *continued*

<table>
<thead>
<tr>
<th>Buying Considerations</th>
<th>Machine Checks</th>
<th>Compare and Check Three Sewing Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Satisfactory (meets needs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#1</td>
</tr>
<tr>
<td>Is the lighting adequate? Is the lamp placed or guarded so you will not be burned? Can the bulb be replaced easily?</td>
<td>Light</td>
<td></td>
</tr>
<tr>
<td>Is there a disturbing glare from light reflections on the sewing machine surface?</td>
<td>Glare</td>
<td></td>
</tr>
<tr>
<td>Is the machine easy to thread?</td>
<td>Threading</td>
<td></td>
</tr>
<tr>
<td>Is the needle simple to change? Can the needle position be adjusted to the center position and to the side positions?</td>
<td>Needle</td>
<td></td>
</tr>
<tr>
<td>Will the machine be easy to care for at home? Can the areas where lint accumulates be conveniently brushed clean?</td>
<td>Care</td>
<td></td>
</tr>
<tr>
<td>How often does the machine have to be oiled? Are the directions simple and clear?</td>
<td>Oiling</td>
<td></td>
</tr>
<tr>
<td>Is the machine portable? How heavy is it?</td>
<td>Portable</td>
<td></td>
</tr>
<tr>
<td>Does the machine need a cabinet?</td>
<td>Cabinet</td>
<td></td>
</tr>
<tr>
<td>What kind of storage will the machine require? Will it fit into the space you have at home?</td>
<td>Storage</td>
<td></td>
</tr>
<tr>
<td>Is the electrical cord long enough?</td>
<td>Electrical Cord</td>
<td></td>
</tr>
<tr>
<td>How readily are repairs available</td>
<td>Repairs</td>
<td></td>
</tr>
<tr>
<td>What is included in the warranty? Who agrees to do what, when, and where?</td>
<td>Warranty</td>
<td></td>
</tr>
<tr>
<td>What is the purchase price? What does it include?</td>
<td>Price</td>
<td></td>
</tr>
</tbody>
</table>

**Reminders**
- Don’t be afraid to ask questions about the things you want to know.
- Take time to select the type of sewing machine that will fit your needs.
- Try the machine out yourself. You will be the one who will be using it, not the salesperson.
- Don’t forget to take sample fabric swatches with you for testing. Many machines sew beautifully on stiff fabric, but some falter on lightweight or bulky fabrics.
- Sew long enough to satisfy yourself as to what the machine will do.
- Upon delivery, be sure your machine operates as the one demonstrated.
- Learn to use and operate your machine.
# Selecting Overlock Machines Buyer’s Checklist

<table>
<thead>
<tr>
<th></th>
<th>Overlock #1</th>
<th>Overlock #2</th>
<th>Overlock #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brand and Model Number</td>
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<td></td>
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<tr>
<td>2. Total Cost</td>
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<td></td>
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<tr>
<td>3. Number of Threads: 2, 3, 4, etc.</td>
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<tr>
<td>4. Number of Needles</td>
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</tr>
<tr>
<td>5. Type of Needle: Industrial or Conventional</td>
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<tr>
<td>6. Types of Stitches:</td>
<td></td>
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<tr>
<td></td>
<td>Overlock</td>
<td></td>
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<tr>
<td></td>
<td>Chain/Safety Stitch</td>
<td></td>
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<tr>
<td></td>
<td>Rolled Hem: Built in/Cost of Separate Attachment/Ease of Conversion</td>
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<tr>
<td>7. Ease of Converting to Different Stitches, i.e.</td>
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<tr>
<td></td>
<td>3 to 4 Thread Overlock to Chain, etc.</td>
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</tr>
<tr>
<td>8. Stitch Quality on Various Fabrics</td>
<td></td>
<td></td>
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<tr>
<td>9. Stitch Quality with Decorative Threads</td>
<td></td>
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<tr>
<td>10. Ease of Changing Stitch Width and Length</td>
<td></td>
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<tr>
<td>11. Ease of Threading Loopers</td>
<td></td>
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<tr>
<td>12. Color Coded Thread Guides and Diagrams</td>
<td></td>
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<tr>
<td>13. Tension Dials: Numbered, Color Coded, + or - Ease of Adjusting Tension</td>
<td></td>
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<tr>
<td>14. Knife Blades: Can Be Disengaged</td>
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<tr>
<td>15. Location of Presser Foot Lever</td>
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<tr>
<td>16. Power Switch: Yes or No</td>
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<td>17. Location of Light</td>
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<tr>
<td>18. Operates Quietly</td>
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<tr>
<td>19. Machine Stability when Stitching</td>
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<tr>
<td>20. Easy Cleaning and Oiling</td>
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<tr>
<td>21. Instruction Manual: Easy to Understand</td>
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<tr>
<td>22. Special Features:</td>
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<tr>
<td></td>
<td>Free Arm</td>
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<td></td>
<td>Differential Feed</td>
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<td></td>
<td>Swing Out Presser Foot</td>
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<td></td>
<td>Snap On Presser Feet</td>
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<td>Special Presser Feet Available, i.e. Blind Hem (Cost?)</td>
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<td></td>
<td>Tray for Catching Trimmed Fabric</td>
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<td></td>
<td>Other Features or Attachments:</td>
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<td>23. Additional Features:</td>
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<tr>
<td></td>
<td>Carrying Handle</td>
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<td></td>
<td>Travel Case</td>
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<td></td>
<td>Built in Accessory Case</td>
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<tr>
<td></td>
<td>Accessory Case Contents</td>
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<tr>
<td></td>
<td>Dust Cover</td>
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<td></td>
<td>Special Table</td>
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<tr>
<td>24. Store and Salesperson</td>
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<tr>
<td>25. Availability of Service</td>
<td></td>
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<tr>
<td>26. Warranty</td>
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<tr>
<td>27. Lessons/Classes</td>
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</tbody>
</table>
Apparel Production
Clothing & Textiles, Level II, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
- Techniques of handmade stitching, different types of seam finishes, darts, gatherings, buttonholes, top stitching
- Appropriate use of each of these techniques

ABOUT THEMSELVES:
- Confidence from learning and practicing advanced construction skills
- Sewing skills can be improved with practice and patience

Materials Needed:
- Let members bring a pattern and fabric of their choice to begin work
- Have samples for the members to look at (Area Extension Offices have a Construction File for check out)
- Have fabric scraps cut and ready for members to practice the mentioned techniques or to make their own construction file or notebook
- Copies of Activity Sheets and Member Handouts
- Copies of patterns for tool apron or shower wrap

ACTIVITY TIME NEEDED: 60 TO 90 MINUTES, OR COULD BE EXPANDED TO TWO SESSIONS

ACTIVITY:
As you learn to sew, you will find that all the steps become easier with practice. (You should have already done some machine sewing.) As you add a new technique, it may seem very difficult at first, but with practice and experimentation, it will get simpler. There is much more to sewing than a straight machine stitch. We will talk about some of the skills that will allow you to expand the kinds of items you can create. Don’t be discouraged if these techniques don’t seem easy at first.

Once you have decided upon a project, purchased the fabric, preshrunk it, and cut it out, you are ready to begin to sew. The best place to begin is with your pattern directions. Follow them step by step. As you learn new methods, you may feel comfortable changing some directions, but until you do, it is best to follow the pattern guide. Don’t be discouraged if the instructions seem hard to understand. Sewing has a language all its own, and you will be learning this new language. Sometimes it takes rereading directions before they are clear.
Leader Notes

It is best to read directions, reread them, prepare the garment for the treatment, and then compare it to the picture and directions once again before performing the actual step. This can save you valuable time by reducing “rip-outs.”

Today, we will talk about some special production terms. That way you will understand them and why they are important when you create garments.

The first thing most patterns tell you to do is staystitching. Staystitching is regular stitching done just inside the seam allowance to prevent stretching or to hold your pieces in shape while you are sewing them. Your pattern guide sheet shows the direction to staystitch. To staystitch, use matching thread, stitching on a single thickness with the grain, ⅛ inch inside the seam allowance. Do not backstitch or tie threads.

**Basting** temporarily holds fabric pieces together and can be done by hand, pins, machine, glue, or water soluble basting tape. Your guide sheet will tell you when to machine baste. You may want to pin baste or hand baste the fabric pieces together for fitting or machine stitching. Experienced sewers sometimes pin baste and fit before stitching.

To pin baste, place pins across the stitching at a right angle, if using a conventional machine. If using a serger, place pins the same direction as the stitching, or parallel to the edge and far enough back that they will not catch under the needle or cutter. For both types of machines, make the cut edges even and pin seam ends and notches first; add more pins if needed. To hand baste, use a needle with single thread in a contrasting color, and take short stitches. There are various types of basting stitches to use in sewing.

Use even basting stitches to hold fabric together for fitting or machine stitching. Uneven basting, a stitch made with a short stitch then a long stitch, is used to mark fold lines and location lines, such as the center front, button holes, or pockets. Long stitches are placed on the right side. Slip basting is made by working on the right side of the fabric, and used to match plaids and strips, hold pockets in position, and hold fitting adjustments in place. Diagonal basting is used to hold interfacing to the fashion fabric, hold the lips of buttonholes together, and keep the edges of the garment from pulling apart. To machine baste, pin baste first, then set machine to longest stitch, use contrasting thread, and baste just inside the seamline.

**Darts** are used to shape fabric to fit your figure. They provide fullness to fit body curves. Not all garments have darts, due to the design or fabric stretch. It is important that you are accurate in fitting, marking, stitching and pressing darts. Choose a marking method appropriate for your fabric. For darts, mark the stitching line, the center fold line, and any matching dots or symbols from the pattern to the fabric.
When sewing the darts, fold the dart on the center line to bring the marked stitching lines together. Pin at the point, at the wide end, and along the seamline. Add pins as needed along the stitching line. If you wish, hand baste along the stitching line. Start the machine stitching at the wide end of the dart and backstitch to secure the threads. Hold the tails of thread on the fabric as a stitching guide. (Stitch toward the point gradually so the last two or three stitches are along the fold. This will result in a smooth, pucker-free point end.) Run off the end of the fabric, then pull it toward you 1 to 1½ inches. Then make three or four small stitches in the dart allowance to replace the knot. (See sample in the Construction File, Area Extension Office).

Before pressing the darts, be sure the fit is correct. Then, press the folded side of the dart flat the way it was stitched, but be careful not to press beyond the point. Next, open out the garment, wrong side up, and shape the dart by finishing the pressing over a pressing ham or rounded surface. Press the dart in the direction that allows the smoothest finish. If the fold of a dart tends to make a ridge on the front of the fabric, slip a piece of paper between the dart and the fabric before pressing firmly.

A **seam** is made of two layers of fabric with a line of machine stitching. Seams are usually functional, but some are also decorative. The standard seam allowance is ⅝ inch, but some patterns may have a different seam allowance, so always check. When stitching seams, use your sewing machine throat plate markings to help you maintain an even width. NOTE: If your machine does not have this marking, accurately mark and place tape on the machine. Always press a seam open before crossing with another seam. It is important to secure stitching at the beginning and end of the seam.

**Seam finishes** are important on fabrics that may ravel or roll, or will receive much wear. Some firmly woven fabrics and double and single knits may be left unfinished.

It is wise to try several seam finishes before deciding if you need to use one and which one to use. Different fabrics call for different finishes. To decide, consider:

- The fabric type and weight, whether it is woven or knit, its tendency to ravel or run, or the tendency of the seam edges to roll.
- The wear and care the garment will receive. Garments which are worn and washed frequently will need more durable finishes than infrequently worn or fad-type garments.
- Whether or not the seams will be seen. An unlined jacket requires attractive seam finishing, while a lined garment may need no seam finish or only one which will prevent raveling.

Types of seam finishes include:

- **Machine stitched**—Use a line of short machine stitches (10 to 12 stitches per inch or 2.5 to 3.0 setting) ⅛ inch from the edge of the seam allowance. Allow the ¼ inch edge to fray and soften for fabrics

Have members practice this skill.

Handout visuals, Stitching Illustration Guide.
Leader Notes

Allow members to practice these seam finishes on various fabric types. Have them first sew the seams, then experiment with the different finishes to decide which one would be best for their fabric and skill level. Hint: Sometimes seam finishes are easier to do before stitching the garment seams . . . especially when serging pant legs or sleeves.

With tightly twisted yarns, to prevent the edge from forming a ridge visible to the right side. This is a quick but not long lasting finish.

- Stitched and pinking—Use a line of short stitches ¼ inch from the edge of the seam allowance. Then cut the edge of the seam allowance with pinking shears. This finish allows for the softening of the edge by pinking and minimizes raveling.
- Zigzag—Test a sample of your fabric using a short stitch length and medium stitch width (2.0 to 2.5). Stitch near, but not on the edge of, the seam allowance for soft fabrics; stitch over the edge for firm fabrics. Multi-stitch zigzag, machine overedge, or blind stitch may also be used. Check that the seam finish remains flat, not causing a ridge or imprint when pressed and not stretching or rippling. Readjust stitch length, width, and location on the seam allowance, if needed. After zigzagging, trim the edge of the seam allowance to stitching if needed. This is an effective finish to prevent raveling.

Understitching is an extra row of machine stitching added after an area such as a collar or neckline has been completed. Understitching prevents a facing or under section of a collar or cuff from rolling outwards. It is easiest to understitch on the right side of a garment.

First, grade the enclosed seam and clip or notch if necessary. Turn seam to facing or under collar/cuff. On the right side, stitch close to the original seamline catching the seam to the facing or under collar/cuff.

Gathering is used to control a large amount of fullness that is part of the garment design. Areas that might use gathering are waistlines, cuffs, yokes and ruffles. Gathers should be evenly distributed without gaps or folds. Gathers are indicated on patterns by seamlines labeled “gathering line.” Dots or circles show the beginning and ending of the area to be gathered. These symbols should be transferred from the pattern to the fabric when you do the marking.

Before gathering, be sure to stitch, edge finish, and press open any seams that will be crossed by the gathering. The gathering stitch should be slightly longer than the normal stitch used for seams. You may want to test this length.

Stitch two parallel rows of gathering stitching in the seam allowance. Put the first row of gathering ⅜ inch from the edge and the second row ⅝ inch from the edge. The seam is then sewn on the ⅝ inch line. Remove the gathering stitch that is ⅜ inch from the edge.

Another way of gathering is to use zigzag stitching over a thin, strong cord (Dental floss works great!) Set the machine for medium-stitch width and medium-stitch length. Place the cord ¼ inch above the seamline and zigzag stitch over the cord to hold it in place. If needed, adjust the stitch width in order to avoid stitching into the cord. To draw up the gathering, pull on the cord from one end. This method is especially good for long areas that are to be gathered since gathering threads break easily.

Pass out Member Handout, “Gathering” for more specific details and illustrations.
To attach a gathered edge to a straight edge, pin the right sides of the fabric together at any points of matching, such as notches or center front and center back seams. Temporarily fasten the bobbin threads at one end by winding them in a figure-8 around a pin. Pull the bobbin threads at the opposite end by sliding the fabric along the bobbin thread until the edges match in length. Secure the threads around a pin in a figure-8 and repeat from each end until the edges match and the gathers are evenly distributed. Pin crosswise to the cut edge as needed in the body of the garment (never on the stitching line; broken needles!) to hold the gathers in place and keep them from slipping or bunching.

Readjust the sewing machine to the correct length of stitch for seams before stitching the gathered and straight edges into a seam. Place the gathers on the bottom so that the feed dog can assist in pulling the gathers through evenly.

Press the seam allowance flat as it was stitched, using the tip of the iron. Finish the gathered seam edge. Open the garment flat with the straight edge folded back. This leaves the gathers so you can press them. Press the seam allowance with the tip of the iron, being careful not to press folds into the gathered section. When you press the gathered area, work by directing the point of the iron into the gathers.

**Buttonholes** must be all the same length and width, stitched on grain, and an even distance from the edge. They should be just large enough to let the button slip through easily, but small enough to hold the garment closed. Always make, cut, and try a sample buttonhole before making buttonholes on your garment.

For flat buttons, buttonhole length should equal the diameter of the button, plus the thickness of the button. Mark buttonhole placements on the overlap section only.

On very stretchy fabric, the area under the buttonhole should be stabilized with a lightweight interfacing. This will prevent the buttonhole from having “fishlike” lips. If your garment has not been interfaced before, add a rectangular shaped piece of interfacing under each buttonhole area.

Follow your sewing machine directions for making buttonholes. Practice making sample buttonholes on two scraps of your fabric with interfacing until you are happy with the way it looks.

After you have made a sample you are satisfied with, check these points:
- Stitching is secure
- Stitching is uniform
- Thread matches unless you want a contrast
- Buttonhole is on grain
- Buttonhole is interfaced
- Right length for button
- Buttonhole is neatly slashed (place a pin just inside each end of the buttonhole before you cut to reduce the chances of cutting through the ends)
If these are done to your satisfaction, take a moment to check the garment on which you will be applying them. Are the buttonhole spaces:
  • marked the same distance apart?
  • placed in the right spots to hold the garment closed securely?
  • providing enough overlap when buttoned?

Make your buttonholes. Here are some cutting tips.
  • To prevent thread ends from poking out after cutting the buttonhole, put a narrow line of seam sealant (Fray Check, No Fray, Fray No More) along both lips of the buttonhole before and after cutting it open.
  • To keep from cutting past the ends of the buttonhole, insert a straight pin at each end of the buttonhole stitching.

As you gain skill, these techniques will become much easier and faster for you. The more you attempt these skills, the more satisfying sewing will become for you. Look for patterns that have only the skills you have practiced. This way, sewing can be fun and challenging instead of frustrating.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. Name two seam finishes.
A. Pinked, machine stitched, zigzagged.

Q. Why are darts sewn into garments?
A. Darts are used to shape fabric to fit a curve.

Q. Why do you only press to the point of a dart and to the seamline of gathers?
A. So that the outside of the garment looks neat without crease lines or ridges.

**Process:**
Q. Name three traits of a well-made buttonhole.
A. Stitching is secure and uniform, thread matches unless you want a contrast, buttonhole is on grain and interfaced, it is the right length for the button, and the buttonhole is neatly slashed.

Q. What skill seemed the most difficult for you? Why?

**Generalize:**
Q. Which of the skills that you have learned in this lesson seem to be the most useful and helpful sewing techniques that you will use in the future. Why?
A. Answers will vary, i.e., buttonholes, seam finishes, gathering, pressing.
Apply:
Q. What other hobbies or careers have their “own language?”
A. Computer, building construction, art, etc.

Q. How will you decide what seam finishes are appropriate for your fabric? How will the laundering procedure affect this decision?
A. Ravel of the fabric, are the seams to be visible, will correct care be given to this garment, how often it will be worn.

GOING FURTHER:
• Have members practice these skills at home and return with samples.
• Have members judge each others samples and make suggestions.
• For a community service project, have members host a repair clinic for a local homeless shelter that receives donated items in need of repairs.
• Members may want to volunteer to sew on buttons, etc., for elderly or shut-in persons.
• Have a sewing Olympics—the first person with a quality project wins. Projects must all be the same.

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Stitching Illustration Guide

Basting
To hold two or more layers of fabric together temporarily, hand basting is used. There are many types: even, uneven, diagonal, and slip basting.

Even basting is small stitches of the same length which are used to hold fabrics together that need a level of high control.

Uneven basting is long stitches which are used for marking seam lines and holding low control areas together.
Diagonal basting is small horizontal stitches which are a short distance from one another in order to create diagonal floats on the top fabric. The needle is worked right to left for this basting stitch. Smaller stitches have more control and longer stitches have less control.

Slip basting assists in accurate matching of plaids, stripes or other directional fabrics. It can also be used for fitting and for curved sections. Slip basting is done by working the needle from right to left with \( \frac{1}{4} \)-inch stitches with seam allowances matched and the top layer folded back along the seam. Stitches are taken bottom to top layer across the length of the seam.
Blind Stitch
This is an optional stitch for some machines. See instruction manual for setting. Generally used on knit fabrics to allow for stretch in the seam.

Machine Stitched
Stitch ¼ inch from raw edge.

Multi-stitch Zigzag
See machine instruction book to set multi-stitch zigzag and stitch close to seam allowance edges.
Zigzagged: Remember, stitch only on the edge of the seam allowance, not through the outside of the garment. Set stitch for medium width and short (about 15) length. Then stitch near, but not on, the edge of seam allowance. Trim close to stitching. This is one of the quickest and most effective ways to finish a fabric that ravels. It can be used for a knit, but special care must be taken not to stretch the seam edge, or it will ripple.

Stitched and Pinked: Using a short stitch, place a line of stitching ¼ inch from edge of seam allowance, (stitching only through seam allowance edge) then pink edge. This finish can be used when pinking is desired, and it will minimize raveling.
Edgestitch close to each seam edge. Set the machine to straight stitch. Guide the right edge of the presser foot along the cut edge of the fabric. (stitching will be $\frac{1}{8}$ to $\frac{1}{4}$ inch, 6 millimeters, from the cut edge)
Gathering

The purpose of gathering is to supply fullness as part of the design of a garment. Garment areas which may use gathering are distributed without gaps or folds. Gathering may be done by hand, but it is more even if done by machine.

The pattern symbol for gathering is the labeled seamline. Dots or circles frequently indicate the beginning and ending of the area to be gathered. These symbols should be transferred from the pattern to the fabric. Usually, gathers reduce fabric one-third to one-half its original width. Plan 1½ to 2 times the finished length if you are not using a pattern.

Before beginning gathering—stitch, finish, and press open any seams that will be crossed by the gathering. Adjust the sewing machine upper tension to slightly looser than normal. An unbalanced tension makes pulling the bobbin thread easier. Test stitch lengths suitable for your fabric. Stitch lengths may vary from 6 stitches per inch (3 to 4 mm long) for thick, heavy materials, to 12 stitches per inch (2 to 2.5 mm long) for sheer, light fabrics. Use the shortest stitch length suitable for your fabric to give the most control of the gathers.

Stitch two parallel rows of gathering in the seam allowance. Locate the first line just inside the seamline and the second line ¼ inch (6 mm) from the first in the seam allowance. If your fabric does not show needle holes after stitching has been removed, the gathers can be better controlled by locating three rows of gathering ¼ inch (6 mm), ½ inch (1.3 cm), and ¾ inch (1.9 cm) from the cut edge. The seam is sewn between the two lines, then the ¾ inch (1.9 cm) line of stitching is removed. Stitch the rows of gathering from the right side.

If the fabric is heavy, stitch under the seam allowance, stop short of the seam, and start again on the other side of the seam leaving long thread ends to pull.

Zig zag stitching over a thin strong cord (dental floss works great!) or a double length of thread is used for long gathered edges or bulky fabrics. Set the machine for medium stitch width and medium stitch length. Place the cord or doubled thread ¼ inch (3 mm) above the seamline and stitch over the cord to hold it in place. Adjust stitch width if needed in order to avoid stitching through the cord.
Gathering, continued

A gathering foot automatically gathers with each machine stitch. The longer the stitch, the closer the gathers will be. Determine the desired closeness and fabric needed by measuring a sample before and after gathering. Refer to your sewing machine manual for directions on operating the gathering foot.

To attach a gathered edge to a straight edge, pin the right sides together at any pints of matching such as notches, center lines, and seams. To evenly distribute gathers in a long area, find the center point of each section and pin, then continue to match the centers of each section of fabric. Temporarily fasten the bobbin threads at one end by winding them in a figure 8 around a pin. Pull bobbin threads at the opposite end by sliding the fabric along the threads until the edges match in length. Secure threads around a pin and repeat as needed from each end until lengths match and gathers are evenly distributed. Pin as needed to hold gathers in place.

Adjust sewing machine to balanced tension and appropriate length stitch for seams before stitching seam with gathered and straight edges. Stitch on the seamline with the gathered side up—watching that pleats are not formed. Trim any seam allowances which are crossed.
Press the seam allowance flat as it was stitched using the tip of the iron. Finish the seam edge with a zigzag or overedge stitch, or apply a woven seam binding, twill tape, or grosgrain ribbon stay if the seam will receive stress, as a waistine seam. Open the garment flat with straight edge folded back and the gathers extended. Again, press the seam allowance with the tip of the iron, being careful not to press folds in the gathered section. When you press the gathered area, work by directing the point of the iron into the gathers.
Stitching Darts

Darts are used to shape a garment so it fits around your body’s curves. Marking Darts (see A):

Mark the darts on the wrong side of the fabric in one of these ways:
1. Using a fabric marking pen or chalk:
   • Mark the outer ends and the point of each dart.
   • Connect the ends and the point to mark the stitching line.
2. Mark the dart’s outline using a tracing wheel and tracing paper.

Stitching Darts

1. Fold the dart, right sides together, so the outer ends and the stitching lines meet.
2. Place the fabric under the presser foot. Lower the needle into the fabric at the outer edge of the dart.
3. Lock stitching by backstitching or stitching in place several times. Then, stitch from the dart’s outer edge to its point (see B).
4. At the point of the dart, stitch 2 or 3 stitches along the fold. This makes the end of the dart smooth and prevents a “dimple” (see C).
5. Tie threads by “chain stitching.”
   • Sew off the fabric, allowing threads to chain and lock together. Chain for 1 inch to 2 inches (2.5 cm to 5 cm).
   • Attach the chain of stitches to the dart fold by sewing 2 or 3 stitches in the fold. Clip threads (see D).

As you gain experience, try this shortcut for marking and stitching darts:
• Mark only the ends and point of the dart with a marker or chalk. (Or mark the ends with “nips” and the point with a pin.)
• When you’re ready to sew, match the dart’s outer ends.
• Lower the needle into the fabric.
• Find a piece of lightweight cardboard at least as long as the dart. Before lowering the presser foot, place the cardboard between the ends and the point of the dart.
• Stitch, following the cardboard as a guide (see E).
Materials needed:
\( \frac{2}{3} \) yard of 44-45-inch fabric
Contrasting thread
\( \frac{1}{4} \) yard fusible interfacing
4½ yards of foldover braid
Matching thread for braid

Suggested fabrics; Level 2—duck, medium-weight poplin, broadcloth, muslin, chambray; Level 3—canvas, denim

1. Make pattern on see-through paper.
   • Trace apron and pocket
   • Trace tool shapes from stitching guide

2. Cut out from fabric (see A).
   • Apron
   • Pocket

3. Cut out from fusible interfacing.
   • Pocket

4. Cut the fold over braid.
   • 43 inches for bottom edge of apron
   • 87 inches for apron sides and ties
   • 20½ inches for top edge of pocket
   • 9½ inches for top edge of apron

5. Trace, using white tracing paper
   • Pocket division lines
   • Tools on three pocket sections
APPAREL PRODUCTION
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Tools of the Trade Apron, continued

To decorate your apron
1. Fuse interfacing to wrong side of pocket, using manufacturer’s instructions.
2. Machine stitch around the outlines of the tools, using decorative stitches indicated on stitching guides. (Practice these stitches on scraps of fabric) (See B)

Applying fold over braid
1. Always place the narrower edge on top (see C).
2. Use the inside toe of the presser foot as your guide for straight stitching.

Ready to sew
1. Apply the 9½-inch piece of fold-over braid along top edge of apron (see C).
2. Apply the 20½-inch piece of braid along the top edge of pocket.
3. Position the pocket on apron and pin in place. Now, machine baste pocket around the outer raw edge (see D).

Finishing touches
1. Apply the 43-inch piece of braid around the bottom and sides of apron.
2. Apply the 87-inch piece of braid around the upper sides of apron.
3. Allow 20 inches for each tie and 23 inches for neck (see E).
APPAREL PRODUCTION
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Terry Shower Wrap

Materials Needed
¾ to 1 yard of 45-inch wide terrycloth. Yardage is determined by length desired. For boys: From waist to desired length. For girls: From high bust (above the bust, just under the armpits) to desired length. Washable, contrasting fabric swatches for applique
Matching thread
1 yard ¾ inch wide no-roll waistband elastic
Hook and loop fastener dots or strip
Tissue paper

1. The width of the terry shower wrap is determined by the waist or high bust measurement plus 12 inches. The extra 12 inches are necessary for the overlap and 1-inch self-facing on each side.

2. For the length, figure the desired finished length, plus 3 inches. 1 inch will be turned over for the elastic casing, the other 2 inches will be for the 2-inch hem.

3. Overcast the four outside edges of terrycloth using the multiple stitch zigzag, the overlock or the double overlock stitch.

4. Fold top edge down 1 inch, pin, press and topstitch with a medium straight stitch. This makes the casing for the elastic to slide through.

5. The ¾ inch no-roll elastic should be approximately 5 inches shorter than the width of wrap. Double check this measurement by comfortably stretching the elastic around the waist, for a boy, or above the bust for a girl. Be sure elastic is long enough for the 5-inch overlap.

6. Fold up a 2-inch hem. Press and topstitch with a medium length straight stitch.

7. Feed elastic through casing and fold back 1 inch self-facings on both sides. Stitch facing down with the straight stretch stitch so each end of elastic is securely caught into the stitching.

8. Try wrap on, and mark loop fastener placement so wrap is held closed. Stitch hook and loop fastener in place, using the straight stretch stitch or a tiny zigzag stitch. Note: There will be at least 5 inches over lap so wrap won’t flap open.
Terry Shower Wrap, continued

9. Transfer applique design to a piece of paper (newsprint or tissue paper).

10. Pin a larger piece of fabric than needed for the applique to the right side of garment. Place transferred pattern over applique being sure pins will not interfere with stitching.

11. With a straight or tiny zigzag stitch, follow the design so the appliqued fabric is stitched in place. Tear away excess paper.

12. Trim away excess fabric from the right side of applique. Topstitch around applique with a satin stitch or the stretch blind hem stitch on the widest stitch width and ½ stitch length.
Wearable Fiber Art
Clothing & Textiles, Level II, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• Recognize wearable fiber art
• How fiber art has been passed through the generations
• How to do one type of fiber art

ABOUT THEMSELVES:
• How to express creativity through designing a fiber art project of their own
• Possible links to their heritage by tracing ethnic wearable art

Materials Needed:
Depends upon the activity chosen; check the instruction sheets:
• Copies of Activity Sheets
• Each member should bring one sweatshirt or T-shirt or fabric scrap
• Examples of fiber arts (you may want to hold the meeting at a local museum)
• Materials for the chosen project

ACTIVITY TIME NEEDED: 60 TO 90 MINUTES, DEPENDING ON ACTIVITY CHOSEN. IF YOU CHOOSE TO MEET AT A MUSEUM OR CRAFT SHOP, TWO MEETING TIMES WILL BE NECESSARY. THE SECOND MEETING COULD BE FOR THE MAKING OF THE PROJECT.

ACTIVITY:
Art is defined as:
• Human creativity
• Skill
• Any specific skill/craft or its application
• A making of things that have form or beauty
If we consider these definitions, then it is easy to think of creating items from textiles as an art. Truly, any item we make in sewing takes skill, is creative, and is an application of this skill. Today, we will focus on the creative aspect of sewing; something that takes us a step beyond following a pattern.

As we have talked before, textile art in many cases has been handed down from one generation to the next. Knitting, crochet, cross-stitch, embroidery, tatting, rug hooking, needlepoint, smocking, and many other skilled art forms have survived the generations. What heirloom textile items does your family have, i.e., a quilt, or dresser scarves, or homemade hats. Most of us have these items, and many of us may have actual garments that

Leader Notes
Welcome all members. Have them sit in a comfortable place. Have all supplies ready and the work area prepared. If members do not know each other, have them introduce themselves. Ask them to tell about a particular piece of wearable art that comes to mind. You begin.
(Think about items for sale at bazaars: painted sweatshirts, accessories, needlework, ethnic dress, etc.)
were made many years ago. If you do, take proper care of these so that they may continue to be family treasures. See lesson “Care and Storage of Heirlooms and Special Items,” Level IV, for heirloom care.

Today, we have a whole new generation of possibilities to choose from as we decide to express ourselves through what we wear and create for our homes. New chemicals and fabrics have expanded not only what is available for us to experiment with, but also how much time is required to achieve the results. As our time constraints tighten, we can purchase items that have been partially completed for us. We can buy prepackaged kits or kits that speed finishing an item after we have done the artwork.

**DIALOGUE FOR CRITICAL THINKING**

**Share:**
Q. How does creating items from textiles classify as an art?
A. It is an expression of human creativity, skill, application of skill/craft, and making of things that have form or beauty.

Q. What are some of the textile arts that have been handed down from one generation to the next?
A. Knitting, crochet, cross-stitch, embroidery, tatting, rug hooking, needlepoint, smocking, quilting, and many others, encourage members to think of as many as possible.

**Process:**
Q. What textile art forms do you have at home? Share their history with your group.

Q. Name some person in your community who you have admired for wearable art they have made or worn.

Q. Would you feel comfortable wearing this type of garment? Why or why not?

**Generalize:**
Q. If you would do this project again, what would you do differently?

Q. What is the next wearable art project you would like to attempt?

Q. What was the hardest part of this project?

**Apply:**
Q. How can you use these ideas to decorate your home space?

Q. How have fashion designers used wearable art in their designs?

**GOING FURTHER:**
- Visit a local arts and craft store for ideas on other wearable fabric art projects.
- Have members look for ideas for other projects and bring them to the next meeting.
• Take members to an art gallery that contains some textile exhibits and look for the special characteristics that might have caused it to be labeled art.
• Take members to a museum to look for historic textile products.
• Have members visit a local ethnic celebration, noting the fiber art that is worn or present for exhibition.
• Have members trace and record their family textile heirlooms.
• Have members plan for an item they would like to create for an heirloom from their time.
• Have members hold a textile art contest for the community.
• Have members display their creations at the fabric store, mall, or school.
• Have members start to collect a 9-inch square of fabric from all sewing projects for use in an art project later.

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WEARABLE FIBER ART
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Bicycle Back Pack

Materials Needed:
¾ yard sturdy 45-inch fabric (cotton duck, denim, corduroy or vinyl)
1 spool thread
14-inch zipper
2 yards—1 ¼ inch wide rickrack
1, 12-inch Decorative Strip Velcro® Quick Sewing Fastener

Use ½ inch seams throughout.
1. Cut back pack fabric according to measurements.
2. On outer bag, pin trim 2 inches from edge as shown. Miter corners. Stitch trim to bag 1 inch beyond fold line on each side (A).
3. On inner bag, cut along cutting line. Apply zipper to cutting line edges according to package instructions. Open zipper.
4. With right sides together, pin inner bag to outer bag. Stitch around outside. Trim seam and turn bag to right side. Press.
5. Pin straps to back as shown. Adjust length and position to suit you. Stitch in place (C).
6. To keep bag closed, hand or machine stitch Velcro Decorator Strip fastener to position for closing (D).
WEARABLE FIBER ART
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Happy Face Coin Purse

Materials Needed:
Felt in the following sizes:
5-inch circle (face back)
7-inch circle (face front)
Two quarter size circles (outer eyes)
Two tiny circles (inner eyes)
Spool of thread
7-inch zipper
14-inch length of yarn-type fringe
Fabric glue

1. Cut through 7-inch circle as shown. Shorten zipper by whip stitching over closed coil 3½ inches above bottom stop. Cut off excess zipper ½ inch below whipstitching as shown.

2. Apply zipper according to package directions along the two straight edges. Trim circle to 5 inch diameter and zipper seam allowances to ¼ inch.

3. Fold fringe in half to form double thickness of hair. Center on top of other circle and pin in place. Place circle with zipper over circle with fringe. Topstitch around circle ⅛ inch from the edge.

4. Glue eyes in place.
WEARABLE FIBER ART
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Fancy Laces

Materials
- Ribbon or fabric in the amount dictated by the chosen design (see below)
- 1-inch wide transparent tape
- Round wooden toothpick
- Wax paper scraps
- Tacky glue

Perfect Shoelace Tips (see illustration below)
1. Place one end of the shoelace (ribbon or fabric tube) on wax paper. Spread glue across ¾ inch of the end, then use the toothpick to roll the end tightly. Remove the toothpick, then secure the end by rolling a 1½-inch piece of tape around it. Clip the end. Repeat with the other ribbon ends.
2. Dip each ribbon end into the glue bottle up to the tape edge, until the taped tips and ends are smoothly covered with glue (A). Place them on waxed paper and allow them to dry overnight.

A Little Ribbon!
Shoelaces from sheer ribbons are the fastest version, and you’ll love the new striped, printed and solid varieties. Choose ¾ to 1½-inch wide ribbons for the best results. Note: Avoid grosgrain and satin ribbons, as the former is too thick to make a nice tip, and the latter is too slippery to keep tied.
1. Cut two pieces of ribbon the necessary length (use existing shoelaces as a measuring guide), plus 2 inches, cutting the ends straight across.
2. Finish the ends as explained under Perfect Shoelace Tips.

Favorite Fabrics
Coordinate your shoelaces to special garments, using stripes, plaids or prints to add visual vitality to a simple shoe.
1. Cut two 1-inch wide bias fabric strips the necessary length (use existing shoe laces as a measure guide), plus 2 inches. Tip: Use nylon/Lycra-blend fabric cut on the straight grain for novel stretchy shoe laces.
2. Fold one fabric strip in half lengthwise, right sides together; stitch in a 1⁄8-inch seam, creating a tube. Turn the tube right side out and cut the ends straight across. Repeat with the other fabric strip.
   Tip: Use a tube-turning tool, such as the Fasturn for faster results.
3. Finish the ends as explained under Perfect Shoelace Tips.
WEARABLE FIBER ART
CLOTHING & TEXTILES, LEVEL II, CREATING WITH FABRICS AND FIBERS
Activity Sheet

Fringes, Patches and Piping!

Neat Ideas
- Embellish denim garments with decorative “patches” (actually a form of cutwork): Cut out the desired shape from the denim, layer the denim over a contrasting fabric, such as lace, gingham, calico or metallic, so the contrast fabric peeks through the cutout, then stitch two rows of topstitching around the cutout at the desired width from the edge. The denim edges might fray a bit, but this will just enhance the look, and the topstitching will control the fraying.
- Add strips of washable synthetic leather or suede to jackets and jeans.
- Add a decorated denim pocket and epaulets to an old white shirt, or a jeweled denim yoke to a dated white T-shirt.
- Use striped chambrays or bright calicos for upper pockets, upper collar and under cuffs on a jeans jacket.
- Replace the collar and cuffs of a jeans jacket with a contrast or matching finished knit collar and cuffs.
- Apply by-the-yard metal zippers as piping.
- Embellish garments with fringes. Fringing a straight edge:
  1. Pull the threads to fringe the edge to the desired depth rather than trying to find the straight grain (difficult on twills).
  2. Topstitch ⅛ inch above the fringe upper edge, using a contrasting heavier thread or matching all-purpose thread.
  3. Stitch again ¼ inch above the first row of stitching for more durability.
- Making a seam-insertion fringe trim: Fringe, as explained above, eliminating the topstitching and cutting the unfringed fabric with a ⅝ inch seam allowance.
- Making strip fringe: Strip fringe consists of narrow strips cut up to within ⅛ inch of an anchor stitching line. It’s made on the bias to prevent fraying, and the bias causes the fringe to curl. Then follow these steps:
  1. Draw a line at the desired fringe depth; topstitch ⅛ inch above the marked line.
  2. Cut the fringe strips ⅜ inch wide or wider (to prevent fraying) to ⅛ inch from the topstitching line. Note:
     Cut out seam-insertion strip fringe ⅝ inch above the topstitching (this will be the seam allowance); insert where desired.
Echoing Appliques

Echoing combines applique, quilting and free-motion sewing.
1. Complete the applique
2. Place a piece of fleece under the fabric which had been appliqued.
3. Set the sewing machine as you would for machine monogramming.
   a. Remove the presser foot and replace with a darning spring or darning foot.
   b. Lower or cover the feed dogs.
   c. Loosen the top tension.
   d. Lower the presser bar before sewing.
4. Place the applique under the presser bar; bring the bobbin thread to the top of the fabric by turning the hand wheel one complete turn. Lock the stitch by sewing a few stitches; clip the thread.
5. Moving the fabric slowly, stitch around the applique. Sew at a consistent speed for even stitches. This stitching line can be any distance from the applique.

Because of this free form, you decide the number of rows of stitching you want around the applique and the distance between the rows. You may want 3 to 4 rows of stitching, or quilt the entire garment piece.
6. Trim the excess fleece from the back of the fabric where the stitching lines stop.
7. After you have completed the quilting, finish the garment.
What Members Will Learn . . .

ABOUT THE PROJECT:
- How to make a wardrobe plan and begin a wardrobe inventory
- How to use the “scarecrow” process
- How to estimate clothing costs

ABOUT THEMSELVES:
- Decision making skills used in making clothing choices and financial plans for their personal wardrobe
- Self-confidence in determining proper fit

Materials Needed:
- Wardrobe Inventory—Members should complete this inventory before they come to the meeting, so it should be assigned earlier. Complete a file card for each garment in your wardrobe. Include style name or sketch, color, a swatch, if possible, size, care instructions, date, and original cost. Number the cards in the top corner (e.g. T-shirt 1, T-shirt 2, jeans 1, jeans 2, etc.) While scarecrowing, (see directions on page 218 of this lesson) write down the combination (e.g. T-shirt 1, shirts 5, socks 10, shoes 2).
- Copies of Activity Sheets and Member Handout
- Current copies of magazines showing fashion trends

ACTIVITY TIME NEEDED: 60 MINUTES. THIS LESSON IS BEST DONE IN TWO OR THREE LESSONS.

ACTIVITY:
Building a workable wardrobe doesn’t just happen, it takes both planning and effort. The first step in wardrobe planning is to make a wardrobe inventory of the clothes and accessories you have. A well planned wardrobe contains enough variety to take you from weddings to picnics without special purchases. It can be challenging, fun, and rewarding if you do it right. If you choose not to plan, your wardrobe may become a constant, expensive frustration.

How many of you wanted to throw away all your clothes and start over as you were filling out your inventory? That sounds much simpler, but unfortunately this is not practical for most of us. Look at the inventory cards you completed. Did you have any items that you dislike and have not worn in a year? If so, get rid of them, or if it still fits, determine what you don’t like about it. Try not to make the same mistake again. Some questions to ask yourself include: is it poor design, wrong color, shoddy workmanship, too small or large, not right for my clothing personality?

Welcome all members. Have them sit in a comfortable place with a writing surface. Allow members to introduce themselves and tell what they thought was the hardest and easiest part of the wardrobe inventory they completed for today’s meeting.
Leader Notes

Leave in your closet only the things that can and will be worn. Discard or give away everything that does not work for you. Group items together that can be mixed, such as blouses and slacks and skirts. Arrange these items by color families to help you coordinate outfits. Do this before the season arrives. Then, if you need to acquire basic items, they can be purchased early and filled in with extras at sale time.

This is good time to do two things; decide on a basic color for your wardrobe and “scarecrow” (will be explained later).

Use your closet to demonstrate the predominant color idea and how to sort clothes. (See lesson, “Color and Me,” Level II.)

Look at the garments in your closet. Is there one basic color of most of the items? If so, this is a good choice as your wardrobe basic color. Make sure the color is a flattering choice for your skin and hair tones. If it is not or if you do not see a basic predominant color, then you need to choose one. Refer to the color lesson in Me & My Body. Pick one or two matching colors that are flattering on you. This will give you the most coordination from the fewest garments.

This would need to be explained to members the meeting before they go home to do their inventory.

Next, do a little “scarecrowing.” Take out the garments and lay the complete outfit on the bed like you are making a scarecrow. Try to form total outfits. You can try blending and using accessories to mix and match together. If you find items that cannot be used—either plan a way to economically bring them into the wardrobe or get rid of them. As you begin this process, you will find that as you grow and gain new items, you can add a second or third basic color through the years and always look attractive. While you are young, it only takes about a year to change to different colors because you are growing so fast. As an adult, it will take about five years to completely change wardrobe colors as you replace worn out garments. This is why you should select colors that look good on you as an individual, regardless of fashion fads that change every season. If you can, ask someone from a clothing store to demonstrate how to mix and match a few garments into a complete wardrobe.

After these steps have been completed, you should have an idea of items you need. It is wise to scan the fashion magazines or stores to get the new color and style ideas. Be sure to consider your clothing style as well as flattering silhouettes for your unique body type.

Give members copies of the Activity Sheet, “Spending Plan for Clothing” to take home and complete.

Now you are ready to prepare your wardrobe plan.

1. You need to evaluate your clothing budget.
2. How much money do you have to spend? This will help you know how much you can afford and how you can prioritize the items. Use of a mail order catalog can help you estimate prices.
3. List your needs, considering the items that will give you the most mileage in combination with other clothing you own.
4. Then consider your wants.

As you shop for your planned wardrobe items, purchase as much as you can afford at one time. This approach will reduce the chance of buying items that do not coordinate. The piece-meal approach to shopping can be very expensive because garments from different dye lots do not match.
perfectly. Also, always launder or dry clean all of the matching garments at the same time so they wear the same. Look for and compare quality and styles.

It also is important to know what good fit means. Basically, good fit means that when a garment is viewed on someone it looks attractive from all sides, without pulls, gaps, or folds. It is essential that each and every item be tried on to determine the fit before purchasing.

One way to help determine proper fit is to wear the undergarments and shoes that you’ll be wearing with what you’re buying. To test for a good fit before you buy, try on clothes in front of a three-way mirror. Check the view from the back as well as the front. Test fit by sitting, walking, bending, stretching, or reaching. Remember to check for pocket size and fit. As you check the fit of outergarments, such as coats, remember that they will top several other layers of clothing. Allow for extra room and sleeve length.

To assist in determining fit, it is important that you know your measurements. Depending on the garment, different measurements may be needed. Boys and girls require different measurements. These should be taken at least every six months or when weight and/or body has varied its size or shape. A string or elastic tied around the waist and the base of the neck helps establish reference points for measuring. If you are buying clothes from a catalog, in a secondhand store, or at a garage sale where you can’t try on before buying, use your measurements as a guide. Use charts in catalogs to help you decide the correct size.

Sizes vary among manufacturers and pattern companies somewhat. It is important to know your measurements to ensure a proper fit.

Changing fashion trends and design ease (amount of fullness in a design) determine fit. Over time trends change from tightly to loosely fitted garments. By combining this ease with your ease of comfort allowance (to allow the body to move), you should be able to find a garment that fits. By following these guidelines you should have a workable wardrobe and one that is unique and pleasing to you.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What is the first step in wardrobe planning?
A. Doing a wardrobe inventory.

Q. What is “scarecrowning?”
A. Taking the garments from your closet and laying them next to each other to form total outfits. This also includes blending and using accessories to mix and match together.

Q. Why is this technique useful to practice?

**Leader Notes**

Allow members to scan magazines (or the store racks) to look for some new fashion trends. Look for trends in colors, textures and design. Ask the members to tell if they like the trends or not, and why.

Pass out handout, “Hints to Achieve Proper Fit” and review each item with your group. For groups of girls, pass out copies of the member handouts, “Correctly Fitted Basic Garment” and “Incorrectly Fitted Basic Garments” and discuss clues for proper fit.

Use the member handout “Selecting the Correct Pattern Size.” Be sensitive to members’ feelings. It could be done with the group meeting or at home.
Leader Notes

Process:
Q. Why is it recommended to decide on one basic color for your wardrobe?
A. From one basic color you can add coordinating garments to allow your wardrobe to be better utilized with fewer items.

Q. How can you tell if a garment fits properly?
A. When a garment is viewed on someone it looks attractive without pulls, gaps, or folds from any side.

Q. How can scarecrowing be adopted to use for other decision-making opportunities at home?

Generalize:
Q. How can having a wardrobe plan influence your use of resources, e.g., money, current garments, time?
A. Resources can be used more effectively obtaining more clothing for the money to enhance current wardrobe items. Time can also be used more effectively by planning ahead rather than making spur-of-the-moment decisions which may not take into consideration current and future resources.

Q. How can this process be adapted to use for other decision making opportunities at home?
A. Answers will vary, i.e., household linens, furnishings, pottery and tableware, bed linens.

Apply:
Q. Think of other situations when taking an inventory is used.

GOING FURTHER:
• Have members scarecrow ensembles from their wardrobe before next meeting and bring back a plan of needed items.
• Discuss the amount families spend on clothing. Have them begin record keeping for their family if it is not done.
• Have members bring items they don’t like; have the group help them evaluate for fit, color etc., to see why they may choose not to wear them or what would make this item wearable.
• Take a field trip to a retail store to try on and evaluate items for fit.
• Discuss how coats fit differently from blouses.
• Aid members in measuring themselves.
• Have members volunteer to measure elderly residents to aide them in purchasing clothing.
• Try clothing on in the same size and tell how the same size of different items fit differently.
• Work with younger club members to help them mix and match clothing items.
• Collect unwanted clothing and give to a charity.
• Give members a variety of garments of different colors, then see how many combinations (make a list) they can put together applying what they have learned.

Optional: Give members crayons or colored pencils and copies of Member Handout, “Basic Wardrobe, Girls/Boys” to do this activity.
REFERENCES:

*Fashion Magic, Wardrobe Planning*, Linda Heaton, Clothing and Textiles Specialist, and Karen Hicks, 4-H Program Specialist, University of Kentucky, Cooperative Extension Service, Lexington, Kentucky

*Teens Shopping Smart*, Rose Marie Tondl, Extension Clothing Specialist, and Janet Wilson, Extension Consumer Education Specialist, Cooperative Extension Service, University of Nebraska, Institute of Agriculture and Natural Resources, Lincoln, Nebraska

*Building a Workable Wardrobe*, Betty Feather, Clothing and Textiles Specialist, University of Missouri-Columbia, Extension Division, College of Home Economics, Columbia, Missouri 65211

*Clothing Leader Guide*, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas


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Reviewed by:

Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Hints to Achieve Proper Fit

• Adequate ease is needed for comfortable movement when sitting, walking, or bending. The garment does not bind or restrict. Strained, pulled, or popped seams and wrinkles mean the garment is too tight. Wrinkles point to the area that is too tight.
• Garment fit is in line with current fashion trends, fabric used, garment design and figure type. Bagginess, extra fabric folds, and uneven lengths mean the garment is too large.
• Crosswise grainlines, horizontal seams, and hems are parallel to the floor unless specifically designed to be at another angle. Uneven dipping, rising, or sloping means fitting problems.
• Lengthwise grainlines and vertical seams are at right angles to the floor unless they are specifically designed to be at a different angle. Sloping or twisting means a poor fit.

Evaluate these particular areas for fit:
• The neckline should lie flat against the body. A high collar lies smoothly against the neck; a scoop neck collar lies against the body at the seam line.
• Lapels roll against the garment without gapping or turning up.
• Natural shoulder seams lie directly over the top of the shoulder or approximately 1 inch behind the ear lobe. Shoulder seams are not usually noticeable from the front or back when viewed at eye level unless they are dropped or otherwise modified by garment styling.
• Natural armhole seams lie closely and evenly around the armhole. The underarm seam is usually about 1 inch below the armpit.
• Sleeves hang straight from the shoulder. Long sleeves end at the wrist bone.
• The waistline lies along the natural waistline, or if raised or lowered, along the midriff or hips.
• The zipper lies flat against the body.
• Buttonhole closings are smooth when the garment is buttoned.
• Darts point toward the curves of the body and end before reaching the fullest part of the body. One dart should point directly at the fullest part of the curve while several darts should be balanced around the curve.
• Pleats, vents, and tucks hang evenly and are closed when the wearer is standing still.
• The pant crotch follows the body curve evenly in both front and back. The pant seat fits without bagging or pulling.
• Pant legs fall straight to the floor with creases following the lengthwise grain in the center of each leg.
• Hems hang straight.
WARDROBE PLANNING BASICS I  
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING  
Activity Sheet

Spending Plan for Clothing

1. You need to evaluate your clothing budget.
2. How much money do you have to spend? This will help you know how much you can afford and how you can prioritize the items. Use of a mail order catalog can help you estimate prices.
3. List your needs, considering the items that will give you the most mileage in combination with other clothing you own.
4. Then consider your wants.

From the period from ___________ to ___________. Total amount of money available to spend for clothing and clothing services $________.

<table>
<thead>
<tr>
<th>Needs</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing Purchases (Including fabric and notions for home sewing)</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
</tr>
<tr>
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<td>$</td>
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<tr>
<td></td>
<td>$</td>
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<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wants</th>
<th>Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing Purchases (Including fabric and notions for home sewing)</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
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<td></td>
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<td></td>
<td>$</td>
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<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>
WARDROBE PLANNING BASICS I
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Member Handout

Selecting the Correct Pattern Size

Patterns are like “road maps” for your projects. A pattern helps you turn a piece of fabric into a great finished project.

Before choosing a pattern, think about what you would like to sew. Would you like to make a simple top, or a pair of shorts or pants? Or do you want to sew a pillow, a tote bag, or some other kind of project? The choice is yours!

Next, look for a pattern you like in a pattern catalog. Pattern catalogs are divided into separate sections for different types of projects. Flip to the section that includes the kind of project you want.

For your first project, choose a simple pattern. Easy patterns have few pattern pieces and simple sewing steps. Most pattern books include special sections with patterns which are easy for beginners. Some also label patterns for beginners as “easy to sew” or “learn to sew.”

Let’s take a look at how a pattern helps you sew.

Selecting the Correct Pattern Size

Ask someone to help you take your body measurements so you can choose the correct pattern size. The measurements you will need are:

1. Bustline or chest
2. Waist
3. Hip
4. Height

Record your measurements in the chart below.
Use this information to help you determine your pattern size.

<table>
<thead>
<tr>
<th>My Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust/chest</td>
</tr>
<tr>
<td>Waist</td>
</tr>
<tr>
<td>Hip</td>
</tr>
<tr>
<td>Height</td>
</tr>
</tbody>
</table>

Compare your measurements to those in the size charts in the back of the pattern catalog. Choose the pattern type and size closest to your measurements. The following charts are examples of several pattern types.

If your measurements don’t exactly match those listed, use the chest or bust measurement for tops, dresses, or jackets. Use hip and waist measurements for pants or skirts.
WARDROBE PLANNING BASICS I
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Member Handout

Selecting the Correct Pattern Size, continued

Girls’
Girls’ patterns are designed for the girl who has not yet begun to mature.

<table>
<thead>
<tr>
<th>Size</th>
<th>S</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>26</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24½</td>
<td>26½</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>11½</td>
<td>12</td>
<td>13½</td>
</tr>
<tr>
<td>Approx. Heights</td>
<td>50</td>
<td>52</td>
<td>58½</td>
</tr>
</tbody>
</table>

Young Junior/Teen
This size range is designed for the developing preteen and teen figures, about 5’1 to 5’3 inches without shoes.

<table>
<thead>
<tr>
<th>Size</th>
<th>5/6</th>
<th>7/8</th>
<th>9/10</th>
<th>11/12</th>
<th>13/14</th>
<th>15/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>28</td>
<td>29</td>
<td>32</td>
<td>33½</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Waist</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Hip</td>
<td>31</td>
<td>32</td>
<td>33½</td>
<td>35</td>
<td>36½</td>
<td>38</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>13½</td>
<td>14</td>
<td>15</td>
<td>15½</td>
<td>15¾</td>
<td></td>
</tr>
</tbody>
</table>

Boys’/Teen Boys’
These patterns are for boys who have not yet finished growing or attained full height.

<table>
<thead>
<tr>
<th>Size</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
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</thead>
<tbody>
<tr>
<td>Chest</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>33½</td>
<td>35</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>28</td>
<td>29½</td>
<td>31</td>
<td>32½</td>
<td>34</td>
<td>35½</td>
</tr>
<tr>
<td>Neckband</td>
<td>11½</td>
<td>12</td>
<td>12½</td>
<td>13</td>
<td>13½</td>
<td>14</td>
<td>14½</td>
</tr>
<tr>
<td>Height</td>
<td>48</td>
<td>50</td>
<td>54</td>
<td>58</td>
<td>61</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Sleeve</td>
<td>22½</td>
<td>23¼</td>
<td>25</td>
<td>26½</td>
<td>29</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

Misses’
Misses’ patterns are designed for a well proportioned and developed figure about 5’5 to 5’6 inches without shoes.

<table>
<thead>
<tr>
<th>Size</th>
<th>XS</th>
<th>S</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>30½</td>
<td>31½</td>
<td>32½</td>
<td>34</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26½</td>
</tr>
<tr>
<td>Hip</td>
<td>32½</td>
<td>33½</td>
<td>34½</td>
<td>36</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>15½</td>
<td>15¼</td>
<td>16</td>
<td>16¼</td>
</tr>
</tbody>
</table>
Correctly Fitted Basic Garment
WARDROBE PLANNING BASICS I
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Member Handout

Incorrectly Fitted Basic Garments

Broad upper back

Broad lower hip

Short midriff

Long torso

Flat buttocks
Wardrobe Planning Basics I

Clothing & Textiles, Level II, Wardrobe Planning

Member Handout

Incorrectly Fitted Basic Garments, continued

- Small bust
- Large bust
- Single high hip
- Large elbow
- Broad, square shoulders
- Narrow shoulders, broad lower back and large waist
- Rounded upper back, sloped shoulders and large waist
- Protruding abdomen, full front thigh and hyperextended calf
Basic Wardrobe, Boys
What Members Will Learn . . .

ABOUT THE PROJECT:
- Ways to recognize fads versus classic styles
- Ways to determine when it is wise to purchase a classic or a faddish style
- How to create an all season wardrobe

ABOUT THEMSELVES:
- To appreciate clothing choices as a life-long skill

Materials Needed:
- Copies of Activity Sheet and Member Handout
- Pictures from fashion magazines, catalogs, other visual guides to study (You may want to ask each member to bring one of the above with them.)
- This lesson may be held at a retail store, if so, the above pictures will not be needed.

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:
Do you wonder why everything looks right when the store puts a look together? Do store displays tend to show just the right clothes with just the right touch in accessories? Today, we are going to teach you some secrets about how to put together these creative looks. With practice, you will become as creative as the pros. Remember, people differ in the comfort level they have when it comes to wearing new fashions. Changes in fashion are one of the reasons we buy new clothing. Some people like to be the first to appear in a new style, others prefer to wait until they have seen it worn by others.

You might want to window shop or glance through magazines to get ideas of new color trends and design details that you might like to try. This costs you nothing (but time) and can save you future time by reducing your selections. You can also decide what things to sew in place of buying.

To spot fashion trends quickly, check only one detail at a time. If you are interested in trends in hem lengths, look only at hems in all the ads or window. Look again noting only shoulder widths and sleeve styles, then again looking at collars and necklines. You will have learned much more in the same amount of time as investigating all changes once very carefully.

Welcome all members. Have them sit in a comfortable place. This lesson can also take place in a retail store if you can arrange it with the manager. Allow the members to introduce themselves if they do not know each other or the store manager (if in a retail outlet). Ask them which type of person they are; the one who likes to be the first to wear a new style or one that prefers to see it worn by others first. (Most individuals prefer to wait until others try a new style.)
In addition, scan magazines and catalogs to determine costs as well as styles. To get an in-depth overview, read fashion magazine editorial features and fashion ads. Focus on pre-season issues in August and September, and again in January and February. Fashion magazines from a year ago seem to have more of the styles that we find in local stores today, so go to the library to check current midwest fashion trends in past magazines. Newspaper ads usually give sketches so colors are missing but prices are usually listed. Television programs show what others are wearing and can be a clue as to trends developing for the mass market. Don’t forget to look at friends and ask sales clerks about what is new.

Before we continue, let’s consider some language that is used by the clothing industry. The better you speak the language, the more you will understand what the industry is trying to tell you.

**Fashion**—Current mode of dress or clothing worn by a majority of the people.

**Style**—A particular or distinctive fashion. Example—boots are in fashion, but there are many styles of boots from which to choose.

**Classic**—A style that is so popular and so lasting that it becomes custom rather than fashion. Blue jeans can be considered a fashion classic. The dark business suit is another example.

**Fad**—A strikingly different fashion that is popular for a short period of time. It may last a few weeks or for a season, but a fad is soon forgotten. The tuxedo look for women, leg warmers, platform shoes, and concho belts have all come and gone as fads.

**Trend**—The general direction in which a particular change is moving. This may include special colors, fabrics, or shapes. Example—lapels may be getting narrower or trousers may be getting slimmer.

Fashions, styles, fads, and trends all have an influence on people’s clothing selections. Usually the people who make the most satisfactory use of their clothing money buy classic styles currently enjoying fashion popularity. These buyers follow trends in colors and fabrics but reserve their fad buying for small, accessory items. Their major clothing items remain wearable for longer periods.

The direction in which fashion moves is called a fashion trend or cycle. This cycle has four stages:

- **Introduction**—A fashion trend is usually introduced by a high fashion designer who creates an expensive one-of-a-kind original. The styles are often too extreme for the average person. Many laugh at the look.
- **Rise**—Designer looks are copied for mass production by high quality manufacturers. The style may be modified in order to lower prices, but the clothes are still expensive and somewhat extreme.
• Peak—Additional modifications have been made to lower the price or to make it less extreme for greater acceptance.
• Fall—Since everyone who wants it has it, it goes on sale in stores and sells well at reduced prices. Stores often continue to buy the style, but only at manufacturers’ promotional prices.

In the past, fashions repeated their popularity every 10 to 20 years, but the world is moving faster today and people are willing to change more quickly. We are exposed to international fashion influences immediately with modern media. So we find a much greater blend of fashions today than in the past, thus allowing you to dress in a more individual and unique manner.

How does this knowledge help you when it comes to building your wardrobe? Think of the money and time you spend on clothing as an investment. The wiser your decisions are, the more money you save. Let’s look at how each factor fits into your planning.

Both classics and fads have a place in your wardrobe. Knowing that you need an item to wear all year or perhaps two years should tell you to avoid a fad. Over the years, as certain fashions have become known for their classic styling, you can count on them to always be acceptable to wear. These garments are always fashionable when made in a quality fabric. Basic characteristics you generally find in classic garment or accessories include plain set-in sleeves, medium width collars or lapels, slightly flared skirts, and straight leg pants. Most of the preppy styles tend to be classic in nature.

A fad can be a bright accent color like fuchsia or teal, a certain accessory such as beads, a piece of clothing such as T-shirts with messages, or a look such as military. Since fads don’t last, don’t spend much money for them. Shop for these items at discount stores. These tend to mark an era—they remind us of a point in time in history (example—flapper style of the 1920s or oversized sag or grunge look of the early ’90s).

If you look at the fashion trends, consider the stage the trend is in. Any item that’s at the peak of the curve is one that you won’t be able to wear as long as one that is a rising trend. In other words, if you buy or sew a style that everyone is wearing now (except classics), chances are it’s at the peak and will be out of fashion before it’s worn out, or before you’ve saved enough for your next clothing investment.

To get the most value from an item, buy or sew it at the beginning of a cycle, wear it, and be ready to quit wearing it when it begins to fall from favor. This way you enjoy wearing fashionable styles and reap the economic benefits of longer wear.

It takes about a year and a half for individual fibers to go from the fiber producer to manufactured garments or accessories. The fabric is often dyed six months before you purchase the garment so fabrics and colors are

**Leader Notes**

Allow members to scan magazines (or the store racks) to look for some new fashion trends. Look for trends in colors, textures, and design. Ask the members to tell if they like the trends or not, and why.
already set for the coming season. This is also why you often cannot match colors from one season to the next. Some of the colors and fabrics that you desire just haven’t been produced, so some seasons there is little available in appropriate styles and colors for some individuals. Fortunately, the same individuals are rarely “left out” of the trend cycle for more than a few seasons.

There are different types of fashion followers. Which type are you?

- Innovators or pioneers—they want to be first and don’t worry about price. They usually buy during the first five weeks of the season.
- Early majority—they buy trend merchandise when they need it, in proper season and at the regular prices. They usually buy during the second and third months after the merchandise is available.
- Majority—middle of the road/average acceptance of new styles. Sales are often used at the end of the early majority buying period to draw the majority into the market.
- Late majority—they wait to buy until they see others with the merchandise. They will typically buy during the fourth and fifth month.
- Laggards—they are discount oriented and do not buy unless there is a break in price. They are not into wearing new looks or trend items.

As we get realistic, it is obvious most of us cannot afford to change our complete wardrobe each season. A good rule is to aim for at least one-half of your wardrobe to be classic styles in fabrics that can be worn nine to 10 months of the year.

We talked before about seasonless colors, but those colors need to be in the form of seasonless fabrics that can go from warm to cold temperatures. It makes sense that you should look for lightweight outfits that can be worn individually or as layered components. The key to seasonless dressing is to select outfits made of mediumweight fabrics that are perfect for every season.

Year round fabric types include lightweight jerseys, twills, challis, gabardine, and lightweight flannels made of wool, cotton, silk, or natural fibers blended with synthetics.

Keeping cool or warm can be accomplished through clothing and accessories. Keep warm by layering your clothes; air trapped by the layers serves as an insulator. Thick fabrics of dark, rich colors will add to your apparent warmth. Clothes may be loosely fitted except at ankles, neck, and wrists where a close fit will trap air.

Staying cool in summer is accomplished by wearing fewer layers of clothes. Loose garments with large necklines and sleeves with loose/large closures and a loose weave will allow air to pass through and encourage evaporation to feel cool. Avoid extra necklaces, belts, scarves, and layers of clothes. Light colors are a good choice. Open footwear, without socks or hose, are coolest.
Pick a flattering neutral color for the majority of your classic styles. Then choose accent colors that blend, harmonize, or contrast to coordinate with the neutrals. Plan outfits with a variety of garments and styles (e.g., skirts, slacks and jackets). Choose various styles of blouses or shirts, sweaters, and underwear to adjust for your thermal comfort as the seasons change. When colors harmonize, you can mix and match for many different ensembles. But clothes should not be so sensible that they bore you to death. Allow some spark and surprise. This can be done with colorful accessories.

A plan for an adequate wardrobe is never finished. You change sizes, ideas, goals about clothing, or your lifestyle may change. Your lifestyle dictates how you expand or alter your basic plan.

**DIALOGUE FOR CRITICAL THINKING:**
**Share:**

Q. What is a fashion trend?
A. The general direction in which a particular change is moving. It may relate to special colors, fabrics, or shapes. Example—lapels may be getting narrower or trousers may be getting slimmer.

Q. What are the five types of fashion trend followers?
A. Innovators or pioneers, early majority, majority, late majority, laggards.

Q. What are some examples of seasonless fabrics?
A. Year round fabric types include lightweight jerseys, twills, challis, gabardine, and lightweight flannels made of wool, cotton, silk, or natural fibers blended with synthetics.

**Process:**

Q. Why is it important to build your wardrobe around classic clothing?
A. Saves money; saves time in shopping

Q. What classic clothing is similar for boys and girls? Which are specific to boys or girls?
A. See handout

**Generalize:**

Q. Now that you have learned some classic styles, what would be one or two classic garments that would add more flexibility to your wardrobe?
A. Answers will vary (classic blazer, straight leg pants, white button-down blouse).

Q. What would be a seasonless garment that you could add to your wardrobe? Why is it seasonless? What fiber is it made from?
A. Answers will vary (tailored cotton jersey, straight skirt, cotton gabardine pants, twill jacket of cotton or a lightweight wool).

Pass out the Classic Clothing Handout, as well as the sheet discussing seasonless wardrobe creation. If time remains, do the Trivia Pursuit page. If not, send it home for them to complete with their family. Take time to look for some classic styles available in the catalogs or store. Let the members experiment in matching outfits of classics, trends and fads. Offer feedback.
Apply:
Q. Have you ever made a “wrong decision” pertaining to a clothing purchase? What were the consequences of this decision? Would you make the same decision in a different situation? Why or why not?
A. Answers will vary.

GOING FURTHER:
- Have members list the differences in their daily life from two years before. Illustrate how clothing needs change accordingly.
- Collect pictures of additional clothing items to go with a garment to form an outfit that can be worn from season to season.
- Tour a fabric store and have the owner or manager discuss appropriate fabrics for year round wear.
- Identify new fashion trends and discuss how the trends relate and influence seasonless choices for you. Also, discuss how they are influenced by world events.
- Name items in your wardrobe that are seasonless.
- Have members host a fashion show of seasonless garments and how to use them.
- Have members talk to local store personnel about how fashion has changed the last five years.
- Visit a museum to study historic clothing and what influenced fashion at the different times.
- Name five world or national events, movies, or people that have influenced fashion change.
- Clip three pictures of classic items and three of fad items. Tell why each is a classic or fad.
- Discuss creating “Your Own Seasonless Wardrobe” and give students handouts to take home.
- Have a garage sale as a fund-raising project with no longer wearables or unwanted clothing and accessories.
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   Fonseca, Ann Beard, Clothing and Textile Specialists, Texas A&M,
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Classic Clothing

Every wardrobe needs a backbone of a few basic garments. Building this basic wardrobe around one or two flattering color schemes allows you to mix and match for a variety of looks. Basics include:

- 2 jackets
- 1 pair of pants and 1 skirt (girls)
- 2 shirts
- 2 pair of pants (boys)

Basic colors are black, brown, navy, beige, camel, red and white. If the basics are not your best colors, select one of your becoming colors to go with a basic color.

Investing your money and time in classic styles is one of the best ways to build an investment wardrobe. When these pieces are carefully planned in terms of style, color, and fabric, you will get more than your money’s worth in wear, and at the same time build some identity and continuity into your look.

Classic clothes are no-nonsense, no-frills pieces that endure over the years. They are usually designed with simple, clean lines that put you in control and allow you to cope with continuing style change. Classics are the old reliables—always comfortable no matter what else is on the fashion forefront.

Classics give you more for your money when they are done in neutral colors. Also, the higher the quality of fabric used, the longer wearing they will be and the more stylish they will look. Linen and wool are examples of classic fabrics.

The following is a list of true classics that can be worn by older members and adults.

<table>
<thead>
<tr>
<th>Girls</th>
<th>Guys</th>
</tr>
</thead>
<tbody>
<tr>
<td>shirtwaist dress (one or two piece)</td>
<td>Oxford cloth button-down shirt</td>
</tr>
<tr>
<td>classic cardigan jacket (V or round neckline)</td>
<td>classic navy or camel blazer</td>
</tr>
<tr>
<td>standard and shawl collared blazer</td>
<td>broadcloth dress shirt</td>
</tr>
<tr>
<td>turtlenecks</td>
<td>turtlenecks</td>
</tr>
<tr>
<td>convertible collar and bow blouses</td>
<td>polo shirts</td>
</tr>
<tr>
<td>menswear-style shirts</td>
<td>crewneck and V-neck sweaters</td>
</tr>
<tr>
<td>crewneck and V-neck sweaters</td>
<td>cardigan sweater</td>
</tr>
<tr>
<td>simple cardigan sweater</td>
<td>grey wool all-season weight slacks</td>
</tr>
<tr>
<td>fitted, straight-legged pant with fly front zipper</td>
<td>khaki cotton pants</td>
</tr>
<tr>
<td>straight skirt or straight legged pant</td>
<td>blue jeans</td>
</tr>
<tr>
<td>dirndl, gathered skirt (40 to 50 inches around bottom)</td>
<td>dark suit</td>
</tr>
<tr>
<td>blue jeans</td>
<td></td>
</tr>
</tbody>
</table>

Classic details include:

- set-in sleeves
- medium-width sleeves gathered into blouse cuffs or pleated into shirt cuffs
- hems just below the knee for skirts or dress, and to the top of the shoe on pants, with a slight break
- medium-width lapels and collars on jackets
- straight medium-width sleeves on jackets

- spread collar
- tie with Windsor knot
- pant cuffs
Create Your Own Seasonless Wardrobe

Follow these eight easy steps to mastering the art of seasonless dressing.

1. Experiment—Introduce your clothes to one another and you’ll be surprised how many different ensembles you can create that will easily live nine lives, up to 10 months annually.

2. Select basics—Your seasonless wardrobe should be built around “basics”—pieces that are easy to layer and never go out of style—including a straight skirt or pant, classic suit, comfortable pants, tailored shirt and blazer, and several sweaters.

3. Stock up on sweaters—Sweaters are one of the key elements to building a seasonless wardrobe because of their versatility and the mix-and-match options. However, for pre-teens and teens, you might want to substitute T-shirts or sweatshirts.

4. Choose brights—Select bright colors to keep your wardrobe vibrant no matter what the season. Whether high-noon or high-tech, the brightest color palette works year-round to help pieces move easily in and out of seasons.

5. Pick fabrics that are 100 percent natural—Your best bets are cottons or lightweight wools.

6. Include classics—Seasonless dressing works best when your closet is stocked with classics such as (for girls) men’s style shirts or a pleated skirt ensemble that endures from one season to the next and (for boys) straight-leg pants and a single breasted blazer, oxford cloth or polo shirts.

7. Add accessories—Accessories make the mood and create your fashion style. You can add them or change them to complement the season. Some of your best choices are; for girls, bangles, beads, pearls, earrings and medallions; and for boys, ties, belts, gold chains and bandanas.

8. Special effects—Don’t forget to include a special outfit for that special occasion—you never know when you may need it!

Adapted from Making It!, Fall 1985, by Texas 4-H Clothing Project Team, 1986
Fashion Trivial Pursuit

Do you know what cartwheels, cutaways and cocoons have in common? Each is the name of a fashion style that was popular in the past. Fashion history buffs can tell you that a cartwheel was a hairstyle, a cutaway was a coat, and a cocoon was a dress style.

How do you rank with the fashion experts? Can you correctly identify and classify fashions from the past? Here’s a fashion trivia test that’s been designed to help you find out.

Below are six fashion classifications that have been lettered “A-F” and a list of the names of 24 different fashion styles. Write the correct classification letter in the box next to each fashion item.

<table>
<thead>
<tr>
<th>Fashion classifications:</th>
<th>A. hats</th>
<th>B. hairstyles</th>
<th>C. shirts/sweaters</th>
<th>D. jackets</th>
<th>E. skirts/pants</th>
<th>F. footwear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. artichoke</td>
<td></td>
<td>13. boater</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. balloon</td>
<td></td>
<td>14. safari</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. bomber</td>
<td></td>
<td>15. spectator</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. polo</td>
<td></td>
<td>16. beehive</td>
<td></td>
<td></td>
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<tr>
<td>5. pillbox</td>
<td></td>
<td>17. lumber</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. mules</td>
<td></td>
<td>18. poor boy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. surfers</td>
<td></td>
<td>19. romeo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. fanny</td>
<td></td>
<td>20. ducktail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. mushroom</td>
<td></td>
<td>21. clam digger</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. pea</td>
<td></td>
<td>22. skullcap</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. desert</td>
<td></td>
<td>23. tank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. corkscrew</td>
<td></td>
<td>24. bubble</td>
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</tr>
</tbody>
</table>
Answers to Fashion Trivial Pursuit

1. Artichoke (B) A short, layered hairstyle combed back from the face, from the 1960s.
2. Balloon (E) A full skirt tightly fitted at both the waistband and a hem band.
3. Bomber (D) An adaptation of an air force pilot’s jacket.
4. Polo (C) A classic square-collared, knit shirt.
5. Pillbox (A) Worn in the 1960s; a round, brimless hat that sits on top of the head.
6. Mules (F) Also known as scuffs of slides; slip-on, open backed shoes worn by women.
7. Surfers (E) Tight-fitting knee-length pants worn in the 1960s.
8. Fanny (C) A long pullover sweater with a side ribbed band at the buttocks.
9. Mushroom (A) 1960s hat with a large brim which turns downward at the face.
10. Pea (D) Adaptation of a sailor’s coat; hip-length, double breasted wool.
11. Desert (F) Another name for the chukka, a suede ankle-high boot with cushioned soles and eyelet laceings.
12. Corkscrew (B) Also called a Shirley Temple, tightly curled spirals of hair that hang freely.
13. Boater (A) A straw hat with a flat brim, low crown and ribbon band.
14. Safari (D) Also called a bush jacket; a single-breasted, khaki cotton, hip-length coat with large pockets and a matching fabric belt.
15. Spectator (F) Classic women’s shoe; a pump with contrasting colors or stitching in a distinct pattern on the toe and heel.
16. Beehive (B) A wide, high sweep of the hair into a dome or beehiver shape; popular in the 1950s and 1960s.
17. Lumber (D) A hip or waist-length wool plaid shirt jacket worn as outerwear.
18. Poor boy (C) A clingy, ribbed pullover with short or long sleeves and a turtleneck.
19. Romeo (F) A simple boot shaped slipper for men with elastic inserts on both sides.
20. Ducktail (B) A short hairstyle for men and women in the 1950s; the hair sweeps back from the forehead and comes to a point at the back of the neck.
21. Clam diggers (E) First popular in the 1950s, a full cut, mid-calf cuffed pant.
22. Skullcap (A) Also called a juliet, a small hat that sits on the top of the head and hugs the skull.
23. Tank (C) A scooped-neck, sleeveless shirt worn for casual wear or sports.
24. Bubble (E) or (B) Also known as the tulip skirt, a bubble has a fitted waist and hem band similar to the balloon skirt; also a popular ’60s hairstyle, short, layered and full round shape.
Hidden Costs of Garments/Advertising

Clothing & Textiles, Level II, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
• Steps involved in making and selling a garment
• How clothing prices are figured
• How shoplifting effects the price of garments
• Types of advertising

ABOUT THEMSELVES:
• How decision-making is affected by advertising

Materials Needed:
• Ads you have collected from newspapers, magazines, flyers, etc. (You may want to request each member to bring one to the meeting.)
• Copies of Activity Sheets
• Video, “How Clothing Is Made,” by The Learning Seed, 1990, 24 minutes (Area Extension Office should have copies)
• Television and VHS video player

ACTIVITY TIME NEEDED: 50 MINUTES

ACTIVITY:

The final price you see on a price tag is the result of many factors. Many people work with a garment before it arrives in the store for sale. Each person that comes into contact with it adds extra cost to the final price. (Ask members to name as many steps as they can.) You may have thought that the steps included: growing and preparing the fibers, cutting and sewing the garment, and sending out to retail. As you will find out today, the steps that a garment passes through are surprisingly numerous. All of these steps add to the final price you see in the store. In addition, we will talk about advertising—the different types of advertising and how to judge them to get the information you need to make the best buy for you.

The price of a garment is the result of both the wholesale cost and the retail cost. These costs are added together to produce the retail price of the item.

The wholesale costs include the cost of producing a dozen of the same garments. Things that are included in these costs are: price of fabric, trimmings, labor; price of making patterns, grading them to the sizes needed, and adding markings for construction; price to cut the fabric; price of construction; price of trucking or freight, and markup for overhead (rent for buildings, utilities, salaries, commissions, advertising and markdowns, shortages, theft and profits). The markup is usually double the price the retailers pay the wholesaler to purchase this item for retail sale.

Leader Notes

Have all members sit in a comfortable place as they arrive. Have each member introduce themselves if they do not know each other. If they bring a clothing ad, have them show the ad after their introduction. If not, have them tell what they selected for their most recent clothing purchase and why. You begin.

Show the video “How Clothing Is Made” to learn about all the steps necessary to produce a garment. Pass out copies of the Activity Sheet, “How Clothing is Made.” Members can complete it while watching the video, or if it is not shown, use this as a worksheet so members will learn the correct steps. Key in order of steps listed is 5, 7, 10, 13, 1, 4, 11, 3, 6, 8, 2, 12, 9.
Leader Notes

Show the members the sample cost sheets. Have them discuss how each cost has to be passed on to the consumer. Remind them that businesses must make a profit to remain in business. Ask them to consider the inventory that retailers have left after each season. This amount is a loss to the retailer because they have purchased this item and not resold it. Point out that government plays a role in the price of garments by increasing taxes or tariffs (fees added to items coming from other countries). Remind members that the greater the profits of a company, the more that company can reinvest in new technology, offer better employee benefits, and be competitive with other companies.

The retail costs are those costs a retailer must pay while trying to resell this item. These charges are added to the price the retailer paid to purchase this item and the resulting total equals the garment price seen on the hang tag.

Buyers for retail stores place orders with many different manufacturers. The retail markup must cover both the store’s operating expenses and profit. Expenses included are: amount that items will be marked down, amount lost to theft, salaries for buyers, sales persons, clerical and stockers; administrative costs, employee benefits; advertising; rent; utilities, cleaning and security; and lastly, state and local taxes.

Usually retailers will average these expenses to determine markup per item. The difference in overhead cost may be the reason that the same or a similar garment may be sold at different prices from one store to another.

NOTE: Theft in retail stores is a serious problem. Not only do shoplifting and theft by employees create losses for the store, but also losses for consumers. Often, stores must hire security personnel, attach electronic devices to merchandise, or use special equipment to monitor the store. The cost of these measures adds to the overall price of merchandise sold in the store. Stores don’t like to take these precautions, but they must to protect their business.

If the members are interested, have them interview a store manager. Make an appointment ahead of time (or invite one to the meeting). Ask these questions:

1. What precautions does the store take to reduce shoplifting?
2. What precautions does the store take to reduce employee theft?
3. What is the age of most shoplifters?
4. What kinds of items do they take?
5. What does the store estimate as the average percent loss each year through theft?
6. When someone is caught shoplifting, what procedures are followed?
7. What are the penalties for shoplifting?

See Going Further for activity idea.

NOTE: One way stores are keeping costs down is through the use of computers. This action decreases the amount of manual labor needed. Costs to hire employees are most expensive. If more work can be done with fewer people, the output of work is greater (higher productivity) and this keeps costs down.

Now that we know stores must sell items to stay in business, we must consider how they convince us we need to buy our items from them. This step is done through advertising. Advertising is a way for companies to let us know what they have to sell. It is informative and tells us about styles, features, performance, and availability of products. Shopping would be more difficult if there weren’t advertisements. Advertisements provide an opportunity to study the market.

Advertisements can also manipulate (persuade you to do something you would not usually do). They can make suggestions about items that are not true, such as wearing a certain brand of clothes will make you popular or
ensure success in a job. Often, these ads will be repeated on television, radio, newspapers, or magazines. With repetition, other good (or better) products can be blocked from your decision-making process. Advertising is powerful, and it works. That is why you are constantly bombarded with it. Recent figures say that every year you are subjected to about $60 billion of sponsored information about products.

Responsible advertising should be favorable, not offensive, annoying, or misleading. No matter what the subject or theme, useful advertising should have these general characteristics:

- Informative
- Fair and accurate
- Tasteful to the majority of people
- Clear
- Valid

Emotional appeals that are frequently used in advertisements may be:

- Emotional security such as youthfulness, glamour, belonging, sex appeal, prestige, or status.
- Convenience and comfort such as ease of care, upkeep, or use.
- Safety and health such as best for yourself and those you love.
- Financial gain such as wise buys, bargains, or shrewd investments.

Beware of faulty ads. Here are some common types:

- Bait and switch—when the advertised bargain isn’t stocked and an expensive alternative is suggested.
- Misleading savings—when the advertised discount price is compared to an inflated or false price to look good.
- Failure to state facts—when what you need to know to make a wise decision is not given.
- Free gimmicks—when you are encouraged to purchase to “get one free” or “get something else free.”
- Jumping on the bandwagon—when it is a “hot” item and it may be gone if you don’t get it now.
- Puffery—when you are persuaded by extreme claims or flattery.

If you fall victim to one of these misleading claims, it is your duty to make a complaint. That way you can help end deceptive advertising practices. For local complaints not handled to your satisfaction by the retailer, contact the local office of the Better Business Bureau. If further action is required, contact your state Attorney General or the Federal Trade Commission. If the ad is a national one, contact the Council of Better Business Bureaus. (Get the address from your local library or local BBB.) Remember the saying “buyer beware” is meant for your clothing investment as well as other investments you will make.
Leader Notes

Federal Trade Commission
6th & Pennsylvania
Washington, DC 20580
(292) 326-2222

Kansas Attorney General
Judicial Center, 2nd Floor
Topeka, KS 66612-1597
(785) 296-2215

Mass Media Bureau, FCC
Complaints & Investigations
2025 M. St., N.W., Room 8210
(202) 632-7048

Council of Better Business Bureau
1515 Wilson Blvd.
Arlington, VA 22209
(703) 276-0100

Better Business Bureaus of Kansas
501 Jefferson, Suite 24
Topeka, KS 66607
(785) 232-0455
OR
300 Kaufman Bldg.
Wichita, KS 67202
(316) 263-3146

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Name some of the steps that describe how clothing is made.

Q. Name three things that add to the retail cost of a garment.
A. Amount that it will be marked down; amount lost to theft; salaries for: buyers, sales persons, clerical and stockers; administrative costs; employee benefits; advertising; rent; utilities, cleaning, and security; state and local taxes; profit.

Q. Describe a favorite ad you have seen. Why did you like it?

Process:
Q. Look at your ads and tell me words that are informative.
A. Answers will vary.

Q. Look at your ads and tell me words that are promotional.
A. Answers will vary.

Q. How do you feel about advertising?
Generalize:
Q. How might you help reduce shoplifting in retail stores?
A. Begin a peer education program, make a display for school or store. Members may offer suggestions.

Q. Now that you are aware of some of the techniques that are used to influence people to buy clothing, think about some that are most effective with teenagers. Why do they work? Do you think you will still be so impressed by them?
A. Answers will vary, i.e., teen idols use product, sexy, sophisticated, popularity, etc.

Apply:
Q. If you are aware of a shoplifter, what choices do you have? What are the consequences of the choices for you? For the shoplifter? The store? Other shoppers? What if the shoplifter is your friend? What are your responsibilities as a consumer? Ethically? Are there personal safety issues that should be mentioned?
A. Answers will vary. You can tell store personnel.

GOING FURTHER:
• Have members write a script for an advertisement for a piece of clothing.
• Have members scan several types of magazines (especially teen versus adult). Have them list the number of pages in each, the number of pages of advertisements, and the number of pages of clothing advertisements.
• Have members visit a store that uses a computerized ordering system. Get answers to these questions.
  1. How does the computer read the tag information?
  2. What do the numbers or codes on the tags mean?
  3. Where does the computer transmit the information?
  4. How was inventory control done before computer scanning of tags?
  5. How many units per week of a particular item of clothing would have to be sold for it to be considered a “good seller”?
  6. Who does the reordering or decides what needs to be reordered?
  7. Where is the warehouse that sends replacement merchandise?
  8. Is it difficult to learn to operate point of sale computers? How much training do employees need to use one?
  9. How costly is a computer system for a retail store?
• Have a group tour an advertising department of a newspaper, radio, or television station. Ask how important advertising is to their business and how much it costs?
• Visit the library to familiarize members with how to look up consumer information.
• Ask members to watch television for one hour (Saturday morning is good). Have them keep track of how many commercials appear, list the products and comments about the quality, quantity and price. Also comment about special effects and emotional appeal. Bring to next meeting to discuss.
Leader Notes

- Have members begin a product information file for their families. Include information and instruction manuals for the appliances their families own, or volunteer to do this for elderly residents.
- Have members plan a business. Help them to consider all costs from overhead to profit.
- Have members practice writing letters of complaint about a product.
- Construct and display an exhibit of various magazine clothing or accessory advertisements.

REFERENCES:
The Super Shopper Connection Joyce E. Jones, Doris “Katey” Walker, and A. Lois Redman, Extension Specialists, Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506
Time Out For Clothing, Joyce Ann Smith, Extension Clothing Specialist, Kathy Jelley, Carla Menelle, and Jill Nolan, Extension Home Economists, Ohio Cooperative Extension Service, Ohio State University, Columbus, Ohio 75733
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
Buying Your Clothes, Clothing 2, Marjorie Mead, Extension Textile and Clothing Specialist, and Michelle Morganosky, Assistant Professor, University of Illinois at Urbana-Champaign, Cooperative Extension Service, Champaign, Illinois
How Clothing Is Made, 24 minute VHS video, The Learning Seed, 330 Telser Road, Lake Zurich, Illinois 60047, $89.00

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
How Clothing is Made

Put the following point in numerical order.

Steps Necessary to Produce a Garment:
   1. Grade Patterns
   2. Spread Fabric
   3. Sew Garment
   4. Ship Garment
   5. Design
   6. Check for Fit, Appearance, Line
   7. Inspection of Garment
   8. First Sample
   9. Marker
  10. Cut
  11. Pattern
  12. Press Garment
  13. Bundle Pieces
HIDDEN COSTS OF GARMENTS/ADVERTISING
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Activity Sheet

Word Search

C B Z B A J Y A E S N L C O L A N W L M Y I R
E T A U A T H E B X K B J C D B S H I R T C H
A R M I G R P Q P G A J A R S Z D X A O T I B
R Y F A W E G M I R S H T E K C A J M G L S A
O I L V S R E A B F I R L B A N U V O K C S I
C T R O L O C D I D T C Z D D T C S R P S A J
X O E E Y T K T M N R M D M C E Z T V I G L C
F N M Q N S D I L A S G A F Z C T I C L Q C A
N G H I X G M S T E L T U O Y R O T C A F U R
S C T R J P R O M Y C H T P B E J C S Y U V E
B M L H U I X Z F H H I S I U D L H R A T U L
Y T I L A U Q S J R G N R O I I Q E T W P D A
L A S R D A N E E L K N I R W T S D Q A M G B
D E B O R D R A W V M H S R K W P M U Y R J E
R G B P E Q A B U T A V R W M L G H I A X V L
B N D C P U Q D E N E H T G N E L Z L I E W S

1. classic
2. care labels
3. credit
4. quality
5. jacket
6. bargains
7. wardrobe
8. try it on
9. shirt
10. impulse
11. sit
12. wrinkle
13. color
14. stitched
15. lengthened
16. layaway
17. mix and match
18. store
19. factory outlets
HIDDEN COSTS OF GARMENTS/ADVERTISING
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Activity Sheet, Leader’s Key

Word Search

C B Z B A J Y A E S N L C O L A N W L M Y I R
E T A U A T H E B X K B J C D B S H I R T C H
A R M I G R P Q P G A J A R S Z D X A O T I B
R Y F A W E G M I R S H T E K C A J M G L S A
O I L V S R E A B F I R L B A N U V O K C S I
C T R O L O C D I D T C Z D D T C S R P S A J
X O E E Y T K T M N R M D M C E Z T V I G L C
F N M Q N S D I L A S G A F Z C T I C L Q C A
N G H I X G M S T E L T U O Y R O T C A F U R
S C T R J P R O M Y C H T P B E J C S Y U V E
B M L H U I X Z F H H I S I U D L H R A T U L
Y T I L A U Q S J R G N R O I I Q E T W P D A
L A S R D A N E E L K N I R W T S D Q A M G B
D E B O R D R A W V M H S R K W P M U Y R J E
R G B P E Q A B U T A V R W M L G H I A X V L
B N D C P U Q D E N E H T G N E L Z L I E W S

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14. stitched
15. lengthened
16. layaway
17. mix and match
18. store
19. factory outlets
Buying for Yourself and Others
Clothing & Textiles, Level II, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
• How clothing stores are different
• Retail terms used to describe categories of items
• Identify types of sales

ABOUT THEMSELVES:
• How to improve consumer making decision skills with increased knowledge
• Personal responsibility for planning to make wise consumer choices

MATERIALS NEEDED:
• Copies of Activity Sheet
• Video “Wardrobe Management: Dress Well for Less,” 21 minutes, by Learning Seed (if you do not have access to the video, main points are discussed below)
• Calculators, pencils, and paper
• Television and ½-inch VHS video player

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
We have talked about buying for others in the past (Wardrobe Planning Level I, “Giving and Receiving”). You have developed a system to give yourself ideas about things others might like. We briefly discussed considering how much you have to spend for gifts. Today, we will talk about where to shop and when to shop. This is more important than you might think. These two factors can greatly influence the quality and quantity of items your dollars will purchase.

We will focus today on clothing, but remember in retail some of these same principals apply on other non-clothing items.

There are many different types of clothing stores. No one type of store is right for everyone. Understanding the differences between kinds of stores, and the characteristics of each, will help you to make better buying decisions.

When thinking about any store, you should consider several things. First of all, ask yourself about the price of the store’s merchandise. Do the prices tend to be high, medium, or low? Price is not the only thing to consider.

Leader Notes
Welcome members. Have them sit in a comfortable place. Have the members introduce themselves and identify a person they will need to purchase an item for (also name the item if they have decided).
Think about selection. How many different categories of clothing are carried? How good is the selection in the category for which you are shopping? How good is their selection of sizes that you need?

In addition, what services do they provide that you want or need? Examples of services are charge accounts, layaway, gift wrapping, delivery and alterations. Are these services free or is there a charge for them? One of the most important services to ask about (especially if buying for someone else) is the store’s return policy. Can merchandise be returned, and under what conditions? Will you need the sales receipt? (It is always a good idea to keep it.) If you return a purchase, will the store give a cash refund or make an exchange for other merchandise?

Here are some differences between several kinds of stores.

**Department Stores**—Department stores usually offer clothing in the medium to higher price ranges. The selection is very wide; shoes to sportswear to underwear. In addition, a variety of colors, sizes, styles and brands are available. Department stores offer many services, but may charge for some of them. They usually have liberal return policies, but be sure to ask.

**Specialty Stores**—Specialty stores sell only one type of clothing (shoes or jeans) or clothes for a particular group (men, children, women). The prices in specialty stores frequently range from medium to high. The range of clothing categories is narrower than that in department stores; however, the selection in terms of color, sizes, styles and brands is usually quite large. Some specialty stores offer services, such as free gift wrapping. Inquire about return policies, they tend to be less liberal than department stores.

**Mass Merchandisers**—Mass merchandisers have many stores both in the United States and in other countries. They sell to large numbers of people, which is why they are called mass merchandisers. Such stores are similar to department stores, but their prices tend to be in the medium range. They carry fewer brand names than department stores. Their policies on services and returns tend to apply nationally, however, so this may be a good place to shop for gifts for out-of-town friends and relatives.

**Discount Stores**—Discount stores appeal to the customer on the basis of price. Their prices are usually lower than those of either the department store or the mass merchandiser. Each store carries a wide range of goods and usually offers many color and size choices. Discount stores offer fewer services than do department stores, specialty stores, or mass merchandisers. Examples include Kmart, Wal-Mart, and Target.

**Off-Price Stores**—Off-price stores are a fairly new kind of clothing store. They carry many of the same brands that department stores carry, but their prices are lower. The selection can be limited, especially in terms of size and color choices because many off-price stores obtain their merchandise from manufacturers’ canceled orders, overruns, and end of season close-
Off-price stores usually offer few services and have strict return policies. Examples include Marshall’s, Hit or Miss, and T.J. Maxx.

**Factory Outlets**—Factory outlets are owned and operated by clothing manufacturers. Instead of selling their close-outs, canceled orders, and discounted merchandise to off-price stores, manufacturers open their own retail stores. These stores frequently offer only one brand of merchandise and the overall selection is usually limited. However, prices can be very low for good quality merchandise. Services are nonexistent or very limited and returns may not be allowed. Examples include Bass Shoe Outlet and Burlington Coat Factory Outlet.

**Secondhand Stores**—Secondhand stores have become more popular recently. Look in the yellow pages of your telephone directory under “secondhand,” “thrift shops,” or “resale shops.” You may be surprised to find out how many exist. They offer low prices to their customers. The selection may be very limited in terms of sizes, colors, styles, and brands. You may be able to find unique or like-new clothing here. Services are nonexistent and returns not allowed. Examples of national secondhand stores are those run by Goodwill or the Salvation Army.

**Home Parties**—A person invites people into their home to sell and try on clothing and then place orders.

**Flea Markets**—Flea Markets are generally held in shopping malls, parking lots, or open fields. They offer consumers a variety of items varying greatly in quality. Watch for advertisements in your area. It is important to arrive early to find the best buys. Sellers may bargain over prices for additional savings. No services or exchanges are permitted.

**Auctions**—Auctions can be a shopper’s paradise, inexpensive entertainment, or a costly, sobering adventure. They offer a variety of goods, from jewelry and furs to general merchandise to useless junk. Although the types of auctions vary greatly, the terms of the auction are the same—cash and carry and no returns. Since the goods are sold “as is” the burden of making a wise purchase falls on the buyer. Arrive in time to preview the items. As you examine them, write down any interesting articles and note any damages.

**Garage Sales**—Garage sales have become a hobby for many smart shoppers. The night before, study the ads in your local paper. Careful planning can save you time and gasoline. Read each description carefully for the day, time, place and type of merchandise. Obtain sufficient cash beforehand. Do not hesitate to bargain. Offer what you feel is a fair price. The seller has the option of accepting, refusing, or making a counter offer.

There are two popular ways the media have gotten into the shopping business as well.

**Mail Order Catalogs**—Mail order catalogs allow you to shop at home. A retail store may or may not also be available to sell carryout merchandise.
These are rapidly increasing in popularity. Keep records of the shipping costs and your order to avoid problems with the company or to settle disputes. Never send cash through the mail. Use of a check, money order, or charge card are better alternatives. Depending on the company, some extra services are available and returns are usually allowed. Policies are printed in the ordering information for you to read.

*Computers and Electronic Shopping*—Home shopping networks currently are doing big business. They offer a wide variety of goods but only one item at a time is displayed. Pay attention to return information, and if it is not given, ask before placing your order. This marketing method seems to work because the pressure of an immediate decision is needed. Quality is hard to check and services and returns may pose problems.

In some cities, electronic systems housed within stores include some or all of the components to allow you to view items and order by computer. This high tech equipment will become more widely distributed in the future.

Some retailing terms you need to know are:

- **Regular**—Clothing that meets the manufacturer’s standards and are sold at regular price or special sale prices.
- **Samples**—Clothing that may have been used by sales representatives. They typically come in small sizes and may be shopworn or soiled.
- **Irregulars**—Clothing that has an imperfection in color, size, or fabric construction. These will not necessarily affect the wear of the garment and may or may not be visible. But make sure you know why the item has been labeled “irregular” before you buy it.
- **Seconds**—Clothing with a visible tear, run, color loss, or other imperfection.
- **Surplus**—Clothing that is generally “left-over,” either because they didn’t sell well or the manufacturer overestimated the number to make. Clothing may be end of season or of odd sizes.
- **Mill-Ends**—Fabric that is regular first quality fabric left on the end of the bolt. They usually come in short lengths and sell for a fraction of the cost. Be sure to check for flaws or wrinkles that may not press out.

Next, we will discuss sale bargains. How many times have you seen those words in a store window or advertisement? When is a sale really a sale?

Here are explanations of some common sales:

*Promotional Sales*—These sales promote certain items. They are offered on regularly priced merchandise for a short period of time. They are often offered on well known brands and held at the beginning of the season. These sales offer the customer an unusual value. It is smart to take advantage of these sales if the item is one you already planned to purchase.

*Special Purchase Sales*—These sales represent special offers by manufacturers to stores. The store has purchased the merchandise at a lower price because the manufacturer has excess inventory. These special purchases
usually remain at the sale price until all are sold. These may be good buys, but inspect carefully.

*Clearance Sales*—These sales are designed to move merchandise that is fast becoming out of season or out of style. As the selling seasons change, stores will put already stocked items on sale to make room for incoming merchandise. The two major clearance sale months are January and July. Often, it is not uncommon to find clearance sales on merchandise that are occurring during the peak wearing season. If you purchase during these sales, select styles that will not go out of fashion quickly. This way you can wear it now and next year.

*Percent-off Sale*—These sales are offered to generate store traffic. They may be a storewide sale, on individual items, or in a general department. Frequently, these sales are for only a limited period of time. Many stores hold storewide percent-off sales on a regular basis once or twice a year for one day. If a store where you like to shop does this, you can postpone purchasing an item until the day of the sale. This is a good way to save money on your clothing, provided you are able to wait until the sale to get what you need.

*Anniversary or Founder’s Day Sales*—These sales are held to commemorate the founding of the store. Some regular stock is reduced in price; some may be specially purchased for the sale and will not be carried in regular stock. They may be a good way to save some money if it is on an item you would purchase anyway.

*Seasonal Sales*—These sales are repeated each year, such as back-to-school sales. Good buys can be made at these sales, and it is good to pay attention to when they are and plan purchases around them if possible.

*Stimulative Sales*—These are offered to boost sales during slow periods. Sales like one-cent sales, two-for-the-price-of-one, buy one, get one free. Beware of these offers. They may be artificial and offer little savings.

Can you get a bargain at a sale? A good buy is anything that meets your needs at a price you want to pay. If you can get what you want for less money than usual, or if you can get better quality for the same money, you have a bargain. But just because you saved money on purchasing an item doesn’t make it a bargain. It is never a bargain if you cannot use it. Some items in your closet which you seldom wear seemed like a bargain when they were purchased but ended up as “closet monsters” taking up space.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. Name types of sales that happen regularly each year?
   A. Seasonal Sales, Anniversary or Founder’s Day Sales.

Q. Describe the most recent clothing or accessory item you or your family purchased on sale.
   A. Answers will vary.

Q. What are the two ways to shop at home?
   A. Mail order catalogs, home shopping networks and home parties.

Process:
Q. What was one of the most important things you learned from this lesson? Why?

Q. What type of store is your favorite to shop? Why?

Q. What did you enjoy the most about playing “I’ll Buy That?” What did you like the least? Why?

Generalize:
Q. Where do you think you would like to shop for a gift you plan to buy? When do you think you will make that purchase?
   A. Answers will vary.

Q. In the future, which type of store or method of shopping do you think will be the most common? Why?
   A. Answers will vary. Catalogs because people (especially parents who also work outside the home) are so busy, discount because more people have to watch their money, a mall because of wider choices, department store because people want better and more service.

Q. If you need to shop for a gift, what types of store or other sources will you consider before you purchase? What considerations will affect your purchasing location?
   A. Answers will vary.

Apply:
Q. When you have to purchase a Christmas gift for which you can plan in advance, how will your choices differ from those for a gift you need immediately for an event you just learned about?
   A. Answers will vary, but may include differences in time allowed, opportunity to look for various sources, compare prices and quality, and take advantage of seasonal sales.
GOING FURTHER:

• Take a field trip to compare three different types of stores.
• Accumulate mail order catalogs and compare differences.
• Compare regular, surplus, irregular, samples, and seconds of items. Have members tell their observations.
• Make a list of the various types of clothing outlets in your county or shopping area.
• Interview local store owner/manager about sales they offer. Discuss at next meeting. Or invite a few to come to the meeting as a panel to discuss when and why of sales.
• Go to the historical museum and research sales of years ago: How do prices compare? How were things marketed? What audience was the sale geared to?
• Develop a skit on the pros and cons of a typical sale. Present it to other peer groups.
• Talk to local clothing stores to see if and how you can assist with or observe an upcoming sale.

REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
Buying Your Clothes, Mary Harris and Marjorie Mead and Marjorie Sohn, Extension Specialists, University of Illinois at Urbana-Champaign, Cooperative Extension Service, Champaign, Illinois
Wardrobe Management: Dress Well for Less (to defeat the closet monsters!), 21 min VHS videotape, Learning Seed, $89, 1-800-634-4941

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
BUYING FOR YOURSELF AND OTHERS
CLOTHING & TEXTILES, LEVEL II, WARDROBE PLANNING
Activity Sheet

I’ll Buy That!

To play:
To make cards, photocopy the cards on the following page and mount them on cardboard or construction paper. For more than three players, add more cards using your own statements. Each game needs a person to act as leader to check the answers.

1. Shuffle the deck and deal four cards to each player. Place the remainder of the deck face down in the center of the table. The player to the left of the dealer begins, playing clockwise.

2. On each turn, a player selects one card from the deck. The player places the card, or any other card from his/her hand, face up on the table, reads the statement on the card aloud, and responds to it with either “I'll buy that!” (meaning the statement is true), or “I don't buy that!” (meaning the statement is false). Players have one minute to answer. (They may use scrap paper and a pencil.) The answer player checks the answer. If correct, the player leaves the card in front of him/her and may either play a second card from his/her hand in the same way or may challenge another player. If incorrect, the player places the card in the discard pile, and selects two more cards from the deck to add to his/her hand. When needed, shuffle the discarded cards into the deck.

To challenge, a player selects a card from his/her hand and places it face up in front of another player. If the challenged player answers correctly, the card is left face up in front of him/her. If the challenged player answers incorrectly, the card now becomes a part of the challenged player’s hand.

When any player discards all of his/her cards and goes out, the game is over. The person with the greatest number of correctly answered cards face up in front of him/her wins the game.
I’ll Buy That! continued

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<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A 6.4 ounce tube of toothpaste for $1.99 is a better buy than two 3.2 ounce tubes for $1.09 each.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>A curling wand for $18.99 with a $3 rebate is a better buy than the same wand for $14.99.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Three disposable shavers for $1 are a better buy than three for 29 cents each.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>A three-yard package of ribbon for 89 cents is a better buy than three yards at 25 cents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>A three-ounce sample size of shampoo for 39 cents is a better buy than 12 ounces for $1.99.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.</td>
<td>Two swimsuits for $40 are a better buy than one for $29.99 and the second one for 1 cent.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Pantyhose at $1.50 a pair is a better buy than three pairs for $5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Two sweaters at $25 each are a better buy than two sweaters for $40.</td>
<td></td>
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<tr>
<td>9.</td>
<td>Two shirts for $30 are a better buy than two shirts at $17 each.</td>
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<tr>
<td>10.</td>
<td>Four plastic combs for $2 are a better buy than four for 59 cents each.</td>
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<tr>
<td>11.</td>
<td>A bar of deodorant soap for 35 cents is a better buy than 4 bars for $1.00.</td>
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<tr>
<td>12.</td>
<td>Earrings with changeable parts to make 3 different looks are a better buy for $10 than 3 separate pairs for $5 each.</td>
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<tr>
<td>13.</td>
<td>Two pairs of jeans at $17 each are a better buy than two pairs for $30.</td>
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<tr>
<td>14.</td>
<td>Two lipsticks for $1.99 each are a better buy than one for $2.39 and one free.</td>
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<tr>
<td>15.</td>
<td>A down jacket for $89 is a better buy than the same jacket for $100 with 5 percent off.</td>
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<tr>
<td>16.</td>
<td>Two blouses for $19.99 each are a better buy than one for $39.99 with the second for 1 cent.</td>
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<tr>
<td>17.</td>
<td>A six-ounce bottle of cologne for $9.99 is a better buy than two ounces for $3.99.</td>
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<tr>
<td>18.</td>
<td>Two bow ties for $3 each are a better buy than two for $6.99.</td>
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<tr>
<td>19.</td>
<td>Two pairs of shoes for $23.99 each are a better buy than one pair for $30 and one pair free.</td>
<td></td>
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<tr>
<td>20.</td>
<td>Coats at $35 each are a better buy than one for $50 and the second one for $5.00.</td>
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<tr>
<td>21.</td>
<td>Belts at $3.50 each are a better buy than three belts for $15.</td>
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<tr>
<td>22.</td>
<td>A $23 blow dryer with a $5 rebate is a better buy than a $19 blow dryer.</td>
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<tr>
<td>23.</td>
<td>Six pair of socks for $1.98 are a better buy than for 50 cents a pair.</td>
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<tr>
<td>24.</td>
<td>Two skirts for $50 are a better buy than three skirts for $69.99.</td>
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<tr>
<td>25.</td>
<td>Two lip glosses for $1 are a better buy than two at 49 cents each.</td>
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</tbody>
</table>
# Kansas 4-H Clothing Leader Notebook

*Level III*

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I Like Me
Clothing & Textiles, Level III, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• Dress is often an indication of self-esteem
• How to express feelings appropriately
• Some myths about society’s values

ABOUT THEMSELVES:
• All feelings we perceive are real and each person can choose how to deal with those feelings
• No one can make others feel emotions
• A person may have a different set of values than society teaches
• The three conditions necessary for a positive self image

Materials Needed:
• Member Handout—2 copies, one to be filled out by parents and one to be filled out by youth
• List of community resources—compile by contacting local mental health, school counselors, health department, etc.
• Magazines and/or catalogs with models

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:

Today, we are going to talk about ourselves—what makes each of us special and how we feel about ourselves. It will be a time for all of us to learn more about what makes us “unique.”

Dress is often a reflection of how we feel about ourselves. Dress can often be misleading. People with poor self esteem may invest great amounts of time in their appearance to disguise their low self image. If the situation arises and too little time is allowed to put on their public mask they often panic because this is their defense to cope with being in public. You may know of people who work at not being noticed. They dress and display body gestures that cause them to disappear from everyone else. They seem to become a “wallflower.” Their method of public presentation is to “disappear into the walls.”

During our clothing and textiles studies we spent some time on personal appearance. Perhaps now we need to explore how each of us can build our inner self-confidence. If we do, that confidence will show outside. Once our self-confidence shows outside, we not only reject becoming a wallflower, but our lives become more rewarding and enjoyable.
To have a positive self image, each person must feel these three basic conditions are being met. They are:
   I am of value.
   I am lovable.
   I am loved.

A supportive environment will help you attain these requirements by providing you with the following situations:
1. A place where you feel listened to and validated (valued).
2. A place where you know the limits of acceptable behavior.
3. A place where you learn there are consequences to breaking the limits.
4. A place where you can learn to accept unchangeable situations. You will be able to recognize the negative feelings and accept them in a positive way.
5. A place where you can learn some problems are worth challenging, and a place where you can gain empowerment through challenging these situations and problems.

Ideally, families fulfill these duties. In reality however, families frequently do not or cannot provide this ideal environment. For various reasons many youth will need to look outside their families for this support. There are many places and people who can provide this support. Others cannot always tell that you need help, so you need to ask if you are not getting enough support at home.

Some of these people/places are:
School: teachers, coaches, counselors, nurse
Relatives: uncles, aunts, grandparents, stepparents, guardians
Non-relative adults: parents of friends, neighbors, 4-H leaders, Sunday school teachers, ministers, youth group leaders, summer coaches
Health agencies: mental health workers, physical health professionals

There may be others that are not mentioned here, but come to mind. In that case, they are probably someone you trust and would make a good adult friend for you to confide in.

Friends your own age and self evaluation/expression (such as journal entries, poetry, meditation, and artistic expression) also can aid you in developing a supportive environment. Due to your (and your friends’) limited life experience this cannot replace a relationship with a trustworthy, caring adult, such as an elder member of your community.

Since we pay attention to our visible self (appearance) in many clothing projects, it is wise for us to take a moment and look at how society views beauty. Can you describe what attributes a “beautiful woman” has, based on society’s values? What about a “handsome man”?

Now take a moment and think of people you know and value. How do they compare to this beauty standard? Are they less, more, or of the same value because of this? They are obviously precious to you; what makes
them important to you? Does our society value the same characteristics you do? Is it possible that beauty is more internal than external? YES! We choose our friends because of the beauty we find inside them.

You have the power to change yourself inside, but the outside cannot be changed except through extreme measures. Therefore, the inside is the most important part. What really matters is who you are inside and how you treat others.

We have discussed that your emotions are real and a very important part of you. (See level II—“Discovering Myself” lesson) We also discussed how others also have their feelings. Part of being friends is allowing others to feel differently than you and accepting this difference. It is important to understand that part of the maturation process is deciding to act more graciously than we may feel at a certain time. The more maturity someone possesses the easier it is for them to react in a deliberate and positive way to a situation in which they feel a very strong emotion.

This is a time in your life to learn how to positively express your negative feelings. For example, you may be angry. It is important to verbally and rationally express your anger without striking out at someone. Strong emotions may include anger, frustration, impatience or sexual feelings.

Youth of your age are often bombarded with the societal message of acting out your sexual feelings. Many youth are experiencing strong sexual feelings at this age. Some may choose to act out these feelings by dress or sexual experimentation. What may be the consequences of this choice? (Positive—feels exciting, perhaps valued for this reason) (Negative—exciting feeling passes, may feel betrayed by another person that is not as intense in the relationship, sexually transmitted disease, AIDS, unwanted pregnancy) members may cite other concerns.

REMEMBER: A quick over-reaction to a strong emotional situation usually results in poor choices. Stepping back from the situation, taking a deep breath, or counting to 10 gives a bit of time for thinking and often yields better choices.

Whether your family is high or low on the asset checklist, you can gain assets by reaching out to a trustworthy adult, and now is the time to pursue this.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. Name three assets in a positive home environment?

A. Limits are in place and known, teen has someone to listen to them, there are consequences for breaking the limits.

Q. What are the three conditions necessary for a positive self image?

A. I am of value; I am lovable; I am loved.
**Leader Notes**

Take a moment to pass out the Activity Sheet “Asset Checklist for Teens and Parents.” (from “The Troubled Journey”—use a code name or cut off teen answers before sending home for parent(s) to complete). Have members complete. Take time for members to interact about their answers if they desire. Remember, this may be quite uncomfortable for some teens who are experiencing trouble at home. Also use this time to invite members to remain after the meeting to talk to you in private or to call you anytime they are in need of an adult friend. Send home the second copy for the parent(s) to complete. The members may choose to compare their checklist with their parents’ checklist. According to Dr. Peter Benson, young people should ideally have at least 25 of the 30 assets listed. However, the average young person has 17 of 30.

**Process:**

Q. Where else can youth go for support if they are not getting parental support?
A. School, health agencies, religious groups, adult friends, 4-H leaders.

Q. What type of self expression do you enjoy?
A. Answers will vary. (talking, music, art, writing, poetry, being in nature, etc.)

Q. Why is this important to you?

**Generalize:**

Q. Describe the kind of person you want to be and the reputation you want to have. How is this reflected in our clothing choices?
A. Answers will vary.

**Apply:**

Q. How will you act differently in the future as a result of this activity?

**GOING FURTHER:**

- Invite mental health professional to address a topic (Example—sexual pressure and saying no).
- Identify local youth facilities and “safe houses” for youth.
- Have members help the community plan a facility or “safe house” if needed or suicide prevention program.
- Have members design and present a talk about communication between youth and adults.
- At the next meeting, invite parents and other significant adults and have the adults participate in this lesson.
- Assign members homework—have them watch 1 to 2 hours of television and record the number of disabled, overweight or unattractive persons seen. Were they portrayed in a favorable or unfavorable light? Commercials count, too. Bring results to next project meeting for discussion.
REFERENCES:
The *Troubled Journey*, Dr. Peter Benson, President of Search Institute, Minneapolis, Minnesota, “Respecteen” 1-800-888-3820

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I LIKE ME  
CLOTHING & TEXTILES, LEVEL III, ME & MY BODY  
Activity Sheet

**An Asset Checklist For Teens and Parents**  
**How many external assets are present in teen’s life?**

<table>
<thead>
<tr>
<th>Teens</th>
<th>Parents</th>
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<tbody>
<tr>
<td></td>
<td>Parents are loving, easy to talk with, and available when teens want to talk.</td>
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<tr>
<td></td>
<td>Parents frequently take time to talk seriously with their children.</td>
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<tr>
<td></td>
<td>Parents express their own standards for teenage behavior.</td>
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<td></td>
<td>Parents talk with their teenager about school and sometimes help with school work and attend school events.</td>
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<tr>
<td></td>
<td>Parents set rules and enforce the consequences when the rules are broken.</td>
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<tr>
<td></td>
<td>Parents check where their teenager is going, with whom, and for how long.</td>
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<tr>
<td></td>
<td>Parents are approachable when the teenager has something serious to talk about.</td>
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<td></td>
<td>The number of nights the teenager may spend out of the home “for fun and recreation” is limited.</td>
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<tr>
<td></td>
<td>The teenager has three or more adults, in addition to parents, to whom he or she could go for help.</td>
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<td></td>
<td>The teenager has frequent serious conversations with an adult who is not his or her own parent.</td>
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<td></td>
<td>The teenager’s friends are a constructive influence, are doing well at school, are staying away from contact with drugs, alcohol, and other at-risk behavior.</td>
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<td></td>
<td>The teenager attends church or synagogue at least once a month.</td>
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<td>The teenager sees the school atmosphere as caring and encouraging.</td>
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<td></td>
<td>The teenager participates in band, orchestra, or takes lessons on a musical instrument involving three or more hours of practice a week.</td>
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<td></td>
<td>The teenager participates in school sports activities or other organizations three or more hours per week.</td>
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<tr>
<td></td>
<td>The teenager participates in non-school-sponsored sports or other organizations three or more hours per week.</td>
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<td></td>
<td>The teenager tries to do his or her best at school.</td>
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<td></td>
<td>The teenager hopes to be educated beyond high school.</td>
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<td></td>
<td>The teenager earns above-average school grades.</td>
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<tr>
<td></td>
<td>The teenager does six or more hours of homework weekly.</td>
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<tr>
<td></td>
<td>The teenager is good at making friends.</td>
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<tr>
<td></td>
<td>The teenager tries to stand up for his or her beliefs.</td>
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<td></td>
<td>The teenager cares about others’ feelings.</td>
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<tr>
<td></td>
<td>The teenager is good at planning ahead.</td>
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<tr>
<td></td>
<td>The teenager is good at making decisions.</td>
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<td></td>
<td>The teenager has a positive attitude toward self.</td>
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<td></td>
<td>The teenager envisions a happy future for him/herself.</td>
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<td></td>
<td>The teenager shows concern for the poor.</td>
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<tr>
<td></td>
<td>The teenager is interested in helping and improving life for others.</td>
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<tr>
<td></td>
<td>The teenager holds values that prohibit having sex as a teenager.</td>
</tr>
</tbody>
</table>

*The Troubled Journey*, Dr. Peter Benson, President of Search Institute, Minneapolis, Minnesota  
*8-Clothing & Textiles, Level III*
Look Good, Feel Good

Clothing & Textiles, Level III, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• Procedures for doing a manicure
• Advanced skin care, including skin protection
• Importance of personal hygiene

ABOUT THEMSELVES:
• Personal responsibility for grooming habits
• The importance of establishing new grooming patterns

Materials Needed:
If inviting skin care specialists from several different companies to lead a session, ask them what items you need to provide for each member. Have these assembled and ready to go for the project meeting. Be sure the emphasis is placed on cleanliness and skin care rather than selling makeup products. Do not allow any products to be sold at the meeting.
If you will lead the manicure session, have the following supplies available:
• bowl of soapy water
• soft cotton washcloth
• emery boards—one per member
• petroleum jelly or a commercial cuticle conditioner
• base coat—may use clear polish
• several nail polishes (or have members bring one)
• top coat—may use clear polish
• nail polish remover
• cotton balls

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:
A major part of your overall grooming begins with your skin layer, not clothing layer. Nothing sets a beautiful outfit off like healthy skin, hair and nails. Likewise, nothing can detract from a handsome outfit like unkept hair, dirty dull skin, or shabby looking fingernails. For more information about hair refer to lesson, “A Head Above,” Level I. Today, we will focus on health habits that will assist you in keeping healthy glowing skin and neat and trim nails.

Since your skin covers the majority of your body, let’s start with that. Your skin is a living organ that contains two layers. The outer layer is called the epidermis, and the inner layer is the endodermis. It breathes, needs nutrients, and is very susceptible to damage. It is important for each

Leader Notes
Allow members to sit in a comfortable place. Depending on the grooming habit you will demonstrate, the ideal location may be near water. If members do not know each other, let them introduce themselves and state if they like their skin, hair, or nail appearance best. You begin.
person to take good care of their skin. The outer layer changes constantly. The inner layer contains the blood vessels and oil glands. Both layers must be kept in good condition. Much of that care comes from the inside through the health habits of proper diet, plenty of sleep, and plenty of exercise.

One good health habit you should adopt is to use sunscreen of 15 or higher anytime you are out in the sun. The sun is one of the most destructive elements to your skin.

Over 80 percent of sun exposure that causes skin cancer later in life occurs before a person is 18 years of age. Protective clothing, such as wide brimmed hats and close woven clothing that covers or shades the body, will protect from ultraviolet radiation. Dermatologists tell us that no tan is a healthy tan. There are 600,000 new cases of skin cancer diagnosed per year.

Skin cancer is at best disfiguring and may result in death. It can be almost entirely prevented by protecting the skin from overexposure to ultraviolet radiation.

Skin specialists usually recommend washing with a mild soap and water as the best care for the outer layer of skin. It is also important to thoroughly rinse off the soap because residue can cause the skin to dry and flake.

The type of skin you have determines how often you should wash your face and what other care you wish to give it. Whatever skin type you have, be sure to remove all traces of soil and/or makeup at night. Usually during puberty, youth have more complexion problems than at other times in their lives. This is common and is another reason a good skin care routine is imperative. As your complexion changes, it is wise to consult with a skin care specialist to re-evaluate the care your skin may require. Find your skin type below to plan your best skin care.

Normal Skin—wash with soap and water twice a day, then apply a light film of moisturizer under any makeup.

Oily Skin—wash with soap and water three times a day. You may want to use a mild astringent to remove all traces of oil and to help close enlarged pores.

Dry Skin—remove makeup with a cleansing cream, then wash gently with a mild soap and water. Use a moisturizer under your makeup. You may want to use a moisturizing cream at night.

If you have a problem complexion even though you have been careful to treat your skin gently, eaten a balanced diet, exercised, and received adequate sleep, then talk with your family doctor or a dermatologist about special skin care to clear up blemishes.

These recommendations are written for young women who may be using makeup. However, they also apply to young men and women when makeup is not a factor.
Let’s talk a moment about skin creams. There are three types available. Cleansing creams, softening creams, and foundation creams.

Cleansing creams are used for cleaning your face or removing makeup. These usually have a high mineral oil content which will eventually dry your skin. If you have very dry skin, look for cleansing creams with lanolin or other fats added. The oils in cleansing creams will dissolve oil-soluble dirt, but not dirt which is water soluble.

Softening creams replace natural skin oil on dry skin. Lanolin, which is very similar to body oil, is usually the main ingredient in these creams.

Foundation creams can be used as your makeup or as a base for blusher and powder. It will conceal minor flaws in your complexion and give skin an even color. Foundation should be matched closely with your natural skin coloring.

We will talk more about makeup and its application in the lesson “Self Expression in Dress.” Next, let’s take a moment to discuss a bit about personal hygiene. Most boys and girls of this age begin the change from a child to an adult. This takes a process of years to complete. In the beginning, one change you will notice is more active sweat glands. As the sweat glands produce more, you will notice increased perspiration, especially under the arms. If this is allowed to remain under the arms, the moist, damp environment is ideal for bacteria growth, and as bacteria grows, so does odor. This is why it is important for you to use a daily dose of deodorant or antiperspirant under your arms. Antiperspirant should be reapplied after showering in physical education classes or after sports practice. Change undergarments and socks daily. Here are some special tips for boys and girls.

Boys: You may begin shaving around this age. Here’s how. If using an electric razor, keep face dry before shaving. If using a blade razor, wash face with hot water and soap. Rinse off soap and leave face wet for about two minutes (just enough time to brush your teeth). Apply lather and shave, cutting with the grain as much as possible. Rinse with hot then cold water and pat dry. Apply an after-shave lotion that you like and that does not cause irritation.

Girls: Many girls will begin their menstrual period during these years. It is important for you to use a consistent hygiene routine during this time. It is reassuring to keep menstrual supplies handy in your locker, purse or backpack so you don’t have to worry. Depending on your personal circumstance, look for sanitary products with the greatest amount of protection. Sanitary pads come in many absorbencies and some have protective shields for undergarments. Tampons are inserted into the body and can be used with a pad to give more protection. There is a small health risk of toxic shock syndrome with the use of tampons. To prevent this problem, never wear the same tampon more than four hours. Tampons allow you to participate in water sports. Again, look for the product that has the absorbency you require.

Allow the skin care professional to discuss the above as she/he demonstrates proper skin care, but not makeup application.

The following might be a touchy subject to discuss with both boys and girls—maybe split the group up before beginning. Boys will feel more comfortable discussing with an older male. At this age, boys and girls really don’t know the proper way to respond. Allow members to ask questions or discuss experiences they or others have had. Many young people will have questions they need answered but many may not have someone to talk with. Allow as much time as needed.
Next, we are going to give ourselves a manicure. Clean and well-kept nails enhance your appearance. Hands and nails are always noticed by others because we use them all the time. Attractive fingernails don’t just happen, they require some time and effort. Whether you are male or female, a weekly manicure should be part of your grooming routine.

Step 1: Clean
Remove all traces of old polish by first moistening a cotton ball with remover. Press cotton firmly to the base of your nail, and wipe off polish using a single firm stroke. Repeat process if polish is stubborn. Hint: Purchase polish remover labeled “non-drying.” Polish remover is acetone-based and can have a drying effect on the skin if used regularly. A few conditioning formulas are on the market that you might like to try. Clean dirt and residue from underside of nails using an orangewood stick or the end of your nail file.
Give nails a bath. Fill a bowl or sink with warm soapy water and soak hands for a few minutes. Afterwards, rinse soap from hands and dry with a fluffy towel. Use the towel to gently push back cuticles. A “handy” time to do this is after your bath, when the cuticles are moist. Caution: Water exposure will temporarily soften fingernails, so be extra gentle during this step.

Step 2: Shape
To shape nails, use an emery board or other type of nail file. Your nails are not weapons, so don’t file them into sharp points. The ideal shape is a squared oval. This is achieved by filing in one-way strokes from the upper sides of nails to the center. Hint: Avoid sawing back and forth as this tends to weaken and split nails. Avoid filing the lower sides of nails because this will weaken the nail’s resistance to breakage. Do not shape right after cleaning. Wait 10 to 15 minutes between steps 1 and 2.
Boys should shape nails so that they are smooth and slightly curved at the sides. Shaping may also be achieved more rapidly with nail clippers.

Step 3: Condition
After giving nails a shape-up, it’s time to condition them. It’s a good idea to save this step for bedtime so that nails will be extra conditioned in the morning. Commercial cuticle conditioners are available. Hint: Petroleum jelly is an excellent and inexpensive conditioner. It is also a great hand softener. At bedtime, massage petroleum jelly into areas around nails and rub some onto hands as well. When you wake up the next morning, you’ll be amazed at how soft your hands and cuticles are. Hand lotions are another alternative.

Step 4: Protect
You’ve probably heard of the importance of a base coat. Here are some reasons why:
• adds strength to weak nails
• prevents yellowing of the nail caused by many dark polishes
• provides a smooth surface for the application of colored polish
Apply base coat of nail strengthener or clear polish in three strokes. One stroke down the center of the nail. The other two strokes down the left and
right side of the nail. Allow to dry thoroughly before proceeding to the next step. Hint: Before doing this step make sure nails are completely clean and dry, free of oily residues and dirt. This prevents bubbling and particles of dirt showing through the polish. Hint: If you prefer a natural look, skip step 5 and invest in a nail buffer for shiny, healthy natural nails. One coat of nail strengthener or clear polish may be added for strength.

Step 5: Decoration
Many people choose not to decorate their nails with polish. However, if you do, remember, there are thousands of brands and colors available. Here are some guidelines for selecting polish:
- Pale, soft colors are best for those who are fair skinned. They also tend to make nails appear longer.
- Darker, brighter colors are complimentary to tanned, black, and olive skins.
- Choose shades that coordinate with the dominant colors of your wardrobe.
- Try a French manicure. This requires skill and control, but the results are lovely. This manicure works best on short to medium length nails.
- For special events, experiment with iridescent, glittery polish.

Apply colored polish in the same manner as base coat, using three strokes.

Hint: Remove “goofs” with a cotton swab dipped in remover. It is important that polish be applied in thin coats and allowed to dry completely between coats. Otherwise, it will appear thick and take forever to dry.

Step 6: Finish
Lastly, add one final coat of clear polish for protection. Hint: Try one of the no-chip top coat polishes. They are excellent for adding staying power to your manicure.

You may think “I don’t have time for all that.” It really doesn’t take that long and the steps can be spread out over a day or two at your convenience.

Step 7: Fixing a Chip
If you find a chip, it’s often not necessary to redo the entire nail. Try this first.
- Dip a cotton swab in remover.
- Place on the chip and allow edges around the chip to melt. Let dry.
- Apply polish just inside chipped area. Let dry.
- Apply one coat of polish to entire nail.

Now that you know the proper way to care for your skin and nails, you can be confident that you will appear as well groomed as possible.

As you teach the steps, allow members to do their own manicures. Offer suggestions and corrections as needed.
Leader Notes

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What type of skin do you have?
A. Answers will vary. Help the members to determine their own skin type.

Q. Why is it important to wash our face daily?
A. It removes the dirt that can clog pores making them grow bacteria and become infected. This results in a blemish.

Q. What was the most difficult part about giving yourself a manicure? Why?

Process:
Q. Why are well cared for nails important?
A. Because nails and hands are visible to everyone during most of our activities and well cared for nails make the statement, “I care about myself.”

Q. What were you feeling during the manicure? Why?

Generalize:
Q. What did you learn about yourself during this lesson?

Q. What did you learn about personal responsibility from this lesson?

Apply:
Q. Skin cancer is becoming an increasing health risk to all ages. What will you do differently in the future to protect yourself and others from the risk of skin cancer?

GOING FURTHER:
• Have members volunteer to do manicures for residents of a local nursing home.
• Take before and after pictures of their nails.
• Experiment with nail designs.
• Have nail specialist give advanced training on nail care.
• Attend local trade show with nail and hair specialists.
• Study the structure of the skin from a physiology textbook. Note how nutrition, grooming, the sun and exercise affect the health of the skin cells.
• Purchase or construct clothing that provides sun protection.
• Present program for other youth teaching about sun protection using resources available from county Extension office.
REFERENCES:
Special Clothes, Naomi Johnson and Jereldine Howe, Clothing and Textile Specialists, Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506
Nail Tips, 4-H Modeling Squad, Lisa Yonge, Oktibbeha County 4-H Modeling squads, Mississippi Cooperative Extension Service
Good Grooming and Physical Fitness American Institute of Men’s and Boy’s Wear, Inc., 1290 Avenue of the Americas, New York, New York 10019
Protecting Against Ultraviolet Radiation: What do we know? What should we know?, Deanna Munson, Textile Specialist, Cooperative Extension, Kansas State University, Manhattan, Kansas 66506

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Public Presentation—Modeling

*Clothing & Textiles, Level III, Me & My Body*

What Members Will Learn . . .

ABOUT THE PROJECT:
- How to perform advanced modeling techniques
- Good public presentation comes from good private health habits
- Making a good first impression also includes proper meal time etiquette

ABOUT THEMSELVES:
- The importance of exercise as a stress reliever and poise builder
- Setting goals to enhance personal fitness

Materials Needed:
- Three to four course meal (Example, soup, salad, main course and dessert)
- Silverware necessary to set table for members
- You may want to have members bring an item for the above meal or have members bring the cost of the meal and have it catered
- *The Spotlight is On You*, video and leader guide from McCall's on modeling (see reference for ordering details) or request your county office to ask for a loan copy from the Area Extension Office or Department of Communications Media Center, Umberger Hall.
- Television and video player, 1/2 inch VHS

ACTIVITY TIME NEEDED: 60 MINUTES. THIS LESSON COULD BE DIVIDED INTO TWO 60 MINUTE SECTIONS, ONE ON TABLE ETIQUETTE AND ONE ON MODELING

ACTIVITY:

We have talked in the past about good manners, good grooming and the importance of being prepared for new unfamiliar social situations. Today, we will talk about your public presentation. There will be many times that you are required to talk in public. We have covered how to make an introduction (see lesson, Personal Presentation, Level II). Everyone of us at some time will be dining out in public. This can be a most enjoyable time or an extremely uncomfortable time depending on how well you know table etiquette. Today, we will cover proper table manners.

Depending on the type of meal and the formality of it, different table settings and rules apply. If you want to be positive you are doing everything correctly, you may want to invest in an etiquette book or check out one at your local library. A good one is *Emily Post's Etiquette*, 1992, or

Leader Notes

Welcome all members, have them sit around a table that is prepared to be set for a meal. Allow members to introduce themselves if they do not know each other. Ask them to tell where they ate their last evening meal. You begin. Use this to illustrate how frequently people eat away from home. You may want to discuss that eating away from home may be informal (picnic) or formal (wedding meal) and manners do differ upon the type of meal. This also applies for meals at home. Some may be informal and others formal.
The Amy Vanderbilt Complete Book of Etiquette, 1978. The rules we will outline today are common proper rules and would apply in a majority of situations.

Before eating the meal, we must first set the table. Our meal will have four courses today. For that we will need:

- Plate
- Salad plate
- Soup bowl
- Dessert plate
- Beverage glasses (two—water/other beverage)
- Silverware—soup spoon, salad fork, dinner fork, knife, spoon, teaspoon, dessert fork/spoon
- Napkin

Guidelines:

- Plate in the center.
- Dinner fork to the left of plate
- Knife to the right of the plate, with the blade toward the plate
- Salad fork to the left of the dinner fork
- Spoon to the right of knife
- Teaspoon to the right of the spoon
- Soup spoon to the right of the teaspoon
- Dessert fork/spoon laid crosswise above the plate
- Napkin to the left of the fork
- Glasses at the top right of the plate in a line to the right

Now that the table is set, let’s eat. Mealtime should be a special time. Good manners help us enjoy our meal without feeling uncomfortable. Here are some tips about mealtime manners.

Silverware—Use the outermost silver first. Soup spoon, salad fork, dinnerware, dessert silver. A knife should be used only when the food cannot be cut with a fork. A spoon should never be used when you can use a fork. Only very dry or firm foods should be eaten with the fingers.

Knife foods—steaks, chops, other meat, and fowl: fish that has to be boned; butter, jelly, cheese, and food that has to be spread. To cut with a knife—hold the fork in the prominent hand backside upward with index finger on back of upper tines. Cut with the knife on the outside edge of the fork, keeping elbows close to your body. Cut a few bites at once.

Fork foods—vegetables; seafood; croquettes; waffles/pancakes; eggs; large pieces of cake or small ones too soft for the fingers; shortcakes; pies; watermelon; hamburger patties; meatloaf.

Spoon foods—soups; stewed tomatoes; ice cream; creamed vegetables; cantaloupe; fruit cocktail; citrus fruits; puddings; custards; cereals; cooked fruits; anything in a bowl.

Finger foods—bread and rolls; crackers; toast; most sandwiches; cookies; small cakes; nuts; celery; olives; crisp bacon; potato chips; radishes; corn on the cob; grapes; cherries; shoestring potatoes; candy; froglegs; lobster claws; crystallized fruit; small pieces of firm cheese.
NOTE: If you are ever unsure of how or what to do when eating, watch your hostess/host and following their example. You can be assured you are doing what is acceptable by following their lead.

For fried chicken it is not acceptable to eat it with your fingers at a formal meal or in a public dining facility. If you are eating informally and the hostess says it is OK, at a picnic, at home or when you raid the refrigerator—fingers are fine! So, how should you eat it? Cut it off the bone and pierce it with a fork.

General table etiquette—Again following the hostess/host lead.

Do’s
- Sit up straight.
- Keep your elbows in.
- Spread your napkin on your lap when you are seated. If there is a hostess, wait until she has made this move and then follow suit. Large dinner napkins should be left half-folded on the lap. Small napkins may be opened out fullsize. Touch the lips with the napkin. Do this before drinking, in order to avoid unsightly marks on the glasses. It is assumed that women will quietly have removed lipstick before using the napkin. At the end of the meal, or if it is necessary to leave the table, leave your napkin neatly semi-folded at the left side of your place setting. Never fold your napkin after a meal unless you are in a family situation where you know this is expected. Never wad up a paper napkin. Treat it like a cloth napkin and keep it as neat as possible.
- Take a little of every course that is offered and at least make a pretense of eating. It is impolite to refuse a dish. Try to develop a taste for all foods. (Unless for health reasons you cannot eat the food, then it would be appropriate to politely refuse or take a very small amount and not eat it. Don’t offer an explanation unless asked.)
- Express some preference for a food when you are asked.
- Say “no thank you” when you are refusing something. You need not say “thank you” for each dish offered by a waiter.

Don’ts:
- Put your elbows on the table while the meal is in progress. During between-course and end-of-meal conversation, one elbow may be tolerable if it does not shut out the person sitting beside you. Elbows on the table frequently disarrange your own or your neighbor’s place setting.
- Wipe off your silverware before eating. If necessary, call the waiter and ask for clean silver or mention it politely to your host/hostess.
- Reorganize your place setting and don’t draw pictures on the linen with your silverware.
- Twirl your silverware or play with it in any manner.
- Reach in front of a person to obtain a desired dish. Ask to have it passed. The correct passing of serving dishes goes from right to left.
When observing the above rules, you will be a welcome guest at anyone’s table. You will make a good impression as you eat out in public and you will learn to feel comfortable and at ease.

As you gain comfort in being in the public eye, you will begin handling more complex presentation tasks. Some of these will be doing more modeling and perhaps sitting or standing at a podium. Here are some tips about these situations.

For girls, if sitting—keep back and head straight. Do not cross legs at the knee. Place one foot on floor and cross other foot behind this leg at the ankle. Keep knees together. Tilt legs back somewhat. By turning the trunk of your body off to one side you appear more graceful. Rest your hands in your lap or on one thigh.

Boys should sit with back and head straight. Both feet should be placed flat on the floor, about a foot apart. Hands can rest on top of thighs, or clasped loosely, resting across thighs.

Another modeling technique is Mannequin Modeling. Here you want to look non-lifelike. Dos and Don’ts include:

Do’s:
• Strike a comfortable pose that can be held for up to 15 minutes.
• Stare straight ahead or slightly downward at an inanimate object.
• When you blink, be sure to maintain your concentration and blink as quickly as possible.
• Use about twice as much makeup as you normally would.
• Point your middle finger slightly inward for a more natural appearance.
• Space your feet apart while standing unless you are modeling swimsuits or lingerie.
• Keep a straight face and never let the crowd get to you.
• Distribute your weight evenly.
• Model with a group of several, when possible.
• Scan fashion magazines, pattern books and catalogues for new and innovative poses.
• Practice looking aloof.
• Use plenty of accessories.
• Feel free to use sunshades with casual clothes.

Don’ts:
• Prop on another model.
• Position your feet so they will cramp.
• Lock your knees.
• Use heavy accessories.
• Smile.
• Look at the crowd.
• Lose your concentration.
• Extend your arms so that they tire easily.
• Grip anything heavy.

Allow members to try this posture.

Show the video, “The Spotlight is on You,” and use the instructor guide with members.
• Lean your head far enough back to look at the ceiling.
• Pose in a lunge.
• Slump.

Practicing these can be lots of fun to try for a different type of style show.

A major part of the self-confidence you will have when you are in public will come from a healthy body. Nothing is as important as a body that is cared for correctly on the inside. To do this you need to make good health habits a top priority. Nothing beats regular exercise, good food, and plenty of rest when it comes to remaining prepared to meet life’s challenges.

A good exercise plan consists of at least three sessions of aerobic activity of 30 minutes or longer per week. Heart rate at 70 percent of maximum (220 minus your age) for at least 20 minutes. In addition, you need regular strengthening exercises, and flexibility exercises to tone and work all your body muscles. These exercises do not have to be monotonous. Change and rotate your exercise by the season and include both group and individual sports. This will help you find many active interests that will keep you in shape now and in the years to come. Exercise is a great stress reliever.

A proper eating plan contains many different types of foods and few foods that are high in empty calories. Teens need many calories to support the active lifestyle they lead. But no one needs a diet filled with foods loaded with fat and refined sugar. Rely on many fresh and simple foods. Use baked meats, fish and poultry. Eat fresh fruits and vegetables many times per day. Refer to the Foods Project materials for more specific information. As you age, this current requirement for calories will slow throughout your adult life. Each decade of age decreases the amount of calories you require. However, the need for essential nutrients stays the same or increases. That is why many adults slowly gain weight. They fail to reduce their caloric intake as they grow older.

If you ever feel the urges to overeat then purge (vomit) or use drastic measures to lose weight, or if you are a normal weight and feel you are too large and hide your non-eating; these can be signs of an eating disorder. If left untreated, these disorders can rob you of your health and in some cases your life. There is help available—but you need to ask. Discuss this with your parents or another caring adult, and contact your doctor or other health care professional.

Everyone has their own needed amount of rest. You should pay close attention to yours and respect it. A full nights sleep can do wonders for keeping you refreshed and ready to meet the day. Occasional naps may be needed for those of you who are involved in strenuous sports. This is a time in your life that your body is growing rapidly. Rest requirements are greater than they were when you were younger.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What does public presentation mean to you?

Q. Why is public presentation important?

Q. How did it feel to practice good table manners (or good modeling techniques)? Why?
A. Comfortable or uncomfortable.

Process:
Q. What similar experiences have you had?

Q. What problems seem to happen over and over?

Generalize:
Q. What did you learn about yourself through this lesson?

Q. Why is that significant for you at this time?

Apply:
Q. How will you use what you learned the next time you model?

Q. What formal situations might you be attending in the next year where you will need to show mastery of proper table manners?
A. Wedding dinner, prom, graduation celebration, etc.

GOING FURTHER:
• Visit fashion shows to see new modeling techniques.
• Allow members to practice modeling steps at each project meeting.
• Have members host a fashion show at a neighborhood nursing home, clothing store, or other public gathering place.
• Tape members with a video camera to allow them to evaluate themselves and their modeling ability.
• Invite a local health care professional to discuss eating disorders. The project group may want to begin an awareness program for other teens.
• Plan a trip to a nice restaurant, dressing appropriately and practicing good table etiquette.
REFERENCES:

Mind Your Manners & Modeling 101, 4-H Modeling Squad, Lisa Yonge, Okitibbeha County 4-H Modeling squads, North Dakota Cooperative Extension Service
Spotlight is on You, 14 minute VHS video and instructor guide, 1992
  McCall Pattern Company, Education Department 9119, 615 McCall Road, Manhattan, Kansas 66502, call 1-800-255-2762 for price and ordering information

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Pressing Techniques For Fabrics

Clothing & Textiles, Level III, Care & Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• Pressing and ironing techniques for various fabrics
• That improper temperatures or techniques can ruin garments
• That properly done, correct pressing enhances the new look of garments

ABOUT THEMSELVES:
• Pride in respectful caring of personal items
• Their ability to read labels and decide the appropriate method for pressing

Materials Needed:
• Iron
• Ironing Board
• Garment with Sleeves
• Garment with Darts or Curved Seams
• Pair of Pants
• Terry Towel
• Samples of the Following: Crepe, Metallic, Sheer, Lace, Velvet, Deep Pile, Synthetic Suede, Glazed Chintz, Linen, Cotton, Synthetic Fabric, Wool

Optional:
• Broom handle, wooden dowel, or rolling pin with one side smoothed flat
• Brown paper strips, 4 × 8-inch
• Ham holder
• Iron cleaner
• Needleboard
• Point presser
• Press Cloth
• Seam roll
• Sleeve board
• Smooth wooden block or clapper
• Soleplate attachment
• Steam iron cover
• Steamer
• Tailor’s Mitt
• Tailors Ham
• The leader may want to copy the next three pages as a member handout

ACTIVITY TIME NEEDED: 45 MINUTES
**Leader Notes**

Have all members sit around the ironing board so that they can see. If members do not know each other provide time for introductions. Have each member tell what the last garment was that they pressed or ironed. You begin.

Show the iron and steamer—or illustrated picture if not available. Refer to lesson “Pressing Basics,” Level II, for other pressing aides and their use.

Lay out various samples and let the members choose a sample. Then allow other members to guess how to press this sample before allowing member to demonstrate.

**ACTIVITY:**

Having the right equipment and using it properly is a prerequisite for successful pressing and ironing. Pressing is done mainly when sewing. This consists of lifting and lowering the iron, bringing pressure down on construction details. Ironing, on the other hand, is gliding the iron across the fabric in long gliding motions.

A steam or spray-steam iron is an excellent choice for pressing. These irons can be used in a wide variety of situations. Make sure the iron has a wide variety of temperature controls to allow for use on a wide variety of fabrics. Choose one that is not heavy in your hand and that you can hold comfortably.

A steamer is lightweight, non-metal and looks somewhat like an iron. It does not become hot, but produces a large amount of steam. This is ideal for use on napped fabrics, as it presses without the pressure that would crush the fabric pile.

Today, we are going to focus on pressing techniques for special fabrics. As you wear formal clothes and perhaps begin to construct garments of special fabrics, it is essential that you know how to press them without ruining these special items. Always test your pressing method and temperature of iron on a scrap or inconspicuous area before using.

Crepe—Steam will cause some crepe to shrink or pucker. Always test, use a light touch of the iron to avoid overpressing.

Metallics—Test on scraps. Metallics are very sensitive to heat and moisture (steam may tarnish or discolor and high heat will melt). When determined safe, use a press cloth and press from wrong side. Metallics may also scratch the plate of your iron.

Sheers—Handle soft sheers without steam, always test, and use a light touch of the iron. Crisp sheers usually can be steamed using a pressing cloth.

Lace—Again, handle without steam, using light touch of iron, always test. For heavy lace, place face down on terry towel. Be careful to avoid snagging lace with point of iron.

Velvet and Corduroy—Press on the wrong side with right side against self-fabric, terry towel, needle board, etc. Use a press cloth and low temperature. Steamer may also be used. After pressing, turn to right side and hold steam iron about ½ inch above the nap to “perk-up” the nap, or hang in the bathroom that is steamy from the shower.

Deep Pile—Press on the wrong side with minimum pressure. Place face of pile against a needle board, terry towel, etc. Use tip of iron or fingers to press seams open.
Leather or synthetic suede—Press open seams by using fingers or dry iron on low setting. An adhesive may need to be used to hold the seam allowance flat.

Glossy Fabric (glazed chintz)—Press on right side without a pressing cloth and with little or no moisture.

Linen—Press with high temperature and moisture. Press on wrong side directly on the fabric until dry. If you desire a shiny look, press directly on surface of fabric. Many linen fabrics have an unevenness of threads. Press on wrong side to retain this look. Water may be brushed directly on areas where extra moisture is needed.

Cotton—Although cotton is the easiest fabric to press, handle it according to its weight. Lighter cottons require a lower setting where heaviest cottons require the same treatment as linen. Moisture (spray or steam) is generally used. Fabric should be pressed completely dry or it will pucker. Pressing on the right side will give a smooth, shiny finish. Pressing on the wrong side will provide a dull finish. For dark colors use a dry cheesecloth or steam iron cover when pressing the right side. Cotton often changes colors because of the heat of the iron but usually regains the original color when cool.

Synthetic Fibers—Man-made fibers are heat sensitive, so iron should be on low setting. Acetate is the most sensitive and can be permanently damaged by iron shine. If iron begins to stick, lift immediately. Use a light press cloth to prevent this. These fibers are thermoplastic and can be easily melted or heat-set. Always test. Press seams and hems lightly until you are certain of an accurate line.

Wool—Press carefully with steam. Wool is easiest of all fabrics to mold and shape. Press on wrong side with a slightly dampened press cloth and steam iron never touching the fabric. Too much moisture may cause shrinkage. Never press wool dry. Be sure to stop pressing while fabric is still steaming to prevent fibers from becoming brittle. Let wool dry before handling. Brush woolen as you press to prevent a shine.

Let’s use a wool garment to demonstrate various techniques and pressing equipment.

1. Always test—set the iron on “rayon.” On some irons, the setting for “wool” is too hot for modern wool. Use some of the scraps cut from the fabric (also test lining and trim). Begin with heat and moisture from the rayon setting. Check for water spots, when they appear you know that you are using too much moisture for that particular wool.
2. Always press one seam before sewing across it again. For curved details, use a tailor’s ham or mitt. This supports the wool and allows for the seams to drape as pressed, so seams press open but no imprint is seen on the right side.
Leader Notes

3. For straight seams and collar points, use a point presser. The fabric is placed directly on the unpadded wood surface and pressed with steam (iron never touches fabric). After saturated with steam, a pounding block can be used to pound and flatten the edges without leaving a shine. A press cloth is not used with this technique. The pounding block may be left on the part being pressed without fear of too much moisture or heat damaging the fabric. This can be repeated on the area until it is flattened in the shape desired.

4. For testing as well as large area pressing (pockets, etc.) a wool lined press cloth is recommended. Pressing is always done on the wrong side.

5. If right side pressing is required, use a wool iron hood or “steam-iron” slip cover. Again, remember the iron never touches the fabric.

6. Seam edge imprints may be avoided on very soft fabric by placing a strip of brown paper under the seam allowance. Or this may be used beneath the folded edge of a dart to prevent it from making a dart line on the surface of the garment.

7. Wide darts may be trimmed and pressed open. Press darts with the grain of the fabric not in the direction of the dart.

8. Before installing the hem, always let the garment hang about 24 hours. Press the hem upward with the grain. If it is the fashion to have a sharp edge at the hemline, spank the edge with the pounding block as you press. Otherwise, press as usual for wool. The final hem pressing should not be done until after the hem is finished.

9. Zipper tuck should be pressed over a soft surface. Reduce temperature and protect nylon zipper from excess heat.

10. Facings for bound buttonholes should be pressed before attached. Then, finished buttonholes should be pressed on a soft surface. A steam iron covered with a hood may be indicated here.

11. Before attaching the lining, press the entire garment body (lining and wool) and allow both to dry completely on well shaped hangers for several hours.

12. When pressing a sharp edge on pleats or pocket flaps, place a thin strip of cardboard or brown paper under the crease to avoid marking the adjoining fabric. To get flat, well-defined edges, first press the detail using an iron, a dry press cloth over the inside of garment, and a slightly but evenly damp press cloth to give added moisture over the dry cloth. Then, with the steam still rising, spank the edge several times using the pounding block. Lay the fabric aside to dry completely before proceeding with the work. NOTE: Wool crepes need very little heat and moisture. Keep pressing motion gentle with no tendency to stretch. Maintain a light touch.

Mohair should be pressed without steam. If pressing bonded fabrics, the tricot backing usually requires a lower setting. Napped wool fabrics may be pressed on a needle board in direction of the nap. Sheer wools require less moisture and heat. Worsted wools are more easily marked and made shiny than other woolens. Erasing changed seamlines are also more difficult. Be sure to fit carefully before pressing.

Demonstrate as many of the above techniques as possible.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. How does ironing differ from pressing?

Q. What new ironing or pressing technique did you learn? Why is that important for you?

Q. What are some of the special pressing equipment used for pressing?
A. Pressing cloth, iron, ironing board, pounding block, tailors ham, etc.

Process:
Q. How do you know what temperature to use for a particular fabric?
A. Use iron temperature setting as a guide, always test, ask for care label at fabric store.

Q. How do you know what temperature to use for ready made garments?
A. Read the care label.

Generalize:
Q. Different fabrics require different temperatures and techniques. Can you think of other situations when things look similar, but need to be treated very differently?
A. Medications or pills, etc.

Q. How are pressing techniques similar to building or finishing a room or house?

Apply:
Q. How will what you learned be useful to you in the future?

Q. What will you do differently next time for different results?

GOING FURTHER:
• Take members to dry cleaners to see special pressing equipment.
• Have members volunteer to do home ironing, or ironing for disabled or elderly.
• Provide instruction on ironing, starching, etc., of day to day items found in home laundry.
REFERENCES:
Singer Tailoring, Cy DeCosse Incorporated, 5900 Green Oak Drive,
Minnetonka, Minnesota 55343
Singer Sewing Specialty Fabrics, Cy DeCosse Incorporated, 5900 Green
Oak Drive, Minnetonka, Minnesota 55343
Singer Clothing Care & Repair, Cy DeCosse Incorporated, 5900 Green
Oak Drive, Minnetonka, Minnesota 55343
Reader’s Digest Complete Guide to Sewing, Reader’s Digest Fund for the
Blind, Inc., Dept 250, Pleasantville, New York 10570
Care of Wool Fact Sheet #6, American Wool Council, 1200 Clayton
Street, Denver, Colorado 80206

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Living Curriculum Development Committee and Clothing & Textiles
Design Team
The Environment and the Cleaning Process

**Clothing & Textiles, Level III, Care & Maintenance**

What Members Will Learn . . .

**ABOUT THE PROJECT:**
- The five R’s of waste reduction
- The cost of the cleaning process to the environment
- To understand the concept of enviroshopping

**ABOUT THEMSELVES:**
- How they impact the environment by the cleaning products and practices they adopt
- Responsibility for enhancing the world in which they live
- Consumer responsibility in purchasing, and use of cleaning products

**Materials Needed:**
- Copies of Activity Sheets for each member
- Pencils

**ACTIVITY TIME NEEDED:** 30 TO 50 MINUTES

**ACTIVITY:**

As responsible consumers we must consider the consequences of our actions upon the environment. This is true in many different areas. The cleaning process is no exception. Today, we will be taking a very broad look at what happens to our environment when we clean our personal items and how we can make changes that may benefit our planet’s natural resources.

“Enviroshopping” or shopping with a concern for the environment is one way we can make a difference. What we purchase plays a vital role in reducing the waste stream that we may now be causing. When we shop we must be aware of the TOTAL cost to the environment of that product. If we have not considered that, we are little more than succumbing to marketing tactics when we purchase. What we must evaluate is the life cycle assessment (Lesson “Textile Environmental Concerns”) of the product from beginning to end before we can make a full determination of the environmental pluses and minuses of that product. “Life Cycle Assessment” means the cost of a product and its packaging, from the inputs of energy and raw materials to the outputs of water effluents, airborne emissions, solid wastes, other environmental releases, and usable products.

Let’s turn for a minute to factors that can reduce waste accumulation. They are called the Five R’s.

**Leader Notes**

Have all members sit in a comfortable spot. If they do not know each other, begin with introductions. Have each member state their favorite natural resource. You begin.

Give and explain the Life Cycle Assessment handout (do a life cycle assessment of concentrated versus unconcentrated detergent—be sure to emphasize less energy to produce, less transportation costs to move smaller volume of smaller containers, and less packaging going to the landfill if smaller container or particularly so if in recyclable containers).
Leader Notes

Reduce—Consumers have become hooked on convenience and pay millions of dollars for it. We pay much more for larger non-mix products and then throw away the bottles!

Reuse—Instead of disposing of items and packaging, think of creative ways to reuse them. Not only will this save landfill space, but it will also save you money. Example: use mesh citrus bags for laundry bags, plastic grocery bags for trash can liners, and discarded clothing can be cut to use for cleaning cloths rather than using disposable paper towels.

Recycle—This is gaining a lot of attention recently and is an important step to reducing landfill space required for waste. Some states are passing laws to reduce the solid waste by mandatory recycling laws. Most recycled materials are used to create new packaging materials that require less energy than producing it from new raw materials. Aluminum yields the greatest energy savings; for example, if each person in a family of four saved one aluminum can per day for a year it would save the equivalent energy in gasoline to drive a 30 mile per gallon car about 2,000 miles. Other common packages to save for recycling are glass, paper, plastic, steel or tin, and newspapers. Textiles can be reclaimed and reprocessed (wool) or fabrics from discarded clothing recycled into the “rags” some businesses use as industrial wiping cloths. Check your county Extension office for local collection points for recycling. Remember, recycling can only work when you buy items in packaging that has been recycled so consider this in your “precycle” purchasing decisions. Look for the recycled symbol on packages you buy.

Reject—Enviroshoppers reject materials and products that cannot be reduced, reused or recycled. You have the most powerful tool in our economy—your dollar. If you choose products that are wasteful or harmful to the environment, you are also sending a message that you want these to be produced. If, on the other hand, you do not buy them you are also sending a message that the marketplace will no doubt hear. Reject disposable towels and napkins by choosing reusable cloth napkins and cleaning cloths.

Respond—This is an action step that requires you to contact merchants and producers to let them know you are concerned about their products and their effect on the environment. Ask for larger more economical packaging, use of recyclable containers and other sound practices to be available. Contact addresses are usually available on the package containers. Ask local merchants to carry these items. Contact local officials about beginning or expanding area recycling efforts.

Next, let’s take a look at the cleaning process with these things in mind and see what, if any, difference you and I can make.

The first item to consider is clothing itself. Can you reduce the number of items you wear? See wardrobe planning lesson “Wardrobe Planning Basics I.” How about multi-use items? By decreasing the items demanded, how will energy be saved? What about cleaning those items? Do you ever wear garments once and wash regardless of degree of soiling? How does this waste energy and resources? What about proper storage? How can you reuse items instead of wasting? See lesson “Garment Life,” Level II, and/or “Update and Reuse,” Level III. Turn them into rags, give away,
etc. How can you recycle clothing items? Remake, craft projects, etc. How can clothing be rejected to reduce waste? Evaluate products, such as stone washed jeans, endangered species skins, etc., for environmental effect and refuse to buy. How can responding by clothing purchase effect the environment? Let manufacturers know of reasons you avoid purchase. Set up local swap shop, remake outlet.

Next, let’s look at cleaning products. **Reduce**: use multi-use products such as detergents with bleach and softeners; use concentrate products that have less packaging and put into refillable containers; buy in bulk. **Reuse**: buy packaging that is made from recycled material. **Recycle**: collect packaging to be recycled and take it to the nearest center. **Reject**: read package contents and learn about harmful environmental components; do not buy items that contain these components (phosphates, fluorocarbons, etc). **Respond**: contact manufacturers and retailers to request more efficient packaging or product formulation.

The other main cleaning factor to evaluate is the cleaning equipment. **Reduce**: choose water efficient models and washers with variety of temperatures, as well as water level settings; use the least amount of water and coolest temperature that will allow for adequate cleaning; energy comparison tags are required on all new electrical equipment; use line to dry in place of the dryer when possible; dry cleaning uses solvents that are harmful, choose as little of this as possible. **Reuse**: consider repair instead of replacement of cleaning equipment. **Recycle**: if items are nonrepairable, disassemble and recycle parts that are recyclable. **Reject**: do not purchase items of poor quality or that are energy wasteful, these will end up in landfills long before items of high quality. **Respond**: let manufacturers know of your pleasure when they are responding to environmentally sound practices, as well as problems they may be causing.

**DIALOGUE FOR CRITICAL THINKING:**
Share:
- Q. What are the five waste reduction steps?
  - A. Reduce, Reuse, Recycle, Reject, Respond.

- Q. Which of the five is the most difficult for you to apply? Why?

**Process:**
- Q. Does our community have a recycling program? Why or why not?
  - A. Answers will vary.

- Q. What similar experiences have you faced regarding other environmental concerns.
Leader Notes

Generalize:
Q. Name one thing you will do to reduce waste?
A. Answers will vary.

Q. How will you accept responsibility to teach others about textile environmental issues?

Apply:
Q. Discuss how your group could mount a campaign to start a community textile 5 R program.

GOING FURTHER:
• Begin recycling program for club or community.
• Tour recycling plant.
• Start swap shop for club or remake items as a project or community service.
• Have members calculate amount of waste their family generates per week.

REFERENCES:
Enviroshopping: Shopping with concern for the Environment, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, Instructional Materials Service, 101 Rolfs Hall, University of Florida, Gainesville, Florida
Enviroshopping, Deanna Munson, Extension Specialist, Justin Hall, Kansas State University, Manhattan, Kansas 66506

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Life Cycle Assessment of Concentrated Versus Unconcentrated Detergent

**INPUTS**
- Raw Materials Acquisition
- Manufacturing, Processing and Formulation
- Distribution & Transportation
- Use/Re-Use/Maintenance
- Recycle
- Waste Management

**OUTPUTS**
- Water Effluents
- Airborne Emissions
- Solid Wastes
- Other Environmental Releases
- Usable Products

**Unconcentrated Detergent**
- Raw Materials Acquisition
- Manufacturing, Processing and Formulation
- Distribution & Transportation
- Use/Re-Use/Maintenance
- Recycle
- Waste Management

**Concentrated Detergent**
- Raw Materials Acquisition
- Manufacturing, Processing and Formulation
- Distribution & Transportation
- Use/Re-Use/Maintenance
- Recycle
- Waste Management
THE ENVIRONMENT AND THE CLEANING PROCESS
CLOTHING & TEXTILES, LEVEL III, CARE & MAINTENANCE
Activity Sheet

The 5 R’s: What Can I Do To Help?

Reduce
Clothing:

Cleaning Products:

Cleaning Equipment:

Reuse
Clothing:

Cleaning Products:

Cleaning Equipment:

Recycle
Clothing:

Cleaning Products:

Cleaning Equipment:

Reject
Clothing:

Cleaning Products:

Cleaning Equipment:

Respond
Clothing:

Cleaning Products:

Cleaning Equipment:
Fabric Finishes  
*Clothing & Textiles, Level III, Textile Science*

What Members Will Learn . . .

**ABOUT THE PROJECT:**
- What is a fabric finish
- What are some common fabric finishes
- When finishes are applied during the fabrication process

**ABOUT THEMSELVES:**
- What finishes they find desirable in their purchased garments or fabric
- That some finishes can be self applied at home

**Materials Needed:**
- Water repellant spray finish (Scotchguard)
- Spray starch finish
- Samples of fabric (cotton or cotton/polyester muslin) 9 × 6 inch, four squares (two for treatment, two for controls)
- Cotton and cotton/polyester muslin with durable press finish—1 square of each, 9 × 6 inches
- Copies of Member Handout

**ACTIVITY TIME NEEDED:** 50 MINUTES

**ACTIVITY:**

As you know, there are many steps between harvesting (or producing) a fiber and the resulting piece of fabric or garment. Many processes are necessary to turn fibers into finished products. From spinning fibers, to making yarns, to weaving, knitting, dyeing, cutting and sewing, all these are steps common fibers undergo to be transformed into apparel you purchase off the rack. Today, we are going to focus on a process called finishes. You are probably aware of many types of finishes. Some familiar ones are permanent press, water repellency, sizing, and flame retardancy. There are many others that you may be unaware of. We will talk about all of these today plus how and when they are applied to the fabrics and garments on which they are found.

“Finish” is defined as anything that is done to a fiber, yarn or fabric either before or after weaving or knitting to change the appearance, the hand, or performance of the fabric. All finishing adds to the cost of the product.

Finishing can be done at the mill or may be done by “converters.” Converters either preform the service for the mill and are paid for their services or they may purchase the fabric from the mill, finish it according to their own needs and sell it under their own trade name.
A temporary finish lasts until the garment is washed or dry-cleaned.

A durable finish lasts longer than a temporary finish but not for the life of the item.

A permanent finish lasts the life of the item.

A renewable finish can be applied with no special equipment or by a dry-cleaner.

Printing is considered finishing but for today’s lesson we will not be discussing printing.

Refer to Level II lesson, “The Dye and Printing Process.”

Conduct the experiment as you discuss it in the handout.

Wad in your hand a sample of 100 percent cotton bleached muslin. Do the same with a cotton/polyester fabric that has durable press finish. Allow the fabric to relax and have members observe the differences in the amount of wrinkling of the fabrics.

Follow package directions. Treat the sample fabric with the water repellent finish. Test the fabric for repellency and the non-treated sample as well.

Have members take the sample fabric and add the spray starch. Compare the stiffness of the treated fabric to the untreated one.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What is the most popular finish?
A. Durable Press or Permanent Press.

Q. What happened when you completed the water repellency experiment? Why?

**Process:**

Q. Why are finishes used on fabrics?
A. To improve fabric properties, aesthetics, and for special purposes that are desirable to consumers.
Q. What is a drawback to the current “Flame Retardant” finishes?
A. Cost, and special care required.

Generalize:
Q. What is an example of a finish you can apply at home?
A. Scotchguard, spray starch, sizing, fabric softener.

Q. Why do finishes add cost to fabric or garments? Why are we willing to pay for this extra cost?

Apply:
Q. Discuss the advantages and disadvantages of protective clothing or textiles such as used by pesticide applicators, fire fighters, health workers.

GOING FURTHER:
• Apply other types of home finishes and test sample fabrics.
• Tour fabric store looking for various finishes applied to fabrics.
• Provide handout of finishes and their purpose for members.
• As community project, have members begin community awareness program focusing on flame retardant sleepwear for children and home textiles.
• Have members research other aesthetic finishes mentioned above.
• Have members select for their wardrobe a functional garment that has a finish to improve that characteristic.
• Look through fabric scraps. Final examples of brushed, plisse moiré, embossed, etc. Make a textile notebook for future reference.

REFERENCES:

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FUNCTIONAL FINISHES:
Shape Retention Finishes—Let’s begin with shape retention finishes. These are very popular finishes because they decrease the amount of ironing that is required by reducing the wrinkling of a fabric. Wrinkles are caused by crushing fabrics during wear and washing, this allows the molecules in the fibers to break and bond with other molecules to form wrinkles. A substance called a “resin” was discovered and when added onto fabric makes it wrinkle resistant. It works by forming a bond between molecules to remind them to return to their proper place. Think of resin as an elastic glue.

“Wrinkle resistant” fabrics contain 3 percent resin. “Wash and Wear” fabrics contain 7 percent resin—allowing these fabrics to be washed and rinsed but requiring removal before spinning and drying. “Durable Press” or “Permanent Press” contain 10 percent resin and retain their shape and pressed appearance after repeated washings, wrappings, and tumble dryings. This method is the most popular finish for cotton/polyester blends and must be used on fibers that contain some cotton. There are two methods to apply the “Durable Press” finish.

The Precured Method:
1. Saturate the fabric with resin-crosslinking solution and dry.
2. Cure in a curing oven. This forms the crosslinks between molecules.
3. Cut and sew. Press with iron. All durable press yard goods for home sewing are prepared this way.

The Postcured Method:
1. Saturate the fabric with resin and dry.
2. Cut and sew garment and press with a hot-head press. (Cannot be done at home.)
3. Cure garment by curing in 300˚ to 400˚F oven. This adds shape by setting polyester component in the fabric.

Problems with Durable Press
1. Stiffness and poor hand.
2. Absorption of chlorine which causes yellowing and loss of strength.
3. Fishy or formaldehyde like odors.
4. Color problems—“frosting” look—color loss on edges from abrasion, color migrates from polyester fibers to cotton ones when cured.
5. Attraction of resins to oily stains—unless treated with resistant finish in addition to the durable press finish.
7. Garment construction problems—seams puckering, pressing in or removing creases may be difficult.

Other Notes About Durable Press
If used on polyester/cotton blends, less resin needs to be used because the inherent characteristics of polyester make less resin required to achieve the wrinkle resistance. In durable press wool, much the same procedure is followed but with an additional step of a shrink resistant resin mixed with a dry cleaning solvent and the garment dry cleaned. Curing is done by allowing three to seven days with the resin resting on the garment before laundering.

Other functional finishes are desired by the consumer and are relatively easy to find on a wide variety of textile items.
Finishes, continued

Water and/or Soil Repellency—this finish makes the fabric resistant to wetting—but with enough force water will penetrate the fabric. Degree of repellency depends upon:
1. How the finish is applied. It can be added at different stages in the production process.
2. What type of finish. Some finishes repel both water and oil, some only water.
3. How soiled is the garment. The more soiled, the less repellent.
4. The fabric construction. This is actually a better guide to the repellency than the finish. The tighter the weave and finer the yarns the more repellant the fabric when treated.

Soil and Stain Release—this finish functions by repelling soil or preventing a bond between the soil and fabric. They make fabrics easier to clean. This finish is applied to the surface so it will wash away after 20 to 30 washings. The higher the resin content (as in durable press) the more tendency to attract oil stains. To aid stain removal use spot cleaners to attack the oily stains.

Antistatic Finish—these finishes function to improve removal of electric build up from fibers in one or more of these ways.
1. Improve surface conductivity so excess electrons move to the atmosphere.
2. Attract water molecules, thus increase fiber conductivity.
3. Develop a charge opposite that on the fiber, neutralizing it.

Most of these finishes are not durable and must be replaced during care. Fabric softeners function in a similar manner and help as an antistatic finish. These finishes are widely used on carpet fibers.

Flame Retardant—a popular finish and for some items is required by law. The degree of retardancy is determined by three factors:
1. Amount of inherently flame resistant fibers.
2. Use of variants that have been made resistant by adding retardants to the spinning solution.
3. Application of retardant finishes.

These finishes work by blocking one leg of the fire triangle (fuel, ignition, oxygen). This finish can be used on cotton, rayon, nylon and polyester. They must be durable (withstand 50 washings), be nontoxic, and noncarcinogenic, as well as exhibit no odor or change in hand of the fabric. For the most part they are not visible, yet they increase the cost of the item. “Flame resistant” finishes are more expensive and more resistant to flame than the “retardant” finishes.

Flame Retardant Problems:
1. High cost—due to federal standards, required in children’s sleepwear, mattresses, carpets, and wearing apparel.
2. Special laundry care—use of soap, bleach or hot water will remove finish. In locales where phosphates are banned, soft water and liquid detergents must be used.
AESTHETIC FINISHES:
These finishes enhance the look or feel of a fabric. Some examples include:
Sizing—similar to starch except sizing contains waxes, oils, and glycerine that acts as softeners; and talc, clay and chalk used to add weight. Gelatin is used on rayon. Sizing adds stiffness to the fabric. If resin based and heat set, it is permanent; if water soluble, it is temporary and will be removed during the first wash.

Often, the sizing finish may be the reason for a certain recommended care procedure. For example, many rayon fabrics carry a dry clean only label. One reason it is necessary to dry clean some rayons is because rayon is a naturally soft and somewhat flimsy fabric. It is often sized with gelatin to stiffen the blend. This sizing is water soluble, therefore, rayon sized with gelatin needs dry cleaning to retain the finish. Spray starch that you may add when ironing your clothes is a similar temporary sizing.

Brushed—This process may be used on smooth faced fabrics to clean the surface of loose fiber ends. Examples: denim, broadcloth. Brushing is also used on pile fabrics, when combined with steaming, it fixes the pile in one direction. Examples: velvet, velveteen.

Plisse—a fabric that has been treated by printing sodium hydroxide in the form of stripes. The chemical causes the fabric to shrink along the stripes. As these areas shrink the middle cloth puckers and as a result the plisse pattern is seen.

Other aesthetic finishes include napped, embossed, flocked, pleated, embroidered, sheared, burned-out, moire and glazed.
Textile Environmental Concerns

What Members Will Learn . . .

ABOUT THE PROJECT:
• How the three R’s apply to textile sciences
• Areas of textile science that can be improved to make them more friendly to the environment

ABOUT THEMSELVES:
• As a consumer they need to evaluate the environmental impact of their purchasing
• Wise consumer purchasing can help reduce the amount of waste generated by textiles

Materials Needed
• Copies of Member Handout and Activity Sheets

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

As with any area of consumption, textiles generate their share of waste. Today, we are going to look at where waste comes from and what we can do to reduce textile waste. We will look briefly at the textile industry and the broad areas that this industry includes.

As with all areas of our lives, we must take a look at the three R’s of waste elimination. They are reduce, reuse, recycle. We apply this to any purchase we will make, as well as items we already own. Today, we want to look in more depth at another system of comparison. This system is useful in helping us to know the overall environmental impact of any particular item. This method is called a life cycle assessment. By using this assessment we evaluate much more than the duration and use of an item.

As an example let’s try a life cycle assessment on stonewashed jeans.

Considering this life cycle assessment of the environmental impact of producing, using, and discarding stonewashed jeans, it is obvious that there is a lot more effect on the environment than just the discarding of the jeans. The agricultural, transportation, and textile industry give considerable attention to purifying emission and residue outputs that would harm the environment. We can do our part by encouraging such action and making wise consumer choices.
Now we must consider that stonewashed jeans, in addition, do not wear as long because of the weakening of the fibers from the stone washing. If our decision is between these and traditional blue jeans the smart decision would be which? Two advantages of traditional jeans are the longer wear life and omitting the step of stonewashing which harms the environment.

This same assessment can be used with almost any product and its processing steps to help you determine which product is really the best environmental buy. It will require knowledge or research on your part to become knowledgeable of the factors involved in the input, use, and output of that procedure.

Another area that consumers play a big part in is buying materials that are made from recycled materials. If consumers fail to purchase these items, there becomes no demand and companies will stop collecting these items for resale. These will then be hauled to a landfill to be disposed of. An example that’s working well is recycled polyester. Recycled polyester carpet is made from PET, which is produced from recycled PET bottles. Americans throw 2½ million plastic bottles out every hour. By reusing these in carpet we displace a large amount of solid waste. Most people replace carpet once every seven years and it rates as the third greatest lifetime expense. These type of buying decisions are ones that have a tremendous impact on the rate of recycling.

As consumers, we must change our own household habits. We can reduce the quantity of materials used and discarded. Also, we can plan multiple uses for a product, if possible, buy less, and plan ways to recycle at the time of purchase. Recycling and separating takes an average of a few minutes daily. It is a choice most of us are free to make at this point in time. If we look at the trends in large urban areas we may find that soon that action will be mandatory.

What can consumers do?
1. Investigate the processes by which the items we want to purchase are manufactured—chose those items with the least environmental impact.
2. Buy items of high quality that will wear and last longer and can be repaired.
3. Don’t over buy apparel—balance fashion with reduction of waste.
4. Use textiles to reduce demand for disposables—cloth for napkins, rags in place of paper towels, etc.
5. Buy items with less packaging—30 percent of the volume of municipal solid waste is packaging.

In addition, be wary of labels proclaiming products are “green.” Many products bear this label. Check to see how much post consumer content is used. If no explanation is given, the claim may be empty.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What were you thinking about while completing the Humble Beginnings activity?

Q. What was most difficult for you to do? Why?

Q. What are considered inputs?
   A. Energy and raw materials.

Q. What are considered outputs in a life cycle assessment?
   A. Water, airborne and other effluents, solid waste, and usable product.

Process:
Q. What inputs and outputs would be reduced by switching to cloth napkins?
   A. Wood for the napkins, energy to produce, plastic to package, landfill space.

Q. What inputs would be required by switching to cloth napkins?
   A. Fiber, energy to produce and launder, water and detergents to clean.

Q. What outputs would the use of cloth napkins create?
   A. Laundry water.

Generalize:
Q. What did you learn about yourself through this activity?

Q. What new information did you learn that will be a part of your decision-making process in the future?

Apply:
Q. How can you apply the 3 R’s—reduce, reuse and recycle—to other areas of your life?

GOING FURTHER:
- Visit local landfill to look for textile products that have been discarded.
- Research a method of textile production to evaluate for environmental consequences.
Leader Notes

REFERENCES:
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Missouri Recycling Directory, Christine Buderer, Project Director, EN-CORE, University of Missouri-Columbia, Extension Publications, 2800 Maguire Building, Columbia, Missouri 65211
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Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
**An Example of Life Cycle Assessment on Stonewashed Jeans**

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy to prepare field, planting, growing cotton</td>
<td>Air emission; chemical residue in soil</td>
</tr>
<tr>
<td>Harvesting cotton (use of gasoline to run equipment, fertilizer to grow crops, etc.)</td>
<td>Raw Materials Air emission; chemical residue in soil; cottonball and plant materials</td>
</tr>
<tr>
<td>Transportation to cotton gin (gasoline or other transportation energy)</td>
<td>Acquisition Air emissions</td>
</tr>
<tr>
<td>Ginning (energy to run gin)</td>
<td>Ginned fibers; linters; cotton seed</td>
</tr>
<tr>
<td>Transportation to cotton mill</td>
<td>Manufacturing, Ginned fibers; linters; cotton seed</td>
</tr>
<tr>
<td>Processing and spinning of fibers yarn—includes scouring, bleaching, carding (further cleaning and straightening of fibers), drawing, and spinning</td>
<td>Processing, Spinning residues; bleach residues and chemicals; waste fibers; cellulosic residue; cleaned and straightened fibers and</td>
</tr>
<tr>
<td>Dyeing of yarn—using indigo dyes</td>
<td>Formulation Water; dye residue; dyed yarn</td>
</tr>
<tr>
<td>Transportation to mill</td>
<td>Formulation Air emissions</td>
</tr>
<tr>
<td>Weaving fabric</td>
<td>Fabric defects; airborne fibers; noise</td>
</tr>
<tr>
<td>Transportation to apparel manufacturer</td>
<td>Air emissions</td>
</tr>
<tr>
<td>Designing, cutting, and sewing of jeans</td>
<td>Mill clippings</td>
</tr>
<tr>
<td>Wet processing to soften fabric and remove color (vast quantities of water, bleaches, and other chemicals)</td>
<td>Distribution Water; bleaches and other chemical residues</td>
</tr>
<tr>
<td>Transportation to retailer</td>
<td>Distribution Air emissions</td>
</tr>
<tr>
<td>Transportation to consumer (mail order) or consumer’s transportation to the store</td>
<td>Transportation Air emissions</td>
</tr>
<tr>
<td>Clothing worn or used by consumer</td>
<td>Transportation Usable product</td>
</tr>
<tr>
<td>Laundry products, energy, water used to maintain product</td>
<td>Use/Re-Use/Maintenance Water effluents</td>
</tr>
<tr>
<td>Clothing discarded by consumer</td>
<td>Waste Management Landfill; solid waste</td>
</tr>
</tbody>
</table>
TEXTILE ENVIRONMENTAL CONCERNS
CLOTHING & TEXTILES, LEVEL III, TEXTILE SCIENCE
Activity Sheet

From Humble Beginnings . . . Origins of Trash

Mission
The mission is to teach members to recognize the natural origins (animal, mineral, and plant) of products they use every day and to acknowledge that many of these natural resources are in limited supply (non-renewable). Students will “transform” products into their natural state via a make-believe TRASH TRANSFORMER MACHINE and learn that natural resources (treasures) are wasted when products are tossed into the trash. They will also learn that one of the benefits of enviroshopping is saving these valuable resources.

Vocabulary

<table>
<thead>
<tr>
<th>Animal</th>
<th>Paper</th>
<th>Plant</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral</td>
<td>Chemical</td>
<td>Petroleum</td>
<td>Tin</td>
</tr>
<tr>
<td>Metal</td>
<td>Styrofoam</td>
<td>Glass</td>
<td>Product packaging</td>
</tr>
<tr>
<td>Plastic</td>
<td>Petrochemical</td>
<td>Renewable</td>
<td>Limited</td>
</tr>
<tr>
<td>Non-renewable</td>
<td>Treasure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Materials
- Copy Me Animal/Mineral/Plant Resource Sheet
- Bag of litter items: leather shoe, polyester blouse, cotton towel, silk blouse, wool jacket, pigskin leather jacket, down-filled parka, feather-filled pillow, glass fiber drapes, aluminum backed drapery, nylon fabric, acrylic sweater, acetate blouse, stonewashed jeans, rayon blouse, linen napkin
- Puppet show table cover
- 3 small cardboard boxes
- Minimum of 10 3 × 5-inch index cards
- Drawing paper (Level 3)
- Crayons or colored markers (Level 3)
- Scissors

Advance Preparation
1. Gather materials appropriate for grade level.
2. Make Resource cards. Copy the Animal/Mineral/Plant Resource sheet (may need more than one copy). Cut out the individual pictures from the sheet. The pictures on the sheet represent the following:
   A. The oil derrick represents petroleum, which is a mineral resource. Possible products include petrochemical items (plastics, fabrics, furniture), gasoline, and heating oil.
   B. The tree represents wood and food from trees. Possible products include notebook paper, furniture, and rayon or acetate fabrics.
   C. Animals (pig, cow, sheep, chicken and duck) are pictured individually. Possible products include leather goods, clothes, and wool fabrics/clothes.
   D. The beach scene represents sand, which is composed of minerals. Possible products include all items made into glass fibers (fiberglass fabrics). Though not directly, ceramics and silicone products can also be used examples.
   E. The mining operation picture represents mineral ores turned into metals. Possible products include aluminum backed fabrics (milium), and metallic yarns and fabrics.
   F. Water is included as a mineral. It is used extensively in the manufacture of products, particularly dyeing and finishing fabrics, and stonewashed jeans.
From Humble Beginnings . . . Origins of Trash, continued

G. The chemistry lab represents all other minerals from nature that man combines to produce product finishes, dyes, and modified fibers (stain blocker carpets).

3. Make Origin cards. Cut 3 × 5-inch index cards in half and label them A (Animal), M (Mineral), and P (Plant) on one side. The words can be written out, if desired. Make enough Origin cards to match the Resource cards. (Example: “A” for cow and “P” for newspaper.)

4. Make a “Transformer Machine” where students can be totally hidden. It can be as simple as draping fabric over two chairs. Label it “Transformer Machine.” Make three signs (Origin, Resource, and Product) and attach them to the front of the machine. Place three small cardboard boxes inside the machine. Label them as follows: A—Animal, M—Mineral, and P—Plant. Place the Resource cards in the appropriate boxes. For Level 1, omit the chemical and water pictures. Make sure there is a product or picture of a product displayed for every picture in the Resource boxes.

Teaching Instructions

1. Introduce the adventure using background information. Tell students that they will be playing a game called “Trash Transformer.” They will enter the strange machine they see before them as a common product or natural resource and be transformed (changed) into the original resources or product.

2. Place a minimum of 14 items from the litter bag and home in view of the students. Discuss the items using the following three classifications: Origin, Resource, and Product. (Example: The shoe is made from leather. Leather comes from the skin or hide of cows. A cow is an animal resource.) See chart below of sample classifications. Level III students should discuss whether the natural resource is renewable or non-renewable.

<table>
<thead>
<tr>
<th>Origin</th>
<th>Resource</th>
<th>Product or Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal</td>
<td>Silkworm</td>
<td>Silk blouse</td>
</tr>
<tr>
<td>Animal</td>
<td>Sheep</td>
<td>Wool jacket</td>
</tr>
<tr>
<td>Animal</td>
<td>Cow</td>
<td>Leather shoe</td>
</tr>
<tr>
<td>Animal</td>
<td>Pig</td>
<td>Leather jacket (pig skin)</td>
</tr>
<tr>
<td>Animal</td>
<td>Duck</td>
<td>Down-filled parka</td>
</tr>
<tr>
<td>Animal</td>
<td>Chicken</td>
<td>Feather-filled pillow</td>
</tr>
<tr>
<td>Mineral</td>
<td>Sand</td>
<td>Glass fiber draperies</td>
</tr>
<tr>
<td>Mineral</td>
<td>Metal ore</td>
<td>Aluminum-backed drapery</td>
</tr>
<tr>
<td>Mineral</td>
<td>Petroleum</td>
<td>Nylon fabric</td>
</tr>
<tr>
<td>Mineral</td>
<td>Petroleum</td>
<td>Polyester blouse</td>
</tr>
<tr>
<td>Mineral</td>
<td>Petroleum</td>
<td>Acrylic sweater</td>
</tr>
<tr>
<td>Mineral</td>
<td>Water</td>
<td>Stonewashed jeans</td>
</tr>
<tr>
<td>Plant</td>
<td>Tree</td>
<td>Rayon blouse</td>
</tr>
<tr>
<td>Plant</td>
<td>Tree</td>
<td>Acetate blouse</td>
</tr>
<tr>
<td>Plant</td>
<td>Cotton plant</td>
<td>Cotton towel</td>
</tr>
<tr>
<td>Plant</td>
<td>Flax plant</td>
<td>Linen napkin</td>
</tr>
</tbody>
</table>

Level I
Discuss the make-up of a product in simple terms. Concentrate only on the three classifications for a product or its processing. Examples:

- plant—cotton—jeans
- mineral—water to remove dye—stonewashed jeans

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TEXTILE ENVIRONMENTAL CONCERNS
CLOTHING & TEXTILES, LEVEL III, TEXTILE SCIENCE
Activity Sheet

From humble beginnings . . . Origins of Trash, continued

Level II
Second, discuss products that include both contents and processing. Examples:

- Content: plant—cotton—jeans
- Processing: mineral—water to remove dye—stonewashed jeans
- jeans (not stonewashed):
  - Content: plant—cotton—jeans
  - Processing: plant—indigo dye—jeans

Level III
And third, take items even further than the two-step process. Example:

- Content: jeans—cotton—plant
- stonewashed jeans:
- Multiple processing: jeans—indigo dye—plant
- jeans—bleach & water to remove dye—mineral

3. Play Trash Transformer game. There are two ways to enter the machine.

   Origin—Resource—Product

   A member is told whether to be an Animal, Mineral, or Plant resource and given an Origin card with that
   noted on it. He/she shows the card to the project group, then enters the machine from the Origin side. Inside
   the machine, the member selects a picture from the box that matches the Animal, Mineral or Plant classifica-
   tion. (Example: “A”—Animal picks cow.) The member can make noises indicating that he/she is undergoing
   a transformation from animal to cow. The member emerges on the Product side and either asks the project
   group to choose a product that is made from the picture or does so him/herself. (Example: A cow’s skin is
   used to make leather shoes.)

   For Level I and II. Have the project group, not the member, match the picture to a displayed item or picture.
   This reduces the pressure on the member going through the transformer machine from having to correctly
   match the picture to the product. The learning experience will be more enjoyable for that member and the
   project group.

   For Level III. After members understand the game, have them enter the machine from the Product side.
   Product—Resource—Origin

   A member chooses a product, then enters the machine from the Product side, selects the Resource picture that
   matches the product, and emerges on the Origin side. The member asks the project group or tells them a
   product is made from animal, mineral, or plant resource. (Example: A leather shoe is made from a cow,
   which is “A”—Animal.)
From Humble Beginnings... Origins of Trash, continued

When the members have successfully gone back and forth in the transformer machine, then have them take a product plus its processing through the machine. They will select two or more pictures to illustrate the contents and processing resources, emerge from the machine, and state whether the processing and contents of the product are made from animal, mineral and/or plant resources.

Most of the game will be conducted form this product side, first using single items (Example: jeans), then items with processing (Example: stonewashed jeans), and then products (contents and processing) comprised of three to four natural resources. The teacher will need multiple copies of the Animal/Mineral/Plant Resource sheet.

4. Have Level III members draw a picture of a product they use every day. Label the product. Have members exchange pictures with a neighbor.

Tell members to indicate on the back of the picture all the natural resources used to manufacture that product (contents, packaging, and manufacturing process). They should use the same project group identification process used in the lesson.

Return the drawings to the original artists and have members create a rap song or a poem about the product, then share it with other project group members.
Animal/Mineral/Plant Resource Sheet

<table>
<thead>
<tr>
<th>Animal/Plant/Resource</th>
<th>Animal/Mineral/Plant Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silkworm</td>
<td>Sheep</td>
</tr>
<tr>
<td>Duck</td>
<td>Chicken</td>
</tr>
<tr>
<td>Cow</td>
<td>Sand</td>
</tr>
<tr>
<td>Pig</td>
<td>Metal Ore</td>
</tr>
<tr>
<td>Water</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Tree</td>
<td>Tree</td>
</tr>
<tr>
<td>Cotton Plant</td>
<td>Flux Plant</td>
</tr>
</tbody>
</table>
Intermediate Construction Techniques
Clothing & Textiles, Level III, Creating with Fabrics & Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• Construction techniques of sewing sleeves, waistbands, buttonholes, zippers and hand-sewn hems
• Handling fabric ease

ABOUT THEMSELVES:
• Confidence in learning a new skill by following directions
• How to set learning goals, practice and master sewing skills

Materials Needed:
• Choose a project that will use these techniques and assemble needed items (shirt, skirt, dress, or pants)
• Have sample fabrics and notions for members to experiment and practice the discussed methods
• Sewing machine (may request members to bring theirs)
• Copies of Member Handouts

ACTIVITY TIME NEEDED: 2 TO 3 HOURS (MAY BE DIVIDED INTO 4 OR MORE LESSONS OF 60 MINUTES)

ACTIVITY:

Today, we will be introducing some more advanced construction techniques. These will help you to increase the types of garments you can produce. You will find that by adding these procedures to the ones you have already learned you can expand your wardrobe and your ability to sew for others. As with the other sewing skills you have learned, the more practice you have, the better the results you will see. If you have some trouble today, don’t be discouraged, many of these skills take a lot of practice to perfect and each different type of fabric can be a new challenge, even for more experienced sewers.

We are going to discuss higher level skills than you have experimented with in the past. These are skills you will use over and over when sewing. They are not difficult, but as you will find, some fabrics may increase the difficulty. This is why sewing is never boring. Sewing can be a fun challenge, because just when you think you’ve mastered a skill, there is a new fabric to try it on or a different way of doing that skill.

We have talked in the past about gathering. In many areas, such as sleeves, you will find that there is more fabric in one piece than in another, yet you do not want gathering puckers. This is termed “ease” and there are several
ways to help you work ease into a fabric piece when joining it to another smaller area. We will begin by discussing “ease.”

The purpose of easing is to give a small amount of shaping. Garment areas that might use easing include back shoulder seams, set-in sleeve caps, waistbands, and hems. Unlike gathering, the ease area should be smooth and unpuckered when it is completed. Fabrics with durable press finishes, non-woven fabrics, tightly woven fabrics, and some stable knit fabrics are more difficult to ease than other fabrics.

Pattern symbols usually used to indicate “ease” are dots, circles, or notches that show you where to begin and end the area to be eased. These symbols should be transferred from the pattern to the fabric when you do the marking.

Small amounts of ease may be handled by pin basting the long edge to the short edge. Working with the longer side facing you, pin the seam at the beginning and at the end of the area to be eased. Bend the seam slightly away from you, over your knee, perhaps, to smooth out the ease. Distribute the fullness evenly and place pins up and down across the edge to hold the ease in place and keep it from bunching. Machine stitch with the eased side down so that the feed dogs continually pull and work in the ease.

If bending the seam away from you does not work, you have a moderate amount of ease that needs an additional step to control. The first step in controlling a moderate amount of ease is to make a row of machine stitching just a thread’s width inside the seam line on the seam allowance. The size of the stitch should be slightly larger than the stitch used for regular seams, but not as large as a basting stitch. For fabrics that are hard to handle, make a second row of stitching also in the seam allowance ¼ inch from the seam line.

To join the long edge to the short edge and form a seam, pin the seam at the beginning and ending of the area to be eased. Pull on one end of the easing threads until both edges match. With your finger, stroke the fullness smoothly and evenly across the area to be eased. Pin the eased area of the seam to hold the fullness and keep it from slipping. Hand baste to hold it more securely if the fabric is extremely stretchy or slippery.

Begin pressing a seam that has been eased by using the edge of a steam iron and stroking lightly. Stroke from the line of stitching outward onto the seam allowance and from the stitching inward over the garment. Lift and lower the iron, applying light pressure until the ease has disappeared and the area is smooth. If the area being eased is shaped, such as the cap of a sleeve, work over a pressing ham or sleeve board so it can be shaped into the proper curve.

Complete by pressing both seam allowances open or by pressing both seam allowances in one direction. Seam allowances such as shoulder seams are usually pressed open. Waistband seam allowances are pressed toward the waistband. Armhole seams are not pressed open, but are turned

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A word about bulk—regardless of sewing skill, one of the greatest challenges in sewing is handling bulk. Bulk becomes an issue when several layers of fabric come together at the same point or in the same area, and the bulkier the fabric, the greater the problem. Here are several techniques to handle bulk:

**Grade:** used with enclosed seams such as at the neckline of a dress, waistline of pants, and collar unit. To grade, cut each fabric seam allowance a different width beginning with the innermost fabric seam allowance. Shortest seam allowance is usually $\frac{1}{4}$ inch.

**Notch:** used on enclosed convex curves such as outer edges of collars. To notch, remove V-shaped segments of fabric by cutting to the stitching line. You can use a small dot of liquid seam retardant at the point to prevent raveling.

**Clip:** used on enclosed concave curves such as garment neckline, neckline side of collar, and armhole facing of sleeveless garment. To clip, cut to the line of stitching with the point of the shears. Use a small dot of liquid seam sealant at the point to prevent raveling.

**Trim:** used when seams are pressed open and enclosed, seams such as a seam allowance within the hem or a tailored jacket neckline/collar seam. To trim, cut single seam allowance to $\frac{1}{4}$ to $\frac{3}{8}$ inch.

**Other:** the collar point, or other similar bulk situation such as waistband, requires a special type of trimming technique. Fabric must be cut diagonally close to the line of stitching at the point and removed from the area. A dot of liquid seam retardant at the point will retard fraying.

**Setting in sleeves.** This process does not have to be difficult. It is not easy for beginning sewers, but with patience you can do a very professional job. If possible, especially on casual, sporty items, set in the sleeves before sewing the underarm seams so that you can lay the fabric flat rather than work with a small cylinder.

Usually, the sleeve cap is larger than the armhole. If it is slightly larger, you will use the easing method we just discussed. If a great deal larger, you will be gathering the sleeve cap. (Refer to lesson “Apparel Production.”) You will be easing or gathering between the dots, circles, or notches marked on the pattern and transferred to the fabric.

Smooth the ease or evenly distribute the gathers and pin or hand baste the sleeve to the armhole. Stitch with a seam allowance called for in the pattern instructions.

Add a second line of stitching $\frac{1}{4}$ inch from the first stitching. Trim close to the second stitching between the end of the sleeve and the notch. Do this on both ends of the sleeve. Do not trim the remainder of the sleeve seam.

Allow members to try these techniques and/or pass out Member Handout that illustrates these important ways to reduce bulk.

See Member Handout “Sleeves.”
**TIP: USING ‘SEAMS GREAT’**

This bias cut nylon tricot can help do the easing on light to medium weight fabrics. Buy matching or blending color “Seams Great” in the 1½ inch width. Measure the armhole on the pattern front from the notch to the shoulder seam. Then measure the armhole on the pattern back from the notch to the shoulder seam. Be sure that you measure along the seamline, not at the cut edge. (Instead of placing the tape measure flat as you measure, place the tape on its side.) Add the two armhole measurements. Cut a piece of the “Seams Great” as long as the combined armhole measurement. Mark the position of the shoulder seam. Pin the “Seams Great” to the wrong side of the sleeve, placing the ends of the tricot at the notches. Pin the shoulder mark at the sleeve shoulder marking. Stretch the “Seams Great” to meet the sleeve notches. Keep outer edges of the sleeve and the “Seams Great” even. Set the sewing machine at 10 to 12 stitches per inch. Sew the two layers together ½ inch from the cut edge.

When you are finished, the “Seams Great” will pull back to its original size, automatically easing the sleeve cap. Proceed as above.

**Waistbands**

Follow pattern instructions to apply a waistband. If you want to add a waistband to a pattern without one, take your waist measurement and add 4 inches to it. Cut the waistband twice the width you want it finished, plus 1¼ inch. Finish one long raw edge of the fabric by zigzagging or serging.

Interface the entire band, trimming off interfacing seam allowances. Fuse interfacing to the wrong side of the waistband. NOTE: precut fusible waistband interfacing is easy to apply and your completed band will be straight and uniform. It is precut to standard widths that will stop at the waistband seamline and the center slot is the fold line.

Stitch the waistband to the garment. Place right sides together, matching notches, centers, and side seams. Stitch, easing/gathering the garment to fit. (Most garments are about 1 inch bigger than waistband and need to be eased slightly.)

Grade seam allowances. Trim the garment seam to ⅜ inch and the waistband seam allowance to ¼ inch. Angle cut skirt seam allowances and darts from stitching line to cut edge to reduce bulk. Press seam flat. Then press the waistband up, covering the seam.

Fold the waistband along the fold line, right sides together. Lower edges will not meet. One edge extends the other. Finish waistband ends, see member handouts.

Turn the waistband right side out. Use a pointer or creaser to help get sharp corners. Press the band so the foldline is at the top of the band.

Finish the band by pinning the remaining edge of the band over the waist seam. The selvage or finished edge of the band will extend slightly below the waist seam. Pin from the right side of the garment.

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Topstitch the waistband, or stitch in the ditch. To stitch in the ditch, straight stitch in the valley of the waist seam. The stitching will blend into the seam and will not be noticeable from the right side. On the wrong side the stitching will catch the remaining waistband edge. Waistband can also be sewn on the back side by hand.

Zippers

_Centered application._ This gives the zipper a sporty look. It is preferred at center front openings and it is sometimes used at back openings, but other methods are preferred for dressy dresses. Use a zipper 2 inches longer than needed so that zipper slider is extended beyond edge of fabric at top.

_Lapped zipper._ This technique is used for all side seams and can be used at center front and center back. If you don’t have a good color match, this technique will cover the zipper more completely.

Buttonholes

It used to be that most sewers dreaded the point in garment construction that called for buttonholes. With today’s improved machines and some practice, you can become a buttonhole expert. It is well worth your time to spend some at your sewing machine practicing buttonholes on various types of fabric samples. This will give you confidence when it comes to making the real thing!

For the actual procedure to sew the buttonholes, read your sewing machine manual. Each machine will vary on the procedure to use.

TIPS:

- Stick to the size button recommended on the pattern envelope. If you can’t find a button you like, don’t go more than 1⁄8 inch smaller or larger.
- Always make a test buttonhole on a piece of sample fabric, complete with interfacing and correct number of layers.
- To make sure the buttonholes are placed accurately, begin stitching horizontal buttonholes at the marking closest to the garment edge; begin stitching vertical buttonholes at that marking closest to the upper edge of the garment.
- Mark placement on the right side of your fabric.
- Check the placement lines before you get ready to make the buttonholes.
- Place the pattern tissue on top of the garment, aligning the pattern seamline with the garment opening edge. Stick pins straight through the tissue and the fabric at both ends of each marking; then carefully remove the pattern without disturbing the pins. If appropriate for your fabric, mark between the pins with a water-soluble or evaporating marking pen. If not suitable, place a strip of 1⁄2 inch tape a scant 1⁄8 inch away from the pins. Mark the position of each pin on the tape. When sewing the buttonhole, stitch next to the tape, but not through it. Check to be sure the tape does not mark your fabric on a sample scrap.
Leader Notes

Allow members time to experiment with buttonholes or do this step in the project you have chosen, if necessary.

• To figure the size of buttonhole needed for a particular button, add the diameter of the smallest part plus the depth of the button (not including the shank). If your button is very thick, you may need to increase the size a little more. Test the size out on scrap fabric before making any buttonholes on your garment.
• Open the buttonholes using a razor blade, X-ACTO knife and cutting board, or a pair of small, sharp embroidery scissors. Start at each end and cut toward the center. To prevent cutting too far, put straight pins at each end of the buttonhole opening, just inside the stitching.
• Use a liquid fray preventer on any stitches accidentally clipped when cutting and on the end threads of the buttonhole to prevent raveling.

Hems
You may choose to machine or hand hem garments. Hand hemming yields a more tailored, dressy look. The type of hem finish you choose will depend upon the fabric and style of garment. Here are some beginning basics.

When your garment is at the “almost finished” stage, it is a good idea to let it hang for 24 hours before you mark the hem. This gives the fabric grain time to settle in. This rest period is important for knit garments or garments with a bias or circular hem. If this is not done, the garment may later develop sags or dips in the hemline.

After resting, try on the garment with the undergarments and shoes/accessories that will be worn with it, if possible. Get a friend to help you mark the hemline; this is easier and faster than doing it alone. For even results, you stand in one spot with your feet together, and the friend moves around you using a yard stick or pin-type skirt marker, measuring from the floor up to mark the finished hem length. Pins should be placed parallel to the floor about 2 to 3 inches apart.

Take the garment off, turn it wrong side out, and place over the ironing board. If the fabric is bulky trim any seam allowances that intersect with the hem to ¼ inch. Matching the seamlines first, insert pins at right angles through both layers of fabric. Once pinned, remove the hemline pins and try on again. Hand-base the hem about ¼ inch from the folded edge (unless you are making a machine-rolled hem or narrow topstitched hem).

Measure and mark the desired hem allowance plus ¼ inch. Trim away excess. On a straight garment, the hem allowance should be no more than 3 inches. On A-line or flared, the allowance is usually between 1½ inch and 2 inches. Press the hem.

If the garment edge is curved, the hem allowance will have extra fullness. To prevent ripples and ridges you must take up this ease. Refer to the first section of this section on easing instructions.

If the fabric will not ravel—no edge finish is needed. If raveling can occur, then a finish such as stitched-and-pinked, zigzag/overcast and

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bound would be appropriate. Seam binding or stretch lace may be appropriate for some items.

Depending on your fabric; choose the blindstitch, the catchstitch, or the hemming stitch. See lesson “Sewing for Others.”

USING A THREAD THAT IS THE SAME COLOR OR ONE SHADE DARKER THAN YOUR FABRIC. TO MAKE SURE THE FINISHED HEM IS INVISIBLE, PICK UP ONLY ONE OR TWO GARMENT THREADS WITH EACH STITCH.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. Name four ways to get rid of fabric bulk.
   A. Trim, notch, clip, grade.

Q. Name areas that may require easing.
   A. Sleeve caps, collars, waistbands, hems, other areas requiring extra fabric for ease of movement or fashion details.

Q. What skill did you practice that you thought was the most difficult? The easiest? Why?
   A. Answers will vary.

**Process:**

Q. What problems seemed to occur over and over?

Q. Why do you think it happened?

**Generalize:**

Q. How do you determine what type of hem to use on a garment?
   A. Overall look you want, weight of fabric, ease in the hem, if fabric will ravel, if the hem will need give. Try different methods on scrap samples until you are satisfied with the result. Many different types of hems may be suitable for the same garment.

Q. What did you learn about goal setting and mastering skills?

**Apply:**

Q. How will what you learned today be helpful in the future?

Q. What will you do differently next time for different results?

Allow time for members to practice this exercise on the project, if required or an sample fabrics. This exercise may be done with the lesson “Sewing for Others.”
Leader Notes

GOING FURTHER:
• Split this lesson into smaller components or projects so that members have plenty of time to experiment and practice the previous methods.
• Have a contest for the most new skills perfected. Judge the members as they practice at home and bring samples of the previous skills in. Keep track for the “most new skills done” and the “best example” and award prizes at the meetings.
• Visit a person that home sews for a living and ask her/him about shortcuts used to master the above.
• Encourage members to make a project with one or two of the new techniques in this lesson for exhibit at the fair.
• Hold a buttonhole clinic as a fundraiser for the project club. Advertise through the Extension office that members will be available for one day to repair or do buttonholes for a fee.

REFERENCES:
Clothing Construction, Leader’s Guide, Linda Heaton and Karen Hicks, Extension Specialists, Cooperative Extension Service, University of Kentucky, Frankfort, Kentucky 40546
Simply the Best Sewing Book, Simplicity Pattern Co., 200 Madison Avenue, New York, New York 10016
Easing and Gathering, Ardis Koester, Extension Textiles and Clothing Specialist and Barbara Sawyer, Extension Specialist, 4-H Youth, Oregon State University Extension Service, Corvallis, Oregon
Let’s Sew, Nancy Zieman, Nancy’s Notions, Ltd, Beaver Dam, Wisconsin 53916
Readers Digest Complete Guide to Sewing

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Ease and Gathers

Easing and gathering are methods of controlling fullness in order to join two edges of uneven length. Easing controls a slight to moderate amount of fullness while gathering controls a larger amount.

The purpose of easing is subtle shaping. Garment areas that may use easing include back shoulder seam, set-in sleeve cap, waistbands, and hems. The eased area should be smooth and unpuckered after pressing. Permanent press finished fabric, nonwoven fabrics, woven fabrics with close yarns, and some stable knit fabrics are more difficult to ease.

The pattern symbols for ease are usually dots, circles, or notches that indicate the beginning and ending of the area to be eased. To control a small amount of ease, pin the beginning and ending of the area to be eased. Bend the area slightly away from you to smooth out the ease. Distribute the fullness evenly and place pin perpendicular to the edge to hold it in place. Stitch with the eased side down (shorter side up) so that the feed dogs of the machine assist in working in the excess fullness.

To control a moderate amount of ease, make a row of stitching next to the seam line. The size of the stitch should be slightly larger than that used for seams but not as large as a basting stitch. If staystitching has been done it may be used as the ease stitching. If more control is needed, make a second row of stitching in the seam allowance \( \frac{1}{4} \) inch (6 millimeters) from the seam line.

To join the moderately eased seam, pin seam at the ends of the eased area as needed. Pull on one end of the easing thread (pull only the top or only the bobbin thread) until the edges match. Distribute the fullness smoothly and evenly. Pin to hold fullness securely. Decide whether to baste, to machine stitch with eased side down, or to machine stitch with eased side up so that you can see and adjust the ease. Your decision may be based on the amount of ease and whether the feed dogs can stroke in the controlled ease, or whether you feel more secure in watching and adjusting the ease.
Ease and Gathers, continued

Begin pressing an eased seam by using the edge of the iron—stroking lightly from the stitching outward on the seam allowance. Then using the point of the iron, press from the stitching inward over the garment. Press seam open or continue sewing as needed.

In some fabrics, especially wool, steam-pressing will entirely shrink out the ease. Work over a pressing ham or a sleeve board, so the area is molded as intended. If iron comes in contact with the wool fabric, be sure to use a press cloth. With a steam iron, hold the iron over the eased area, and allow the steam to penetrate the fabric, then lower the iron and apply light pressure until ease has disappeared. With a dry iron, use a dampened press cloth and lightly touch the press cloth and fabric with the iron. A piece of your wool fabric makes an excellent press cloth.

Other fabrics are handled in the same way, but will not readily shrink, although unfinished natural fibers may do so to a slight extent. It is important to begin by pressing the seam only, using the point of the iron. Putting the iron down flat may make creases out of the slight indication of gathers.
Reducing Bulk

Grading or Layering
Any enclosed seam like a neckline, collar, cuff or waistband, should be graded or layered to prevent a bulky look and feel. To grade a seam, cut seam allowances to different widths so seam will lie flat. (Figure 1).

Collar Point Trimming

How close you trim depends on the firmness of the fabric. The shortest width on very firmly woven fabric could be ¼ inch wide. Always reduce as much bulk as possible without weakening the seam.

Remember when reducing bulk, the shortest width should be next to your body and the longest width should be to the outside of the garment.
Sleeves

Set-in Sleeves
Although set-in sleeves occur in a variety of garments and in many design variations, they are all inserted by a procedure much like the one described later. Depending on the curve of the sleeve edge, a sleeve cap can be either slightly rounded or full and feathered. If a sleeve is to have a nicely rounded cap, it must be carefully manipulated when it is eased into the armhole to avoid puckers and dimples along the seamline. If the sleeve is to have a gathered cap, the shirring must be evenly distributed along the upper curve. The number and form of pattern pieces for set-in sleeves also varies. The set-in sleeve used most often is cut from a one-piece pattern. Occasionally you will see a two-piece sleeve, usually in tailored garments. Still another available type has a two-piece look but is actually cut as one and the seam positioned at the back of the arm.

Seams Great® Easing of Sleeve
Seams Great® is 40-denier tricot cut into bias strips. The 1¼ inch width is generally used to create bulk-free casing and to help ease sleeves. Since Seams Great® is lightweight, it cannot be used to ease every sleeve, only those of light- to medium-weight blouse or dress fabric.

1. Cut 1¼ inch wide Seams Great® the length of the bodice armhole from notch, across shoulder, to notch.
2. Use three pins to pin the Seams Great® to the wrong side of the sleeve, matching raw edges at the notches and cap. See Figure 1.
3. Set the machine at the standard stitch length. Stretch the Seams Great® to meet the sleeve and sew the two layers together ½ inch from the cut edge. The Seams Great® will retract to its original size, automatically causing the sleeve to ease. See Figure 2. Since you sewed the Seams Great® to the underside, it does not show.
Set-in Sleeve Method

1. The curved edge on most set-in sleeves measures more than the armhole circumference, thus easing along cap is needed to fit the sleeve into the armhole. To provide ease control between sleeve cap notches, place two rows of easestitching within the seam allowance, the first a thread’s width from seamline, the second ⅛ inch from first.

2. With right sides together, match, pin, and baste underarm seam of sleeve. Stitch as basted. Press seam flat, then open.

3. Insert sleeve into armhole with right sides together; pin at all matched markings. To draw up sleeve fullness, pull the bobbin thread ends from easestitching line; distribute eased fullness evenly along cap. (For a gathered cap, use easestitching threads to gather excess fullness.) Hold sleeve in position by pinning on seamline at ½ inch intervals; take small “pin bites.” Hand-baste in place; use small stitches.

4. Check sleeve from right side; cap should be rounded and smooth. If there are puckers of dimples along seamline, secure easestitching thread ends; remove basted-in sleeve. With right side out, drape sleeve over press mitt or tailor’s ham; steam-press along the cap, “shrinking out” as much of the puckering as possible. Re-baste sleeve into armhole.

5. Start at underarm seam and, with the sleeve side up, stitch along seamline; use fingers to control eased-in fullness as you stitch. Overlap a few stitches at end.

6. Diagonally trim cross seam allowances at shoulder and underarm. Place another row of stitches (either straight or narrow zigzag) within seam allowance, ⅛ inch from first row. Trim seam allowances close to second row of stitching from notch to notch. To help maintain rounded cap, turn seam allowances toward the sleeve; do not press seams open.
INTERMEDIATE CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Shirt Sleeves

One form of the set-in sleeve is attached by the shirt-sleeve method, which permits the sleeve to be sewed into the armhole before garment side and sleeve seams are stitched. Sleeves eligible for this method are less rounded than usual along the shoulder line because the cap is not so steeply curved; there is less difference between the measurement of the armhole and the upper sleeve curve, which means easestitching along that curve is usually not necessary. Flat-felled seams are often used in this method; because of the armhole curve, they should be narrow and, contrary to most seam situations, made on the wrong rather than the right side. A popular method for men’s shirts, where it originated, the shirt-sleeve technique is also an easy way to handle children’s sleeves.

1. With right sides together, match and pin sleeve to armhole; ease in sleeve’s slight fullness as it is being pinned (easestitching is not necessary). Baste as pinned, and stitch with sleeve side up.

2. Diagonally trim cross-seam allowances at shoulder. If a flat-felled seam is desired, construct at this time (see Seams). For regular seam finish, place another row of stitches (straight or zigzag) within seam allowance, $\frac{1}{4}$ inch from first row. Trim seam allowance close to second row of stitching.

3. With right sides facing, match, pin, and baste underarm seams (turn armhole seam allowances toward sleeve). Stitch in one continuous seam from bottom of garment to bottom of sleeve.

4. Diagonally trim cross-seam allowances. If a flat-felled seam is desired, construct at this time (see Seams). For regular seam finish, place another row of stitches (straight or zigzag) within seam allowance close to second row of stitching $\frac{1}{4}$ inch from first row. Trim seam allowance.

Sleeve cap is less rounded because of shallower curve.
INTERMEDIATE CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Waistbands

Straight Waistband Techniques
This is perhaps the most basic and traditional of all the waistband techniques. The waistband for this method is cut with an extended (self) facing and is then applied to the garment as a flat piece. The ends are formed and finished while it is being applied to the garment. The length of the waistband should be placed on the lengthwise grain of the fabric for greatest stability. Cut and apply the interfacing according to the type of interfacing that has been chosen and the number of layers being used. Mark the foldline of the waistband by pressing a crease in the waistband. (a)

1. Pin-mark waistband, placing a pin at beginning of overlap or seam allowance, another at beginning of underlap. Pin band to skirt matching notches, dots, or squares, usually mark location of side seams on waistband.
2. With right sides together, pin waistband to garment, matching pin marks and notches. Draw up the ease thread on garment between pins so that the fullness is evenly distributed and the garment lies flat against the waistband. Baste, then stitch, open the seamline. Press seam flat. Grade the seam allowances to reduce bulk. Press the waistband and seam up.
3. Turn the ⅜ inch seam allowance on the long unstitched edge of the waistband to the wrong side and press. To finish the ends, fold the waistband along the foldline so that the waistband is wrong side out, with right sides together. Pin at each end and stitch on the ⅜ inch seamline. Trim both seams and corners and turn waistband right side out.
4. Pull corners out so that they are square. Press the waistband facing to the inside of the garment along the foldline, keeping the turned-under seam allowance intact. Pin turned-under seam allowance to garment. Slipstitch folded edge to the seamline, making certain that no stitches show through to the outside. Attach suitable fasteners to ends of waistband. A quicker method is to stitch in the ditch from the front side of the garment with a machine, being sure to catch back of waistband in stitching.
Selvage Waistband

1. Not merely quick, this waistband technique helps to reduce bulk by eliminating a seam allowance. Cut the waistband so that the seamline of the unnotched edge falls on the selvage. Note: If selvage edge is not available, waistband is cut on the crosswise grain, the edge could be serged or zigzagged to finish. This provides one finished edge.

2. Fold the waistband lengthwise along foldline, wrong sides together (the long raw edge should extend 5/8 inch below the selvage); press. Interface the half of the waistband that has the raw edge. Interfacing should not extend into any seam allowances.

3. Turn the long raw edge and the ends to the wrong side on the seamlines and press. Make certain that pressed-under edge does not extend below selvage edge when waistband is folded in half.

4. To enclose the garment edge within the waistband, place selvage to the inside and fold along waist seamline. Match all pin marks; pin if desired. Topstitch close to fold, from end to end, catching selvage in stitching. Press waistband flat. Attach fasteners.

5. An alternative waistband method would be to use the ready-cut waistband interfacing. Follow the manufacturer’s instructions.
INTERMEDIATE CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Centered Zipper

2. Place the zipper face down on the seamline with zipper tape edges along seamline. Hold zipper in place with transparent or basting tape. Figure 1.
3. Using zipper foot, stitch $\frac{1}{8}$ inch from the zipper teeth from bottom to top on each side of zipper. Be sure to only stitch through the zipper tape and the seam allowance on each side. Figure 2.
4. Flip fabric over and smooth fabric evenly over the zipper. Center a piece of $\frac{1}{2}$ inch tape evenly over the seamline. ($\frac{1}{4}$ inch of tape should extend on each side and the bottom should be even with the bottom of the zipper stop.) Figure 3.
5. Stitch across the bottom and up the side of the zipper on one side and then start at the bottom and stitch up the other side using the edge of tape as a guide. Figure 4.
6. Remove the tape and basting and unzip the zipper so that slider is below the top edge of fabric. Zigzag across the top edge of each tape at fabric top and then trim off the extra zipper that extends beyond top edge.
Lapped Zipper

1. Machine baste zipper opening on seamline. Press basted seam open. Figure 1. Seam finish edges of seams.
2. Open the zipper and place it face down on the underlap portion (back) of the seam allowance. Place the zipper teeth to the seam line. Stitch through zipper tape and left seam allowance by positioning the zipper foot to the right of the needle and stitching close to the teeth of the zipper. Figure 2.
3. Close the zipper and turn it face up. Press the fabric away from the zipper making a narrow fold in the left seam allowance. Stitch from bottom to the top close to fold. Figure 3.
4. Position the zipper face down on the right seam allowance. Tape in place with ½ inch transparent or basting tape.
5. Turn garment to right side and place the edge of a ½ inch piece of tape along the seamline to mark stitching line (along the outside edge and bottom of the tape).
6. Stitch across the bottom of the zipper from the seamline and then up the side of the zipper (along the edge of the tape). Be sure that this catches garment fabric, seam allowance, and zipper tape—if not, reposition tape before stitching. Figure 4.
7. Remove all tape and basting from the fabric.
8. Pull the zipper slider down within the zipper opening. Zigzag across the top of each end of the zipper even with edge of fabric, so that the slider won’t slide off and then trim top of zipper even with top of seam.
Hems

Marking Hem
Get a friend to help you mark the hem line. For even results, stand in one spot with your feet together; the friend moves around you, using a yard stick or pin-type skirt marker, measuring from the floor up to mark the finished hem length. Pins should be from the floor up to mark the finished hem length. Pins should be placed parallel to the floor, about 2 to 3 inches apart. Figure 1.

Trimming Hem Width
Turn your garment wrong side out and place it on a flat surface. Turn the hem to the wrong side following the marked line. First, match and pin the seam lines together placing the pins at right angles to the hemline. Then pin the remaining hem in place. Figure 2.

Next, check your pattern guide for the suggested hem width. Also, decide how you will attach the hem; handstitching, machine-stitching or fusing. If you’re undecided, ask your leader or helper for help. Usually, flared hems are $\frac{1}{2}$ to 1 inch wide, while straight hems are 2 to 3 inches wide.

After you’ve decided on hem length, measure and mark the desired hem width. Trim away any excess fabric. Figure 3.

Eliminate bulk at the hemline by trimming the hem seam allowances to half their width. Figure 4.
Hems, continued

Easing Curved or Flared Hems
When hemming flared or curved hems, some extra steps need to be taken to remove the fullness at the cut edge of the hem. Otherwise, you’ll have ripples in the hemline and it will not lie flat against the garment.

To remove or ease out this fullness, stitch a row of machine basting ¼ inch from the hem edge. Turn up the hem. Figure 5.

Pin hem in place and adjust the fullness by pulling with a pin on the machine basting thread. Pull up the machine basting threads every 2 to 3 inches, until the hemline lies flat against the garment. Figure 6.

If you’re using a fabric where you could shrink out the fullness, do so with a steam iron. If the fabric will not shrink, put a square of brown paper bag between the hem and the garment and press lightly. Figure 7.

Seams Great® or Seam Saver® comes on a roll, is available in many colors, and is made of a lightweight tricot fabric. It is stretchy and when pulled will curl around the cut edge of fabric. As it curls around the cut edge, it is machine stitched in place. Figure 8. This is a very nice way of finishing a cut edge that ravels.
Hems, continued

Curves—Inward and Outward
After grading inward curves, it may be necessary to cut into the seam allowance about \( \frac{3}{8} \) inch so the edge will lie flat when it is turned. Figure 9. Clip as few times as possible—sometimes only one slash is needed. Be careful not to get too close to the stitching.

After grading outward curves, it will probably be necessary to make notches along the seam. Figure 10. The sharper the curve, the more notches needed. Try cutting the notches with the ends of the shears pointing to the cut edge of the seam allowance. This will prevent accidentally cutting into the seam allowance.

Understitching
Understitching is an extra row of machine stitching added after an area such as a collar or neckline has been completed. Understitching prevents a facing or under section of a collar or cuff from rolling outwards. It is easiest to understitch on the right side of a garment.

First, grade the enclosed seam and clip or notch if necessary. Turn seams to facing or under collar/cuff. On the right side, stitch close to the original seamline catching the seam to the facing or under collar/cuff. Figure 11.
Creating For Your Personal Space

Clothing & Textiles, Level III, Creating with Fabrics & Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
- Making your own home decorations can save money
- How to create home decorations with and without patterns

ABOUT THEMSELVES:
- Sewing can help you express yourself in your living environment
- How to use sewing and math skills to do home decorating
- Using a budget and setting priorities

Materials Needed:
- Materials needed depends upon the activity chosen to complete—see instruction guides of patterns selected
- Sewing magazine featuring home furnishings, or pattern book
- Copies of Member Handouts

ACTIVITY TIME NEEDED: 60 TO 90 MINUTES

ACTIVITY:
As you master the different sewing skills, you may decide you would like to tackle a project other than a garment. Perhaps you want to change something in your home and are considering sewing the replacement. Sewing for the home has become more popular recently. Most home sewing projects require little technical sewing skills—which means that most sewers have the skill required to complete them. There are fewer curves to fit and windows and furniture do not change sizes like people do. However, because of the varying measurements of windows, furniture, and spaces—some math skill is required to measure accurately and figure given equations to calculate amount of fabrics and correct dimensions needed for the project.

The reasons to sew for home are varied. Some persons desire that one of a kind look in their home that they cannot find ready made. Others will find that the look they want cannot be afforded on their present budget and will sew to achieve the look at a fraction of the cost.

Besides sewing, the needle crafts are often used as house decoration, as well as mental therapy. These activities should be included as you plan your home space decorations and budget. Here are some special things you should keep in mind as you think about creating for your home.

Leader Notes
Welcome all members. Have them sit in a comfortable place. If they do not know each other allow time for them to introduce themselves. Have each member name one thing they would like to make/change in their home space. You begin.
Express Yourself
Remember that this is your living space. You attend school and spend a great amount of time away from home each day. Home is supposed to be your retreat. In spite of what decorating magazines may say—you should choose a look in which you are both comfortable and relaxed. Plan to surround yourself with the things and colors you like most, regardless of what is popular or trendy. Nothing is more disappointing than achieving a designer home space look, but not feeling comfortable living in that space.

Plan a budget
As you find an item/look you like, keep track of the approximate cost. Itemize the expenses. Set your budget and prioritize. Decorating is easily done in stages; which makes a budget a helpful tool in reaching your goals.

List the items to make
You may decide to make new window treatments, bedspread, and pillows. After checking prices, you may decide to buy a bedspread and make a table cover, pillows and window curtains for about the same price. When buying solid color bedcovers and making items from complimentary fabrics, you may find you can afford more. Compare prices of ready made to by-the-yard fabrics or bed sheets. Shop for fabrics on sale.

List special functions
Will the item be next to a sunny window? If so, the fabric should be colorfast. Will it frequently be used under conditions that may soil it? If so, you will want fabric that can easily be machine washed and dried. Does it need to be water-proof or repellant? By answering these functional questions, you will limit the time needed to comparison shop for fabrics. In addition, this will make cost comparison much simpler. Remember safety first; always keep fabrics more than 3 feet away from a source of heat.

What kinds of things can be made for the home? Only your imagination is the limit here.
- Window treatments
- Comforters/Bed skirts/Bedspreads
- Table covers
- Napkins
- Place mats
- Wall hangings
- Rugs
- Pillows
- Sleeping bags
- Futon covers
- Appliance covers
- Storage organizers
- Shower curtains
- Decorative covers for walls, wastebaskets, headboards, room screens, toilet seats, outdoor furniture, picture frames, etc.
As you look to choose fabric for your project, take a moment to review the characteristics of fibers to choose the right one for the project.

**Acetate**
- Color fastness—Takes color well but may be affected by atmospheric fumes
- Abrasion resistance—Weaker than average
- Durability—Weaker than average, weakened by sunlight
- Use—Inexpensive draperies, some upholstery

**Acrylic**
- Color fastness—May darken
- Abrasion resistance—Good
- Durability—Tends to pill; resists sunlight
- Use—Draperies, upholstery

**Cotton**
- Color fastness—Affected by sunlight
- Abrasion resistance—Good
- Durability—Good, but shrinks unless treated; wrinkles easily unless treated
- Use—All decorative uses

**Glass/Fiberglass**
- Color fastness—Excellent
- Abrasion resistance—May crack
- Durability—Extremely durable except for cracking; care should be taken in handling to avoid splinters
- Use—Curtains

**Linen**
- Color fastness—Certain colors may run or fade
- Abrasion resistance—May show wear at edges
- Durability—Extremely durable; shrinks unless treated; wrinkles easily unless treated
- Use—All decorative uses

**Modacrylic**
- Color fastness—May darken
- Abrasion resistance—Good
- Durability—Extremely sensitive to heat
- Use—Fake furs, pile fabrics, rugs and upholstery

**Nylon**
- Color fastness—Pale colors may fade
- Abrasion resistance—Excellent
- Durability—Fades in sunlight
- Use—Curtains, rugs and upholstery

Allow members to look through the patterns for home furnishings in the pattern book or look through the home decoration magazines for ideas of things the members could make for their home. List as many items as possible that can be made to decorate their home.
Olefin
- Color fastness—Good
- Abrasion resistance—Good
- Durability—Strong fiber; fast drying but heat sensitive—NEVER iron or dry in dryer
- Use—Rugs and upholstery

Polyester
- Color fastness—Good
- Abrasion resistance—Excellent
- Durability—Excellent; may pill or attract lint; most versatile man-made fiber
- Use—All decorative uses

Rayon
- Color fastness—Solution dyed; colorfast
- Abrasion resistance—Weaker than average
- Durability—Weaker than most and affected by sunlight; high wet-modulus and high tenacity rayons are stronger than other types
- Use—All decorative uses, but consider sunlight in curtain use

Saran
- Color fastness—Good
- Abrasion resistance—Good
- Durability—Stiff; softens at relatively low temperature
- Use—Outdoor furniture

Silk
- Color fastness—May change or run
- Abrasion resistance—Good
- Durability—Weakened by sunlight but the ultimate luxury fabric for home furnishings
- Use—All decorative uses, rugs rarely

Wool
- Color fastness—Good
- Abrasion resistance—Good
- Durability—Shrinks, attractive to moths unless treated
- Use—All decorative uses, draperies rarely

See some attached projects: kitchen accessory, pillow, covered hangers, sleeping bag. Give directions to the members for the project they will complete today. Assist them in completing the project.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What is one project you would like to make for your home space?
A. Answers will vary.

Q. What is a home-sewn item can you think of that you admire in someone’s home?
A. Answers will vary.

Process:
Q. What type of fabric is this project made from and why is it a good choice for this item?
A. Answer depends upon the project, look for answers like: easy care, durable, resistant to sunlight, etc.

Q. If you had to describe your room in a one word “theme,” what would it be?
A. Answers will vary.

Generalize:
Q. What did you learn about decision making today?

Q. How did you go about making your decision?

Apply:
Q. What one thing did you learn today that can be used in another situation?

Q. What would you do differently next time?

GOING FURTHER:
• Take a field trip or ask a home decorator to talk to the members about their job duties, the use of the design principles, and how they help customers choose the decorations they decide upon.
• Have members begin a scrapbook of the home furnishings they prefer with ideas of cost and what could be self made.
• Have members design rooms for the “ugliest room” contest. Use the principles of design and critique them. Have members choose the ugliest one.
• Complete another of the home decorating projects at a later meeting.
Leader Notes

REFERENCES:
Be Creative! Pillows, Bridgett Smith, Assistant Professor, University of Tennessee
Sewing For Your Home, Marilyn Stryker, County Extension Home Economist, Saline County Extension Service, 300 West Ash, Salina, Kansas 67401
Sewing Patterns, Talon Consumer Education, 41 East 51st Street, New York, New York 10022

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CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Knife-Edge Pillow

Pillows come in an endless variety of shapes, sizes and styles. They all share one thing in common—their basic construction. All are knife-edge pillows or a variation of the knife-edge pillow.

The basic knife-edge pillow has a pillow top and back that is sewn together around the outside edge. Other pillow styles are also seamed together at the edge, but may have corners which are folded, pleated or gathered. Other options include edge finishes such as cording, ruffles or a boxing strip inserted into the seamline.

Before you begin any pillow, read over the step-by-step directions for completing the basic knife-edge pillow. It contains information basic to all pillow styles.

A knife-edge pillow is thicker in the center and tapers off at the outer seamed edges. It is the simplest of pillows to make, requiring only one seam.

You Will Need
Fabric for pillow front and back
Loose stuffing, (including lining fabric for pillow liner, if desired) or purchased pillow form
Optional: Zipper or alternate closure technique 1 inch shorter than length of finished pillow

Cutting Instructions
Add 1 inch to width and length dimensions of finished pillow size to both pillow front and back. For example, a finished pillow measuring 12 inches square requires cutting the pillow front and back 13 x 13.
For pillows with a center back opening, cut pillow back wider to accommodate desired closure technique.
CREATING FOR YOUR PERSONAL SPACE
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Knife-Edge Pillow, continued

1. Fold pillow front into fourths keeping raw edges even. On each open side, mark the center point between the corner and the fold. At each corner, mark a point ½ inch from corner.

2. For each corner, start at new corner mark and trim, tapering to nothing at center mark (step 1). Unfold front and use it as a guide for trimming corners on pillow back. This eliminates exaggerated points or dog ears on corners of finished pillow.

3. If working with a lightweight fabric, fuse a triangle of fusible interfacing to each corner of pillow front and back to keep corners sharp.

4. Apply any trim, ruffle or cording that is to be sewn into the seam to the pillow front.

5. Insert desired closure technique in pillow back or side seam (optional). After completing, leave closure open.

6. Place pillow front and back right sides together. Pin. For pillows with no center back closure technique, stitch a ½-inch seam, leaving an opening on one side for turning and stuffing. For pillows with a center back closure, stitch a ½-inch seam completely around pillow.

7. Trim corners diagonally, ½ inch away from stitching. Turn pillow right side out. On pillows with no closure technique, press under ½ inch along pillow opening edges to make creases for machine or hand stitching. Pull out corners of pillows and press edges of pillow. Insert pillow form or liner into pillow or stuff with loose filling.

8. For pillows with no closure technique, pin pillow opening closed and slipstitch by hand or machine stitch close to pressed edge. (See lesson Apparel Production, Level II, page 63, for hand slip stitch to use to close the opening.)
What to do to Make an Oven Mitt—Barbeque or Chef Mitt

1. Make a paper pattern. Place your hand on a piece of paper. Spread your fingers apart and draw around the outline of your hand. Draw another line \( \frac{5}{8} \) inch outside of the first line. This is for the seam allowance. Cut out the pattern on the second line. There is also a pattern included if you would prefer to use it, but it is good for the members to realize they can make their own pattern.

2. Fold fabric in half so you can cut the mitt front and back at the same time. Lay and pin pattern on the fabric. Place the pattern on the straight grain line of the fabric. Have your leader show you how. You can cut two mitts at one time if the fabric isn’t too heavy. Decide which hand you will wear the mitt on and label one piece of the fabric as the top section and one piece the palm section.

3. From the same pattern, cut as many layers of padding material as needed to protect your hand. Cut one extra piece to be used on the top piece.

4. Place one piece of the padding on the fabric labeled top. Place right sides together, making the lower edges even, pin. Stitch the lower edges together, taking a \( \frac{1}{4} \)-inch seam allowance.

5. Place the remaining pieces of padding fabric on the palm section of the mitt with right sides together, making the lower edges even, pin. Stitch the lower edge, taking a \( \frac{1}{4} \)-inch seam allowance.

6. Turn both sections right side out and pin the raw edges of each section together. Stitch these edges together by sewing \( \frac{1}{4} \) inch from the edge.

7. Join the two sections with right sides of the fabric together taking a \( \frac{5}{8} \)-inch seam allowance. For added strength, make a second row of stitches \( \frac{1}{2} \) inch from the edge. Trim the seam close to the second row of stitches. Clip the inner curve between the thumb and fingers. Turn the mitt right side out.

Select pattern size which fits your hand. Be sure to allow \( \frac{5}{8} \)-inch seam allowance.

<table>
<thead>
<tr>
<th>Judge Your Mitt</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>1. Does it fit your hand and work well?</td>
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<tr>
<td>2. Is it made of appropriate fabric?</td>
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<td>3. Is the stitching straight and sewn even?</td>
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<td>4. Is the hem even and neat?</td>
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<td>5. What could you improve? (Explain)</td>
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CREATING FOR YOUR PERSONAL SPACE
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Covered Hangers

Make a check after you complete each step.

**Step 1.** Make a casing for the neck.
___ A. Cut a strip of fabric \( \frac{3}{4} \) inch wide by the length of the neck plus 1 inch.
___ B. Fold the strip in half, lengthwise, with the right sides together. With a continuous stitch, stitch across one width, pivot and stitch down over the length.

**Step 2.** Batting and covering for the wooden frame of the hanger.
___ A. Cut one piece of batting \( 2\frac{1}{2} \) times the size by the length of the hanger.
___ B. Make a small opening in the center and slip over neck of hanger.
___ C. Wrap around hanger and catch stitch together.

**Step 3.** For covering.
___ A. Cut two pieces of fabric the circumference of the padded hanger plus 1 inch by half the length plus 1 inch.
___ B. Fold each piece lengthwise with right sides together.
___ C. Machine stitch \( \frac{1}{2} \) inch seam along raw edges leaving one end open.
___ D. Trim and turn right sides out.
___ E. Fold under \( \frac{1}{2} \) inch seam allowance at open end of each casing.
___ F. Carefully slip casings over each end of padded hanger keeping batting intact, then slipstitch together at center.

**Step 4.** To finish the hanger (and cover the stitches), wrap a ribbon around the tip of the neck and continue down the neck to the wooden frame, wrap the ribbon around the frame twice to cover the catch stitches and make a bow.
Easy Sleeping Bag

Materials Needed:
5 yards fabric for outer shell, 45 inches wide
5 yards fabric for lining, 45 inches wide
7 × 7 foot square of batting
3 separating zippers, each 36 inches long
2 yards cording
Thread

Outer Shell:
Use durable, colorful, washable fabric
1. Stitch together 2 long pieces of fabric, each approximately 44 inches wide and 84 inches (7 feet) long, forming a 7 × 7 foot square.

Lining:
Use durable, soft fabric
1. Make the same as outer shell forming a 7 × 7 foot square.

Filling:
Use extra-loft batting for best results
1. Cut 7 × 7 foot square.

Construction:
1. Layer the above fabrics as follows:
   a. outer shell fabric right side up
   b. lining fabric wrong side up (outer shell and lining should have right sides together)
   c. batting on top.
2. Pin all fabrics together and stitch together using 5⁄8-inch seam—leaving open a 24-inch space for turning on one side.
3. Turn fabric to right side and stitch opening closed using the sewing machine.
4. Top-stitch at 3⁄8-inch around entire sleeping bag.
5. Determine top of sleeping bag (your decision) and mark.
6. Stitch through all layers of fabric in long rows about 12 inches apart, sewing top to bottom.
7. Optional: Stitch through all layers of fabric in long rows about 12 inches apart sewing side to side.
8. Fold 7-foot square quilt in half, forming a 7 × 3.5 foot sleeping bag.
9. Sew a 36-inch separating zipper at the bottom of the sleeping bag. Note: The zippers aren’t sewn in the seam. Sew wrong side of zipper on right side of sleeping bag fabric. When zipped, the zipper strip goes to the inside of the sleeping bag.
10. Sew two, 36-inch separating zippers on the side of the sleeping bag with zipper stops meeting.
11. Fold a 2-yard piece of cording in half and stitch to the center back of the sleeping bag, just above the zipper.
12. Roll up the sleeping bag top to bottom and tie.
What Members Will Learn . . .

ABOUT THE PROJECT:
- How projects can be marketed
- How to figure price when sewing for others
- What to consider when beginning a home-based business

ABOUT THEMSELVES:
- To value their skills as a potentially marketable resource
- Careful planning is necessary before starting a business

Materials Needed:
- Copies of Member Handout
- Paper
- Pencils
- See Sewing for Profit, located in resource section of notebook introduction

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:

“No business plans to fail, but many firms fail to plan.” The business plan is the structure upon which a business is built. A business plan can help lay out a logical series of steps for the beginning producer, or for the expansion of an existing business. A business plan serves as a checklist and as it is updated and modified, can help chart the course for a business. If applying for a loan, a plan is often required to reassure lenders or backers. Today, we will use a pretend business and offer ideas to help you begin to learn the steps necessary to start a business. Starting a business can be very rewarding. Most new businesses demand just as much work, and often more, than reporting to an 8 to 5 job.

Let’s assume that you want to begin a home business. You want to stay at home yet earn some income. You want your work to be something you will be satisfied with.

Many times one parent wants to work at home and care for the children. It is difficult to carefully watch the children and work more than a few hours at a home business. Sometimes, both the business and the children need you at the same time.

In trying to decide what business to start, you may decide that an area of need is sewing outfits for premature babies. In particular, you may decide there is a need for premature cloth baby diapers. You have the skill needed...
to create the new pre-shaped diapers. You feel good about offering this product. You know some mothers have very little money to spend, and by using cloth diapers, they can save money over disposables. This feels like an area you could get excited about. You decide to start a home business.

First, you need to create a plan. Take some time to think about the areas listed on the Cash Flow Projection sheet.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. What “business” did you decide to start? Why?

Q. What was the most difficult task to do? Why?

**Process:**
Q. What problems seemed to happen over and over?

Q. What similar experiences have you had?

**Generalize:**
Q. What did you learn about yourself through this process?

Q. What did you learn about the importance of planning and fact-finding?

**Apply:**
Q. How can you use this activity to help you with a business idea in the future?

Q. What would you do differently next time for different results?

**GOING FURTHER:**
- Discuss the advantages and disadvantages of having a home-based business.
- Invite a person who has a home sewing or arts business to speak to your group.
- Interview someone who has started a home business.
- If your community has a cooperative handcrafted business, investigate how it works. Is it a corporation or partnership? What are the differences?
- Visit with your chamber of commerce to see if there is a need which your group could fill by creating a home business.
REFERENCES:
Sewing for Profit, NCR Extension Publication 208, Joyce Smith, The Ohio State University

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
**Cash Flow Projection**

<table>
<thead>
<tr>
<th></th>
<th>Startup</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. CASH ON HAND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. CASH RECEIVED (SALES)</strong></td>
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<tr>
<td>(Do not include sales tax.*)</td>
<td></td>
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<tr>
<td><strong>3. TOTAL CASH AVAILABLE</strong></td>
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<td></td>
</tr>
<tr>
<td>(Before bills paid, 1 + 2)</td>
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<tr>
<td><strong>4. CASH PAID OUT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
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<tr>
<td>Labor</td>
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<td>Owner</td>
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<td></td>
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<tr>
<td>Employees</td>
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<td></td>
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<tr>
<td>Outside Services</td>
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<tr>
<td>Office and Operating Supplies</td>
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<td>Repairs and Maintenance</td>
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<td>Advertising</td>
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<tr>
<td>Travel Expenses</td>
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<td></td>
<td></td>
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<tr>
<td>Mileage</td>
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<td></td>
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<td>Lodging</td>
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<tr>
<td>Meals/Entertainment</td>
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<tr>
<td>Accounting and Legal</td>
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<td></td>
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<tr>
<td>Rent</td>
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<td>Telephone</td>
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<td>Utilities</td>
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<tr>
<td>Insurance</td>
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<tr>
<td>Taxes (property)</td>
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</tr>
<tr>
<td>Interest</td>
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<tr>
<td>Other Expenses (specify)</td>
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<tr>
<td><strong>5. TOTAL CASH PAID OUT</strong></td>
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<tr>
<td>(sum of 4)</td>
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<tr>
<td><strong>6. BALANCE</strong></td>
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<tr>
<td>(Line 3 – line 5)</td>
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</tbody>
</table>

*Sales tax collected from the sale of craft products should be kept separate at all times.*
Alterations of Patterns

What Members Will Learn . . .

ABOUT THE PROJECT:
- Techniques for doing minor pattern alterations
- More about design ease and wear ease

ABOUT THEMSELVES:
- Areas where they may need to make alterations
- Adjusting patterns to give better fitting garments they can be proud of and enjoy

Materials Needed:
- Old patterns that are no longer wanted—gather from club members or at garage sales
- Tape measure
- Straight edge
- Tissue paper
- Tape
- Pencils
- *Pattern Alteration*, Kansas State University Cooperative Extension Service Publication, C573
- *Mens Wear Fit and Coordination*, video from Kansas State University Department of Communications Media Center; *Garment Fitting Procedures* videos, loaned from Department of Communications Media Center, Umberger Hall, Kansas State University (see references section)
- Copies of Member Handouts

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES (LONGER TIME OR A TWO-PART LESSON IF VIDEO IS USED)

ACTIVITY:

Many people can sew; but to really make a garment look professional you want to achieve good fit. By making your own clothing, you can achieve a fashionable look for your very own figure. Even if you are satisfied with your body, being able to alter patterns will help you make the most of the pattern and get a custom made look. Today, we will experiment with more pattern adjustments to help you achieve the “just right” fit for yourself and others.

Your measurements are the most important guide you have when fitting patterns. If it has been more than three months since you were measured, you should have someone help you remeasure. Look at the pattern book
and find the body type that matches your measurements most closely. Begin with your current body measurements as the basis from which to work.

Don’t make the mistake of thinking it is easier and more efficient to determine adjustments by comparing your measurements with the actual pattern pieces. If you do, you may find problems because of something called “ease.”

Ease, or the fullness included in a pattern design, determines how the fashion will fit and look. There are two types of ease: wearing ease and design ease.

Wearing ease is the amount of “wiggle room” built into a garment. Without it, your garment would be skintight, and you would not be able to walk or sit. Because of this, the actual pattern pieces will measure more than the standard body measurements. Patterns “for knits only” may have less wearing ease added because knits stretch more and, therefore, need less wearing ease built into the pattern.

Design ease is fashion ease; it’s the extra fullness, over and above wearing ease, that determines the garment’s silhouette. In today’s fashion world, there is no one contemporary silhouette. Garments that hug the body are just as fashionable as those that are loose and billowy.

Closely fitted garments have minimal wearing ease but no design ease. Garments like bridal gowns, tuxedos and evening wear with close fitting bodices or upper torso are examples. Semifitted garments have some wearing ease, plus some design ease. Examples include a-line skirts and body skimming chemises and most western wear. Loosely fitted garments have wearing ease plus a great deal of design ease. Gathered skirts, baggy jeans, oversized jackets, the big T-shirt look, and the peasant look are examples of loosely fitted garments.

If the item is to be made in a classic style or from expensive fabric, you may want to make a sample garment from scrap fabric or muslin first to determine fit. Try on the major body pieces to look for fit problems after stitching them together.

The direction of wrinkles helps in analyzing the fit. Crosswise pulls indicate that the garment is too tight. Extra width is needed. Crosswise folds of fabric indicate that the garment is too long. Length needs to be reduced. Lengthwise folds of fabric indicate that the garment is too wide. Width needs to be reduced. Diagonal wrinkles mean that the grainline isn’t being pulled from the correct position. Wrinkles point to the problem. The grainline must be restored to proper alignment. When a dart base is too deep, extra fabric will be present at the point, so make the dart shallower. When a dart is too small, the fabric will bulge at the dart point, but have extra room parallel with the dart, so make the dart wider.
Leader Notes

Note your particular body irregularities that may be cause for alterations:

- sloping shoulders
- flat or full bust
- large abdomen
- small waist
- square shoulders
- length of garment
- sway back
- length of sleeve
- waist length
- hip
- neck size
- shoulder width
- inseam length
- one high hip
- rounded back

Next, at each problem area, decide what alteration is needed by lifting or pulling the fabric in the sample garment into position until smoothness of fit results and undesirable wrinkles are removed without creating new ones. The following order of adjustments is recommended: (1) length, (2) width, (3) bodice back, (4) bodice front, (5) sleeves, (6) skirt.

Adjusting is a process of adding and subtracting fabric where it is needed. There are two methods of adjusting patterns—internal and external.

Internal—fabric is added by slashing and spreading within the pattern body. Fabric is subtracted by slashing and lapping within the pattern body.

External—fabric is added or subtracted from the seamlines by taking up or letting out the seams. The external method is desirable when only small increases or decreases are made.

For a video on pattern alterations, check out Garment Fitting Procedures: Bodice Alteration With Corresponding Pattern Adjustments, or Garment Fitting Procedures Lower Torso Alterations With Corresponding Patterns Adjustments, by Phyllis Brackelsberg, Iowa State University. Available on loan from Department of Communications Media Center through your Kansas County Extension Office.

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What is the amount of extra space designed into the pattern for comfortable wearing called?
A. Wearing ease.

Q. What is the extra amount of fabric designed into a pattern to give a fashion silhouette called?
A. Design ease.

Q. What are the two methods of adjusting patterns called?
A. Internal and external.

Q. How did it feel to alter a pattern?

Process:
Q. When you cut across the pattern and add or subtract space, what method of pattern adjusting are you practicing?
A. Internal, cut and slash.
Q. When do you use external pattern adjustment?
A. When you have very small amounts of adjustment to make in the garment seams.

Q. What problems seemed to occur over and over?

Generalize:
Q. What observations did you make about altering patterns? Why do you feel/think that? What caused you to feel that way?

Apply:
Q. How can you do it differently next time for different results?

Q. What other situations occur around home that require you to make adjustments so they fit better?

GOING FURTHER:
• Visit a tailor or someone who does custom sewing for others. Ask them how they fit garments and/or ask for a demonstration.
• Help members fit a simple skirt, dress or pants pattern to their bodies. Ask members to sew a sample garment and bring it to the next meeting for peers to evaluate fit of the sample.
• Make small sample pieces of patterns with which the members can practice making adjustments. Begin a notebook with the adjusted patterns for the members to keep for future reference.
• Have members volunteer to assist others with measurements and to hold an “adjustment clinic” for patterns, perhaps at a senior citizens center.

REFERENCES:
Pattern Alteration, Lois Goering, Extension Specialist, Cooperative Extension Service, University of Minnesota, St. Paul Minnesota 55108
Personalized Patterns, Nadine Hackler and Dorothy Barrier and Ursula Holahan and Margie McIntyre, Southern Region Cooperative Extension Service, University of Tennessee 692
Clothing and Textiles, Cooperative Extension Service, Montana State University, Bozeman, Montana 59715
Simply The Best Sewing Book, Simplicity Pattern Company, 200 Madison Avenue, New York, New York 10016
Pattern Alteration C573, Kansas State University Cooperative Extension Service, Kansas State University, Manhattan, Kansas 66506
Video: Garment Fitting Procedures: Bodice Alterations with Corresponding Pattern Adjustments, 92 minutes, Phyllis Brackelsberg, Iowa State University (to borrow: 913-532-5830)
Video: Garment Fitting Procedures Lower Torso Alterations With Corresponding Patterns Adjustments, 69 minutes, Phyllis Brackelsberg, Iowa State University (to borrow: 913-532-5830)


Men’s Wear, Fit and Coordination, video, from slide set University of Missouri Extension, 1982

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
ALTERATIONS OF PATTERNS
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Selecting the Correct Pattern Size

Patterns are like “road maps” for your projects. A pattern helps you turn a piece of fabric into a great finished project.

Before choosing a pattern, think about what you would like to sew. Would you like to make a simple top, or a pair of shorts or pants? Or do you want to sew a pillow, a tote bag, or some other kind of project? The choice is yours!

Next, look for a pattern you like in a pattern catalog. Pattern catalogs are divided into separate sections for different types of projects. Flip to the section that includes the kind of project you want.

For your first project, choose a simple pattern—patterns with few pattern pieces and simple sewing steps. Most pattern books include special sections with patterns that are easy for beginners. Some also label patterns for beginners as “easy to sew” or “learn to sew.”

Let’s take a look at how a pattern helps you sew.

Selecting the Correct Pattern Size

Ask someone to help you take your body measurements so you can choose the correct pattern size. The measurements you will need are:

1. Bustline or chest
2. Waist
3. Hip
4. Height
5. Back waist length

Record your measurements in the chart below. Use this information to help you determine your pattern size.

<table>
<thead>
<tr>
<th></th>
<th>My Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust/chest</td>
<td></td>
</tr>
<tr>
<td>Waist</td>
<td></td>
</tr>
<tr>
<td>Hip</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td></td>
</tr>
<tr>
<td>Back waist length</td>
<td></td>
</tr>
</tbody>
</table>

Compare your measurements to those in the size charts in the back of the pattern catalog. Choose the pattern type and size closest to your measurements. The following charts are examples of several pattern types.

If your measurements don’t exactly match those listed, use the chest or bust measurement for tops, dresses, or jackets. Use hip and waist measurements for pants or skirts.
ALTERNATIONS OF PATTERNS
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Selecting the Correct Pattern Size, continued

**Girls’**
Girls’ patterns are designed for the girl who has not yet begun to mature.

<table>
<thead>
<tr>
<th>Size</th>
<th>S</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>26</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>23½</td>
<td>25</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>11½</td>
<td>12</td>
<td>12¼</td>
</tr>
<tr>
<td>Approx. Heights</td>
<td>50</td>
<td>52</td>
<td>56</td>
</tr>
</tbody>
</table>

**Young Junior/Teen**
This size range is designed for the developing preteen and teen figures, about 5’1 to 5’3 inches without shoes.

<table>
<thead>
<tr>
<th>Size</th>
<th>5/6</th>
<th>7/8</th>
<th>9/10</th>
<th>11/12</th>
<th>13/14</th>
<th>15/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bust</td>
<td>28</td>
<td>29</td>
<td>30½</td>
<td>32</td>
<td>33½</td>
<td>35</td>
</tr>
<tr>
<td>Waist</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Hip</td>
<td>31</td>
<td>32</td>
<td>33½</td>
<td>35</td>
<td>36½</td>
<td>38</td>
</tr>
<tr>
<td>Back Waist Length</td>
<td>13½</td>
<td>14</td>
<td>14½</td>
<td>15</td>
<td>15½</td>
<td>15¼</td>
</tr>
</tbody>
</table>

**Boys’/Teen Boys’**
These patterns are for boys who have not yet finished growing or attained full height.

<table>
<thead>
<tr>
<th>Size</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
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<tr>
<td>Chest</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>33½</td>
<td>35</td>
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<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Hip</td>
<td>27</td>
<td>28</td>
<td>29½</td>
<td>31</td>
<td>32½</td>
<td>34</td>
<td>35½</td>
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<tr>
<td>Neckband</td>
<td>11¼</td>
<td>12</td>
<td>12½</td>
<td>13</td>
<td>13½</td>
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<td>Height</td>
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<td>54</td>
<td>58</td>
<td>61</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Sleeve</td>
<td>22½</td>
<td>23¼</td>
<td>25</td>
<td>26½</td>
<td>28</td>
<td>30</td>
<td>31</td>
</tr>
</tbody>
</table>

**Misses’**
Misses’ patterns are designed for a well proportioned and developed figure about 5’5 to 5’6 inches without shoes.

<table>
<thead>
<tr>
<th>Size</th>
<th>XS</th>
<th>S</th>
<th>M</th>
<th>L</th>
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</thead>
<tbody>
<tr>
<td>Bust</td>
<td>30½</td>
<td>31½</td>
<td>32½</td>
<td>34</td>
</tr>
<tr>
<td>Waist</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26½</td>
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<tr>
<td>Hip</td>
<td>32½</td>
<td>33½</td>
<td>34½</td>
<td>36</td>
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<tr>
<td>Back Waist Length</td>
<td>15½</td>
<td>15¼</td>
<td>16</td>
<td>16½</td>
</tr>
</tbody>
</table>

See Lesson, “Straight as an Arrow,” Level I, for more detailed information.
Correctly Fitted Basic Garment

For instructions and illustrations on fit and coordination for men’s wear, request a copy of the video, “Men’s Wear Fit and Coordination,” through the county Extension office. It is available for loan through the Department of Communications Media Center, Umberger Hall, Kansas State University.
ALTERATIONS OF PATTERNS
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Incorrectly Fitted Basic Garment

- Broad upper back
  Clue: crosswise pulls
- Broad lower hip
  Clue: crosswise wrinkles
- Short midriff
  Clue: crosswise wrinkles above waist
- Long torso
  Clue: lengthwise wrinkles and smile lines at crotch
- Flat buttocks
  Clue: lengthwise wrinkles and creases

99-Clothing & Textiles, Level III
ALTERATIONS OF PATTERNS
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Incorrectly Fitted Basic Garment, continued

Small bust
Clue: lengthwise wrinkles

Large bust
Clue: crosswise wrinkles in bust area

Large elbow
Clue: diagonal wrinkles from elbows

Single high hip

Broad, square shoulders
Clue: crosswise wrinkles in shoulder area

Narrow shoulders, broad lower back and large waist
Clue: lengthwise folds and creases

Rounded upper back, sloped shoulders and large waist
Clue: diagonal wrinkles from upper back

Protruding abdomen, full front thigh and hyperextended calf
Clue: diagonal wrinkles from all areas

100-Clothing & Textiles, Level III
Ethnic Apparel—Yarn Arts
Clothing & Textiles, Level III, Creating with Fabrics & Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
- Basic knitting stitches
- Basic crochet stitches
- Basic embroidery stitches
- Patterns associated with ethnic heritages

ABOUT THEMSELVES:
- Confidence to master a new skill
- To identify their ethnic heritage in family textile heirlooms
- Patience in learning a new skill

Materials Needed:
- Knitting needles—size needed for project chosen, one pair/member
- Crochet hook—size needed for project chosen, one per member
- Yarn—size and amount needed for project chosen
- Embroidery needle and floss for project chosen
- Copies of Member Handouts
- May need a resource person that knits, crochets or embroiders to help with this lesson

ACTIVITY TIME NEEDED: 60 MINUTES OR MORE, DEPENDING UPON PROJECT CHOSEN TO COMPLETE (THIS LESSON MAY BE DIVIDED INTO SEVERAL SEGMENTS)

ACTIVITY:
Yarn arts have been around for hundreds of years. Before the industrial age, each piece of clothing had to be handmade. This meant that people had to weave flat cloth and sew it by hand or take the fibers and knit or crochet them into garments. These yarn arts were very useful and most girls and many boys were taught these skills for very functional reasons. In addition to being functional, these yarn arts also were used in household decoration. Many women and children would create items for decorative purposes and as gifts. Study of yarn art is very interesting. Many ethnic heritages have roots that can be traced to the type of yarn arts and patterns that are popular in their countries.

Have you ever heard of Irish Lace, Fair Isle Sweaters, Tartan Plaid? These patterns and types of handwork all have their beginning in a particular ethnic heritage. They are now known as a pattern and have seemed to outgrown one particular region, but their beginnings can be traced to the ethnic transmission of yarn arts.

Leader Notes
Welcome members, have them sit in a comfortable place. If they do not know each other have them introduce themselves. Have them tell their favorite knit, crocheted or embroidered item. You begin.
Many of the well-known knitting patterns will be traced to the Scandinavian countries. This is because of the abundance of wool and the cold climate where knitting of sweaters were needed for survival. As a result, knitting and bulky fibers went well together. They produced bulky garments that would trap the body heat well and insulate against the cold better than anything else known at the time in history that they were created.

Crochet can be used for the same purpose as knitting, but is often used for coverlets or throws. Crochet was also used to make decorations such as dresser scarves, by using thread in place of yarn. There are many other yarn stitches that have roots in other ethnic heritages.

Seminole Patchwork, so popular today, was developed by the Seminole Indians. It allows small pieces of fabric to be pinned together at an angle to create a beautiful fabric.

Today, we are going to introduce you to knit and crochet basics.

**Round**—When working in a circular shape, a round is one or more times around the circle.

**Row**—When working horizontally, a row is one time across the width of the item.

**Asterisk (*)**—Repeat instructions following asterisk as many times as specified.

**Brackets [ ]**—Repeat instructions within brackets as many times as specified.

**Basic Knit Stitches**

**Casting On**—Make a slip knot on needle from yarn end a distance of 1 inch × the number of stitches to be cast on. Pull yarn ends, tightening loop. Move loop near middle point, loop yarn from skein over fingers. Loop free end of yarn around left thumb and insert needle in loop on thumb and wind yarn in right hand over point of needle. Draw yarn through loop on thumb. Slip loop off thumb and pull free end of yarn to tighten stitch on needle. One stitch has been cast on.

**To knit**—Hold needle with cast-on stitches in left hand. Hold second needle and yarn from the skein in right hand. The yarn from skein should be in back of needles. Insert right needle into front of first stitch. Wind yarn from right hand under and over needle point. Draw right needle and yarn through stitch. Slip stitch just made off left needle. One knit stitch has been made. NOTE: Rhyme to help teach:

In through the window, run around the back.
Out through the window, and off pops Jack.

**To purl**—(This project may not call for purl, keep it simple) Hold needle with stitches in left hand. Hold second needle and yarn from skein in right hand. Yarn from skein must be in front of needles. Insert needle from back of a stitch. Wind yarn from skein over and under point of needle. Draw yarn through stitch. Slip stitch just made off left needle. One purl stitch has been made.

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To Bind off—Slip first stitch off left needle onto right needle without knitting. Knit second stitch loosely (or if purling, purl second stitch). Insert left needle through front of first stitch on right needle, gently pull first stitch over second stitch bringing right needle and second stitch through first stitch. Slip first stitch off left needle. Knit next stitch and continue “binding off” until the last stitch. Cut the yarn and leave a 3-inch tail. Pull the tail through the last stitch to secure.

**Working even**—When directions say “work even,” this means to continue working without increasing or decreasing in the pattern being used.

**Place a marker**—Means to place a plastic ring over loop of stitch, or mark with a safety pin or strand of contrasting yarn at a certain point on the piece itself, to use as a guide in making measurements, to note repeats, rounds, increases, decreases, etc.

**Place a marker on needle**—Means to place a safety pin or right stitch marker on needle between stitches. It is slipped from one needle to the other to serve as a mark on the next row.

**Garter**—Garter is using the knit stitch on both sides.

**Ribbing**—Ribbing is a combination of knit and purl stitches; and because of its elasticity it is often used for neckbands, waistbands and wrists.

**Stockinette Stitch (St st)**—Row 1: Knit across. Row 2: Purl across. Repeat these two rows for pattern. In St st the knit side or smooth side is usually the right side of work. The purl side is the “rough” side. In Reverse Stockinette stitch the purl side is used as right side.

**Duplicate Stitch (Duplicate st)**—Draw yarn through to right side at base of stitch to be duplicated. * Insert needle under the two strands at top of same stitch and draw through to right side. Insert needle back into base of first stitch and into base of next stitch to be duplicated. Repeat from * across.

**Fair Isle Knitting**—The term, Fair Isle, is used for a pattern where two colors are used in the same row of knitting and the color changes every few stitches. And you carry the yarn not being used on the wrong side throughout the whole pattern. The color yarn used most is held in right hand, the second color held in the left hand. If yarn is carried more than three to five stitches, catch the carried yarn so you don’t have long loops on the back. Catch yarn as follows:

* Insert right needle in usual manner but before picking up yarn to work this stitch, slip right-hand needle under the carried yarn, work stitch in usual manner, dropping carried yarn as stitch is completed. Work next stitch in usual manner. Repeat from * across.

**To change color in knitting**—When color appears in a definite line or block, attach a color as it appears in the design. When changing colors, twist yarn by bringing new color under yarn you are working with. This prevents holes in the work.
Leader Notes

Pick simple crochet project. Help members by walking through beginning instructions with them. Check progress of members. Projects may be taken home to complete if time does not allow for completion today. Have members return items to finish (or finished) at next project meeting.

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**Basic Crochet Stitches**

*Chain (ch)*—Make a looped knot on the crochet hook. Tighten knot. Make one chain stitch by catching yarn from skein, drawing it through the loop.

*Slip stitch (sl st)*—Insert hook from the front through a stitch. Loop yarn over hook and with one motion, draw yarn through stitch and loop on hook.

*Single crochet (sc)*—Insert hook into previous stitch and loop yarn over hook. Draw yarn through stitch. There are two loops on hook. Loop yarn over hook. Draw yarn through both loops.

*Double crochet (dc)*—Loop yarn over hook. Insert hook into a previous stitch. Loop yarn over hook. Draw yarn through stitch and loop yarn over hook again. Draw yarn through two loops. Loop yarn over hook. Draw yarn through two loops on the hook.

*Half Double crochet (hdc)*—Make double crochet to point where the yarn was looped over and drawn through the stitch and looped over again. Draw yarn through all loops on hook.

*Yarn over (yo)*—Take up yarn from the skein by wrapping over hook.

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**Basic Embroidery Equipment**

*Materials and Threads*—The combination of threads, materials and stitches used will determine if the finished piece of embroidery is delicate or coarse. Fine work is usually done on lightweight fabrics, such as organdie with two or three strands of cotton. If worked on burlap, felt or linen with wool yarns, it will appear coarse.

*Thimbles*—If possible, a thimble should be used to create this yarn art. When working with a coarse fabric and thread, a thimble is important to protect your finger when pushing the needle and yarn through the fabric.

*Needles*—The type of needle required depends on the type of embroidery desired. Fine embroidery requires a size 8, 9 or 10, or 3 to 9; Coarser types of embroidery calls for a size 1 or 2, or 18 to 24.

*Scissors*—Narrow beaded, sharp pointed scissors are essential, especially in cut work embroidery.

*Frames*—Beginners will discover that an embroidery hoop frame (two wooden hoops, one fitting inside the other, with the material stretched over the inner loop, held tight by a screw), will serve their purposes well. More sophisticated frames are available for the serious embroiderer.

*Transferring the Design*—Creative designers can transfer their own patterns on the fabric using several techniques. Using carbon paper is the simplest way. Dressmaker’s carbon should be used because regular carbon will smear. Simply secure the carbon paper to the tight fabric and use a pencil to trace the design.
Perforating is a second technique. After tracing the design on a heavy-weight piece of tracing paper, prick holes on the design with a needle about \( \frac{1}{16} \) inch apart. Place the design on the fabric, smooth side upwards, secure to the fabric, and rub powdered charcoal or chalk over the paper. Blow away excess powder and paint over the lines with water color paint. Experienced artists should check out a reference on embroidery to learn additional techniques of direct tracing or tacking.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. What yarn art project did you choose? Why?
- Q. If this was the first time you tried this art, how did it feel?
- Q. What was the easiest? the most difficult?

**Process:**
- Q. Why are yarn arts not passed from generation to generation today?
  - A. Mass produced knitted and crocheted items are available at reasonable costs, saving consumers money. Handmade garments require a large time commitment, so machine made items save consumers time.
- Q. When would handmade items be a good choice to create?
  - A. When one has time to commit, has a need to create, wants an original one-of-a-kind garment, satisfies the need to give of self, can save money by making versus buying a one-of-a-kind yarn item, or as a hobby for mental health and feelings of self-satisfaction.

**Generalize:**
- Q. What did you learn about yourself through this activity?
- Q. What did you learn about our world?

**Apply:**
- Q. How have lifestyle changes impacted the use of family or personal time to continue the practice of yarn arts?
Leader Notes

GOING FURTHER:
• Have members learn basic embroidery stitches and make pin cushions (see handouts).
• Have members crochet towel hangers or hanger covers to donate to area churches or social agencies to sell at bazaars, etc.
• Have members visit local retail shop that uses knitting machines and allow members to view their use and ask questions.
• Have local craftperson who sells yarn arts come to visit the project meeting with items made, and talk about how they learned the art and how they run their business.
• Visit local museum to look for yarn art displays. Trace ethnic heritages through their yarn arts. Design a display of members family heirlooms or others to be displayed in an acrylic case at a local library or other safe place.

REFERENCES:
Simplicity Timeless Fashions, Pam Aulson, Editor, Simplicity Pattern Co. Inc., 200 Madison Ave., New York, New York 10016
Gift Bazaar, by Coats and Clark, Stanford, Connecticut, Copyright 1976
The Readers Digest Complete Guide to Needlework

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ETHNIC APPAREL—YARN ART
CLOTHING & TEXTILES, LEVEL III, CREATING WITH FABRICS & FIBERS
Member Handout

Abbreviations in Crochet, Knit Instructions

beg  begin(ning)
ch   chain
cir  circle
cm   centimeter
dc   double crochet
dcc(s) decrease(s)
dpn  double pointed needle(s)
g    gram(s)
hd   half double crochet
inc  increase
K    knit
lp(s) loop(s)
mm   millimeter
oz(s) ounce(s)
P    purl
pat  pattern
psso pass slip stitch over
rem  remaining
rep  repeat
rnd(s) round(s)
sc   single crochet
shl(s) shell(s)
sk   skip
sl st slip stitch
sp   space
st(s) stitch(es)
St st Stockinette stitch
tog  together
yo   yarn over
**Basic Knit Stitches**

Casting On: Make a slip knot on needle from yarn end a distance of 1 inch (2.5 cm) times the number of stitches to be cast on. Pull yarn ends, tightening loop. Figure 1. Move loop near middle point, loop yarn from skein over fingers. Loop free end of yarn around left thumb and insert needle in loop on thumb and wind yarn in right hand over point of needle. Figure 2.

Draw yarn through loop on thumb. Slip loop off thumb and pull free end of yarn to tighten stitch on needle. Figure 3. One stitch has been cast on.

To Knit (K): Hold needle with cast-on stitches in left hand. Hold second needle and yarn from the skein in right hand. The yarn from skein should be in back of needles. Insert right needle into front of first stitch. Figure 4. Wind yarn from right hand under and over needle point. Figure 5. Draw right needle and yarn through stitch. Slip stitch just made off left needle. One knit stitch has been made.

To Purl (P): Hold needle with stitches in left hand. Hold second needle and yarn from skein in right hand. Yarn from skein must be in front of needles. Insert needle from back of a stitch. Wind yarn from skein over and under point of needle. Figure 6. Draw yarn through stitch. Slip stitch just made off left needle. One purl stitch has been made.

To Bind Off: Slip first stitch off left needle onto right needle without knitting. Knit second stitch loosely (or if purling, purl second stitch). Insert left needle through front of first stitch on right needle, gently pull first stitch over second stitch bringing right needle and second stitch through first stitch. Slip first stitch off left needle. Knit next stitch and continue “binding off.” Figure 7.

Work Even—When directions say “work even,” this means to continue working without increasing or decreasing in the pattern being used.
Basic Knit Stitches, continued

Place a Marker—Means to place a plastic ring over loop of stitch, or mark with a safety pin or strand on contrasting yarn at a certain point on the piece itself, to use as a guide in making measurements, to note repeats, increases, decreases, etc.

Place a Marker on Needle—Means to place a safety pin or ring stitch marker on needle between stitches. It is slipped from one needle to the other to serve as a mark on next row.

Ribbing—Ribbing is a combination of knit and purl stitches; and, because of its elasticity, is often used for neckbands, waistbands and wrists. Figure 8.

Stockinette Stitch (St st)—Row 1: Knit across. Row 2: Purl across. Repeat these two rows for pattern. In St st, the knit side or smooth side is usually the right side of work. The purl side is the “rough” side. In Reverse Stockinette stitch, the purl side is used as right side. Figure 9.

Duplicate Stitch (Duplicate st)—Draw yarn through to right side at base of stitch to be duplicated. *Insert needle under the 2 strands at top of same stitch and draw through to right side. Insert needle back into base of first stitch and into base of next stitch to be duplicated. Repeat from *. Figure 10.

Fair Isle Knitting—The term, “Fair Isle,” is used for a pattern where two colors are used in the same row of knitting and the color changes every few stitches. You carry the yarn not being used on the wrong side of work throughout the whole pattern. The color yarn used most is held in the right hand, the second color in the left hand. If yarn is carried more than 3 to 5 stitches, catch the carried yarn so you won’t have long loops on the back. Catch yarn as follows: *Insert right needle in usual manner, but before picking up yarn to work this stitch, slip right-hand needle under the carried yarn, work stitch in usual manner, dropping carried yarn as stitch is completed. Work next stitch in usual manner. Repeat from * across.

To Change Color in Knitting—When color appears in a definite line or block, attach a color as it appears in the design. When changing colors within a row, twist yarn by bringing new color under yarn you are working with—this prevents holes in the work.
Scarf to Knit

A beginner can knit this warm scarf. It is worked in simple garter stitch and progresses rapidly on number 8 needles. If gauge is accurate, the scarf should measure 6½ inches wide. Because of mohair’s softness, and the natural stretchiness of garter stitch, your finished scarf may be slightly wider.

Materials
120 grams or 5 ounces of mohair yarn
1 pair #8 needles
1 crochet hook, medium to large, for fringe

Gauge
4 sts = 1 inch

Pattern stitch
Garter

Instructions
Cast on 26 stitches loosely. Knit until scarf measures 60 inches; bind off loosely. When you finish one ball of yarn, attach a new one at the beginning of a row (see explanation). Weave in the yarn ends later.

Finishing
Prepare fringe as directed. Insert yarn groups in first and last stitches at each end of scarf, then every 5th stitch in between.

Making tasseled fringe
A tasseled fringe is a handsome edge for a scarf or stole, and easy to make. On the scarf above, yarn groups have 10 strands spaced 5 stitches apart. For another project, you can experiment with dimensions to see what looks best.

To make the fringe, wind yarn 60 times around a cardboard 8 inches long. Cut through the yarn at one end, and divide it into groups of 5 strands each. Fold each group in half and, with a crochet hook, draw the folded end through one stitch in the scarf edge. Draw yarn ends through the loop and pull to tighten it. The finished length is 7 inches because 1 inch is taken up by the knot.
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Member Handout

Attaching New Yarn

At beginning of the row, tie yarn on as shown, then slide it close to the needle. Weave the end into the edge later.

In the middle of the row, thread new yarn in a tapestry needle; weave it into the old yarn for 1 to 2 inches. Trim rough ends later.
**Knit and Crochet Terms**

Some knit and crochet terms are the same. Always use instructions that apply to the project.

**Round:** When working in a circular shape, a round is one or more times around the circle.

**Row:** When working horizontally, a row is one time across the width of the item.

**Asterisk (*)**: Repeat instructions following asterisk as many times as specified.

**Brackets [ ]**: Repeat instructions within brackets as many times as specified.

**Basic Crochet Stitches**

**Chain (ch):** Make a looped knot on the crochet hook. Tighten knot. Make one chain stitch by catching yarn from skein, drawing it through the loop. Figure 11.

**Slip Stitch (sl st):** Insert hook from the front through a stitch. Loop yarn over hook and with one motion, draw yarn through stitch and loop on hook. Figure 12.

**Single Crochet (sc):** Insert hook into previous stitch and loop yarn over hook. Draw yarn through stitch. There are 2 loops on hook. Loop yarn over hook. Figure 13. Draw yarn through both loops.

**Double Crochet (dc):** Loop yarn over hook. Insert hook into a previous stitch. Loop yarn over hook. Draw yarn through stitch and loop yarn over hook again. Figure 14. Draw yarn through 2 loops. Loop yarn over hook. Draw yarn through 2 loops on the hook.

**Half Double Crochet (hdc):** Make double crochet to point shown in Figure 14. Draw yarn through all loops on hook.

**Yarn Over (yo):** Take up yarn from skein by wrapping over hook or needle.

![Figure 11](image1.png)  ![Figure 12](image2.png)  ![Figure 13](image3.png)  ![Figure 14](image4.png)
Crocheted Covered Hangers

Wood Hanger Materials

- 4 Ply Handknitting Yarn: 1 ounce each of no. 1 white and no. 230 yellow
- Crochet hook, size G
- Wooden hanger

Instructions

Starting at lower edge with yellow, ch 66, having 13 ch sts to 3 inches.

Row 1: skip first ch, draw up a loop in each of next 3 ch, yarn over and draw through one loop (yarn over and
draw through 2 loops) 3 times—4 afghan sts made; pick up white and draw through loop on hook, pull yellow to
tighten and drop, ch 4, skip 1 ch, draw up a loop in each of next 3 ch, draw up a loop in the vertical bar of each of
next 3 afghan sts leaving last afghan st unworked—7 loops on hook; yarn over and draw through all 7 loops on
hook, ch 1 to close star; *drop white, with yellow draw through loop on hook, draw up a loop in center of star,
draw up a loop in last loop of star, draw up a loop in vertical bar of last free afghan st, draw up a loop in each of
next 3 ch sts—7 loops on hook; yarn over and draw through one loop (yarn over and draw through 2 loops) 6
times; drop yellow, with white draw through loop on hook; draw up a loop in each of first 6 vertical bars of
afghan sts leaving last afghan st unworked, yarn over and draw through all 7 loops on hook, ch 1 to close star.
Repeat from * across, end with drop white, with yellow draw through loop on hook, draw up a loop in center of
star, draw up a loop in last loop of star, draw up a loop in vertical bar of last free afghan st, draw up a loop in each of
last 2 ch sts—6 loops on hook; yarn over and draw through one loop, *yarn over and draw through 2 loops) 5
times; drop yellow, with white draw through loop on hook, draw up a loop in each of last 6 vertical bars of afghan
sts, yarn over and draw through all 7 loops on hook, ch 1 to close star; drop white, with yellow draw through loop
on hook. Turn.

Row 2: Sc in center of first star, * sc in top loop of same star, sc in top of next afghan st, sc in center of next star.
Repeat from * across, end with sc in top of last star, sc in center of last star. Ch 1, turn.

Row 3: Work as for Row 1, working into sc’s instead of ch sts.

Row 4: Repeat Row 2. Break off and fasten. With yellow, work a row of sc along each narrow end of strip.

Slip center of strip through neck of hanger, fold strip over hanger and sew 3 remaining sides together. With white,
wrap neck and hook of hanger, then glue ends at base of neck to secure.
Crocheted Covered Hangers, continued

Wire Hanger Materials
4 Ply Handknitting Yarn: 1 ounce each of no. 1 white and no. 230 yellow
Crochet hook, size G
Wire hanger

Instructions
Starting at lower edge with yellow, ch 5.
Row 1: Sc in 2nd ch from hook and in each ch across—4 sc. Ch 1, turn.
Row 2: Sc in each sc across to last st; draw up a loop in last st, drop yellow, with white yarn over and draw through all loops on hook—color change made. Always change color this way. Ch 1, turn. Repeating Row 2 for stitch pattern, work 2 rows each of colors alternately until piece measures about 35 inches.

Starting at base of neck of hanger, fold piece lengthwise around wire and sew together. Continue in this way around entire hanger including hook. Tack beginning of strip to base of neck.
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Member Handout

Pincushions

Materials for Pincushion A
Six strand floss: 1 skein each of No. 10-A Canary Yellow, No. 46-A Mid Rose, No. 5-A Chartreuse No. 99 Grass Green, and No. 48-A Dk. Hunter’s Green.
Embroidery needle, no. 7
A piece of light color linen and velveteen, each 5 inches in diameter
Tracing paper
Dressmaker’s carbon paper
Sharp pencil
Stuffing

Materials for Pincushion B
Six strand floss: 1 skein each of No. 141 Devil Red, No. 36 Royal Purple, and No. 46-B Beauty Rose.
Embroidery needle, no. 7
A piece of light color linen and velveteen, each 5 inches in diameter
Tracing paper
Dressmaker’s carbon paper
Sharp pencil
Stuffing

Materials for Pincushion C
Six strand floss: 1 skein each of No. 61 Ecru, No. 108 Steel Blue, No. 24 Lt. Oriental Blue, and No. 24-A Oriental Blue.
Embroidery needle, no. 7
A piece of light color linen and velveteen, each 5 inches in diameter
Tracing paper
Dressmaker’s carbon paper
Sharp pencil
Stuffing

Instructions
Tracing design: section shown is one quarter of the entire design. Mark intersecting vertical and horizontal dotted lines of tracing paper. Using the dotted lines as a guide, trace onto the tracing paper that quarter of the design omitting numbers. Continue tracing onto paper in same way the remaining three quarters until the entire design has been completed, being careful to have lines meet.

Mark horizontal and vertical center of linen circle with basting stitches. Place tracing paper on linen, matching dotted lines to basting lines. Slip carbon paper face down between tracing and linen and pin securely in place. With sharp pencil, trace design omitting dotted lines.

Embroidery: Use 4 strands throughout. Following numbers on Section Drawing and Key for Stitches and Colors, embroider design, working all parts similar to numbered parts with same stitches and colors. Press embroidered pieces on wrong side.
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**Member Handout**

**Pincushions, continued**

*Finishing:* For A and B only: Having $\frac{1}{2}$ inch seam allowance and leaving a small opening to insert stuffing, sew linen top to velveteen bottom. Insert stuffing, sew opening together. For C only: Turn under $\frac{1}{2}$ inch along outer edge of linen circle. Sew onto a velveteen circle, then complete finishing as for A.

**Keys for stitches and colors, Pincushion A**
1. Satin stitch — Canary Yellow
2. Satin stitch — Chartreuse
3. French knot — Mid Rose
4. Straight stitch — Canary Yellow
5. Stem stitch — Grass Green
6. Stem stitch — Dark Hunter Green
7. Stem stitch — Chartreuse
8. Satin stitch — Mid Rose
9. French knot — Chartreuse
10. Back stitch — Dark Hunter Green

**Keys for stitches and colors, Pincushion B**
1. Satin stitch — Devil Red
2. French knot — Royal Purple
3. Back stitch — Beauty Rose
4. Satin stitch — Royal Purple
5. Satin stitch — Beauty Rose

**Keys for stitches and colors, Pincushion C**
1. French knot — Light Oriental Blue
2. French knot — Ecru
3. Satin stitch — Light Oriental Blue
4. Stem stitch — Steel Blue
5. Stem stitch — Oriental Blue
Pincushions, continued

Satin Stitch—work straight stitches across the shape as shown. Care must be taken to keep a good edge.

French Knots—bring thread out at the required position. Hold thread down with left thumb and wind thread twice around the needle (a). Still holding thread firmly, twist the needle back to the starting point and insert it close to where the thread first emerged (see arrow). Pull thread through to the back and secure for a single French Knot or pass on to the position of the next stitch (b).

Straight Stitch—this is shown as single, spaced stitches worked either in a regular or irregular manner.

Stem Stitch—work from left to right, taking regular slightly slanting stitches along the line of the design. The thread always emerges on the left side of previous stitch.

Back Stitch—bring thread through on the stitch line, then take a small backward stitch through the fabric. Bring needle through again a little in front of first stitch, take another backward stitch, pushing the needle in at the point where it first came through.
Care and Feeding of Your Sewing Equipment

What Members Will Learn . . .

ABOUT THE PROJECT:
• Proper steps to sewing machine and serger care and maintenance
• How to adjust the tension of the sewing machine and serger
• What to consider when buying a sewing machine or serger

ABOUT THEMSELVES:
• Their responsibility to help care for the machines they operate
• Improved decision-making skills in selection of needles and tension

Materials Needed:
• Sewing machine and care kit—lint brush, sewing machine oil, soft cloth
• Serger and care kit—lint brush, oil or lubricant, soft cloth, and aerosol cleaner (canned air)
• Different types of fabric samples and needle sizes for experiments
• Notebook for recording experiment results and mounting stitch samples
• Selecting Overlock Sewing Machines, (optional, in the Resource Section of the Introduction of this notebook)
• Copies of Member Handouts
• Copy of page 52 of the Stitch ’N Wear booklet (diagram of serger) in the Resource Section of the Introduction

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:
Your sewing machine and serger are fine, yet sturdy, precision instruments, and they should serve you well for many years if you take a few simple steps to keep them in good working condition. Just like a car, regular care and maintenance is your best plan to extend the life of your investment. Today, we will talk about how to care for them and how to use them to their greatest ability.

The first place to begin, when we think about caring for and feeding our equipment, is the instruction manual that comes with the machine. This is designed to give you all the information you need to know to be satisfied with the machine. So it should be the first thing you read upon purchase and should be kept in close proximity to your sewing area to refer to when questions arise. If you do not have an instruction manual, the manufacturer can be contacted, or a general guide is available in most reliable clothing construction books.

Leader Notes
Welcome all members. Have them sit in a comfortable place around the sewing machine and serger. Have all your cleaning supplies and instruction manuals prepared. If the members do not know each other, allow time for them to introduce themselves. Ask each member to name one item that needs regular maintenance. You begin.
The frequency of care will depend a great deal upon how much you use your machines. Usually, the machine guidebook will tell you to perform these after every eight hours of sewing/use. That may be daily for some of us, or weekly, or monthly. If possible, store the machine under a dust proof cover to help extend the life of your machine. Be cautious not to store in damp basements, garages, etc., because this can cause rust and permanent damage. Here are some general guidelines.

- Read your sewing machine or serger manual for instructions on oiling the machine. It will tell you how often and where to oil. Be sure to use only sewing machine oil.
- Some sewing machines require lubrication. Check your manual for instructions. Use the lubrication designed for the sewing machine. Lubrication is not done as often as oiling.
- Do not use or store the sewing machine under a window where there is a lot of sunshine or any other source of heat. This will dry out the machine oil and lubricant.
- Keep a lint brush handy. Use it often, while you are sewing, to remove lint and loose threads. It is very important to keep the bobbin area free of lint.
- Always cover the sewing machine when not in use to protect it from dust.
- Develop the habit of always cleaning the machine either before you start a project or as soon as it is completed.
- Avoid dropping the speed control mechanism or pulling on the cord.

Dust and lint must be removed before you put oil on the machine. Doing this often will make the machine work better and last longer. Use a clean cloth to remove lint from the presser bar and the tension disc. Move needle and presser foot to highest point. Remove the throat plate by removing the two screws and opening the side plate. Now you can see how the lint gathers around the feed dog and the bobbin case. Use a small brush or tweezers to remove lint. If any threads have been caught in the bobbin case, remove them. Open the face plate and remove lint. On some machines the face plate comes off. Read the care instructions in the manual. After the machine is completely clean, oil the machine as directed.

Serger care is similar to sewing machine care. Lint must be removed and regular oiling done as instructed. The moving cutting blade may need extra attention in cleaning or replacement. These instructions will be found in the machine guide. The lint may gather quite rapidly while sewing, and cleaning may need to be done throughout the sewing period to keep the machine clean. Be sure to use the oil recommended by the manufacturer on your serger.

Once your machines are clean and oiled, you are ready to take on your next sewing project. Machines and sergers come with many possibilities in stitch length, width, and tension. Many sewers never experiment with these for fear of “messing up” their machines. As a result, they miss the opportunity to improve the quality of the product and never become
comfortable handling their machine. The best way to understand your machine is to use and experiment with it.

On sewing machines, the stitch possibilities are from very basic to computer programmed stitches that can hold your own personal designs. There are stitches that are purely decorative and others that are functional. If you ever shop for a machine, make a list of the functions you want your machine to possess. Everything else is optional. You may find the extra options don’t cost extra, or they may add thousands of dollars to the cost of the machine. The top of the line model may not be the one that you need, so don’t let the gadgets encourage you to spend more than you need to on a sewing machine. The basic stitches that most people want on a machine are straight, zigzag, blind, satin, stretch, and overedge.

As you begin a sewing project you have several things to consider. The stitch type, length, and tension need to be set for the type of fabric you will be sewing on. The needle size will also vary. That is why it is important to save some of those scraps as you cut the pattern from the fabric. Use these scraps of fabric to try out various stitches and tension.

First, look at a needle size guide. The sizing of needles is usually given in both American and European sizing classifications. Find the correct size needle and insert it into the machine. Remember, the larger the needle size, the larger the needle.

<table>
<thead>
<tr>
<th>Size</th>
<th>Recommended Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 (70)</td>
<td>Delicate and sheet fabrics: lingerie fabrics, sheer tricot, chiffon, lawn, violet, net</td>
</tr>
<tr>
<td>11 (80)</td>
<td>Lightweight fabrics: single knits, matte jersey, tricot, taffeta, silk, seersucker, batiste, velvet</td>
</tr>
<tr>
<td>14 (90)</td>
<td>Medium-weight fabrics: double knits, stretch terry, velour, swimwear fabrics, synthetic leathers and vinyl, pique, linen, flannel, velveteen, medium weight wools</td>
</tr>
<tr>
<td>16 (100)</td>
<td>Heavyweight fabrics: bulky knits, coatings, suitings, heavy canvas, duck, upholstery, and drapery fabrics</td>
</tr>
<tr>
<td>18 (110)</td>
<td>Very heavy fabrics: leather-like fabrics, heavy elastic</td>
</tr>
</tbody>
</table>

In addition, there are different types of needles to choose from; these include:

- Regular needle—a sharp-pointed needle. It is used for general sewing on woven fabrics and works well on most knits.
- Ballpoint needle—designed especially for knits, the point is rounded. This allows the needle to go between the yarns, rather than piercing and breaking the fibers. They may have a marking indicating the size of the ballpoint: SES = fine, SUK = medium, SKG = heavy.
- Universal needle—this needle has a special taper, is not as sharp as a regular, nor as rounded as a ballpoint. It is used on both knits and woven fabrics.
- Leather needle—this needle is designed for leather, suede, vinyl, and non-woven fabrics. The triangular, wedge-shaped point perforates without tearing the heavy non-woven.
Leader Notes

• Top-stitching needle—this needle has a larger eye than normal to accommodate heavy, buttonhole twist thread.

Some sewing professionals suggest that you change the needle in your sewing machine or serger with every project you sew. This will ensure that you do not sew with a blunt needle. Frequent changing is recommended, and when compared to the small cost of needles, is worthwhile.

Experiment with Stitch Length and Tension

Once you have found the correct size and type of needle, you want to check the correct stitch length and tension. To do this, use a piece of scrap fabric. Thread the machine with one color on top and a different color on the bobbin. Sew a sample seam and look for puckers in the seamline. Look closely at the stitches—do the threads combine in the middle of the stitch depth? If they do, then the tension is correct. If you can see the bobbin thread showing on the top side, then the top tension is too tight and needs to be loosened. Do this slightly, and stitch again. Continue until the threads meet in the middle of the stitch depth and looks the same on both the top and bottom.

If the top thread can be seen from the bottom side, then the top tension is too loose. Try tightening slightly and stitch again. Do this until the stitch colors are not visible from the opposite sides.

On some machines the bobbin has a tension. Read the instruction manual to determine if your machine is one of these. Bobbin adjustments are only made as a last resort. The machine guide will give you instructions on when and how to do this.

After the tension is corrected, look again at the seam—is it flat and pucker free? If not, you may need to lengthen or shorten the stitch length, or try a small zigzag stitch. You may need to stitch holding the fabric taut. Experiment to find the technique that yields the highest quality seam.

As you decide the best stitch length and tension for your fabric, you must also do this for your serger. Use different colors for each thread. Use another fabric sample and stitch a seam on your serger. Check this for the proper stitch tension. Pull the seam apart after opening it. If the stitches pucker, the tension is too tight. If they look like a ladder, the tension is too loose. Consult your machine guide on how and which tension to adjust depending upon which portion of the stitches are incorrect. On a serger, you will have more success by loosening the tight thread instead of tightening the loose thread.

Once the tension meets your satisfaction, check the stitch length. Consult your machine guide, but usually, the lighter and more delicate the fabric, the shorter the stitch length that is required. Again, the seam should not pucker or pull. Consider changing the pressure of the foot if more or less drag is needed.
As with sewing machines, sergers come from the very basic to expensive, computerized, top-of-the-line models. To know which one is best for you, take time to consider what type of sewing you will be doing. Then compare features; here is a list of the types of stitches and seams that the different thread sergers can create.

2-thread flatlock or trellised:
—gives a decorative effect
—joins two pieces of fabric
—used to do a simulated blind hem
—used for lingerie elastic
—used for patchwork quilts

2-thread overedge
—will not lock threads at the seamline
—used to finish seam allowances and edges
—used for lighter weight rolled hem

3-thread overlock
—locks thread at seamline
—provides a lot of give
—suitable for woven fabrics
—can be used on knits
—used for seaming
—used for overedging
—used for pintucking
—used for a narrow rolled hem
—used for picot stitching
—used for satin stitching

4-thread overlock (fourth thread is part of overlock)
—used for seaming and edging
—used for knits and wovens

4-thread overlock (third and fourth thread separate from overlock)
—used for seaming when safety stitch is needed for extra durability
—used on woven, not stretchables
—makes a chainstitch

5-thread
—makes a chainstitch that stretches
—used for seaming and edging
—used on woven and stretchables

Most machines will also provide for a way to do narrow rolled hems, decorative stitching, and picot stitching or satin stitching.

**TIP:** To secure stitching at the beginning of a serged seam, sew a few stitches and stop. Then raise the presser foot, bring the thread chain from underneath the foot, and lower the foot. Stitch over the thread chain for about 1 inch and cut off the remainder with the knife.

See page 54 and 55 of Stitch ’N Wear book, for illustrations on securing the thread chain. Have youth make a sample of one or more of these techniques to put in their notebooks.
To end a seam with the backstitching stitch, stop when the machine takes the first stitch off the edge of the fabric, lift the presser foot, and gently pull the stitches off the thread finger. Turn fabric (end-over-end) and stitch back up the seam for about 1 inch, being careful not to cut the serged edge with a knife.

Other methods of securing are using fabric glue, knotting the threads, or threading ends into a large needle and running back through stitching.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. How often should you clean and oil your sewing machine and serger?
A. As instructed in the machine manual; cleaning after completing every project is good. Lubricate occasionally as needed for the environment and the machine.

Q. What tools are needed to keep your machines clean?
A. Lint brush, soft cloth, sewing machine oil, instruction manual.

**Process:**

Q. What was one of the most important things you learned? Why is it important to you?

**Generalize:**

Q. What would be the correct size needle to sew on denim with?
A. Size 14 to 16 (90-100), sharp point.

Q. The sewing machine and serger can be a major investment. Why would you want to keep it in good order?

**Apply:**

Q. What other major home appliances do you have? Discuss the consequences of not caring for them properly.

**GOING FURTHER:**

- Take a fieldtrip to local machine and serger dealer. Let members try out the various models of machines and sergers.
- Have a “Discover Your Machine Day,” when members bring their machines and scrap fabrics to experiment with the features their machines can do.
- Have the members begin a notebook and record the needle size, stitch length, and other tips they have found when using fabrics and their machines.
- Have all members do a small project, such as finish a scarf on the serger.
- Have members do some comparison shopping for sergers and sewing machines, listing features and price. Help them decide which one would suit their families’ needs.

At the end of the Introduction Section of the notebook, you will find Publication Resources, page 1, Selecting Overlock Sewing Machines. This information could also be used to analyze features of machines that members have at home.
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*Today’s Sewing Machine Needles*, New York State College of Human Ecology, Cornell University, Ithaca, New York 14835
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Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
*Stitch ‘N Wear*, Ruth Gulbrandson, Clothing Specialist, and Merry Green, McHenry County Home Economist, Cooperative Extension Service, North Dakota State University, Fargo North Dakota 58105

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What Members Will Learn . . .

ABOUT THE PROJECT:
• How to evaluate good quality garment or accessory cut and stitching
• Steps used to evaluate detail construction techniques to determine a quality garment or accessory
• Safety details on clothing that should be included when selecting apparel

ABOUT THEMSELVES:
• Confidence in using evaluation skills
• How to be a wise consumer

Materials Needed:
• Clothing: An Intelligent Buyer’s Guide, Learning Seed Video, available for check out from your area Extension office or Department of Communications Media Center, Umberger Hall, Kansas State University
• Television and VCR
• Garment samples
• Copies of Member Handout

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:
Learning to judge quality in clothes and accessories can help you get the most for your money. Being able to recognize quality is a great asset.

The quality you look for will depend on the use of a garment or accessory. If you occasionally decide to indulge in a fad item, do not spend a lot of money, because you will not use it for a long time. Coats, suits, and other basic items that you will wear often and for a longer period of time, should be the best quality you can afford.

High prices in clothes or accessories can sometimes mean high quality, but not always. Many garments or accessories are similar in appearance and quality but vary in price.

As you saw in the video, fiber is the first thing to consider. Fibers can vary from high to low quality. To know the difference, make it a point to look closely at fiber contents and their quality in all your garments. Examine the hand (feel, drape, texture) of fabrics so you can become familiar with the characteristics of fine fabric. As you are comparing garments, remember the fabric quality in a garment or accessory cannot be changed, so it needs to be the best possible for its intended use.

Leader Notes
Welcome members and have them sit around the television/video player. Ask members to think of their highest quality garment or accessory. Have them tell why it is of good quality. You begin.

Begin the video. Allow members to watch and make comments at the end of the program.
Luxury and specialized fabrics are not intended for heavy wear. These fabrics may be durable enough only for their intended special uses. Fabrics like metallic and jeweled pieces qualify here.

Here are some “in store” fabric tests you can try:

• **Wrinkle or crease resistance.** Crush a corner of the fabric, hold it for 60 seconds and release. Look for wrinkles and see how long it takes them to disappear, if they do at all.

• **Stretch recovery.** Stretch a small length of fabric beside a ruler and release. Compare to the original measurement.

• **Evenness of dyes.** Examine the fabric from both sides for evenness of color and design.

• **Flaws in weave or knit.** Hold the fabric up to the light and examine.

• **Colorfastness.** Rub fabric against your skin or a lightly colored fabric. Look for color rubbing off. This is undesirable especially in light colored garments with dark trim.

• **Temporary sizing or starch.** Rub fabric together briskly. Temporary sizing flakes off.

• **Pilling or balling up.** Rub fabric together briskly. Watch for small balls or pills that form on the right side of fabric.

• **Durability of bonding or laminating.** Examine cut edges and avoid those which separate easily.

• **Quilting.** Examine for durable and strong quilting threads and a durable backing fabric.

• **Odor.** Avoid fabrics with strong odors.

• **Finishes or processes.** Examine labels for quality finishes or processes such as durable press, colorfastness, shrinkage control, soil release and wrinkle or flame resistance.

Next, look at the garment cut. How was it cut from the fabric. Good quality garments pay close attention to this feature. Check that wherever possible, plaids, stripes, and checks should be matched at the seams. This makes the seam less visible and enhances the pattern itself. Check at the center front, center back and side seams, waist, top of armholes and pockets.

Pile fabrics, such as velveteen and corduroy, should be cut so that the nap runs in the same direction on all parts of the garment. This will ensure that all parts of the garment will have the same shade when seen in various lights. Sometimes, certain fabric prints or textures will look slightly different (usually in color) from garment section to garment section if they have not all been cut in the same direction.

Many slightly off-grain woven fabrics and single knits can be straightened before made into a garment. Permanent press fabrics, double knits and those printed off-grain cannot be. Off-grain garments will twist or not hang straight when worn. Check that the crosswise and lengthwise yarns or knitted ribs made into the fabric are straight up and down or at right angles to the floor unless intentionally cut at an angle for a special design or fit.
It is hard to make generalizations about fabric. Good fabric can be ruined by poor design or construction. Low quality fabric can be useful and appropriate depending on the purpose and expected use of the garment. In general, look for good quality fabric as a beginning point.

Next, look at the construction for a clue as to the attention given to the assembly of the garment.

- Seam allowances should be wide enough to prevent unraveling or pulling out when there is a strain on either side of the seam. The narrowest acceptable seam allowance is $\frac{1}{4}$ inch. Wide seam allowances will allow you to let out a garment that is a little too tight and still have enough fabric left for a safe seam.
- Seam edges should be finished if the fabric used in the garment ravel. Knit fabrics do not need this as they do not ravel.
- Seams should lay flat and not pucker. There should not be any fabric caught in the stitches along a seamline. Check for lumps in the seam line caused by darts, or crossing seams. Thread should be of a suitable weight, color and fiber for the fabric.
- Seam machine stitches should be short enough and firm enough to hold the pieces of the fabric together without puckering. Check the firmness of the stitching by gently pulling the fabric on each side of the seam. If the stitching is too loose, you will be able to see between the garment pieces.
- Extra stitching, patches, bar tacks, metal rivets, or tape should be securely applied at points of strain, such as underarm seams, openings, pleats, or slits, pockets, and knee and elbows in children’s play clothes.

If the fabric quality, garment cut and overall stitching is suitable, next look at the details of how well the garment or accessory is made. A variety of construction techniques can be used today to produce a quality garment. Examine individual garment parts such as buttons, buttonholes, zippers, collars, and hems, to see if each is in working condition, attractive and securely made. Look at each from the right and wrong sides.

Also consider the addition of safety factors such as reflective tape for active wear, reinforced toes on work boots, and other measures that are important to your safety. These may cost more but are well worth the price.

One of the most important safety features to look for in clothing is proper fit. An ill-fitting garment not only looks unflattering but actually can be a dangerous hazard. Clothing too loose can cause accidents, as can accessories that are big and awkward. So look for and think about the activity you will be wearing this item for. Check the safety of clothing of youngsters that may not think about it themselves.

As you begin to consider all the factors that influence your clothing purchase you will gain confidence in your ability to correctly choose the most for your money.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What was one thing from the video that made the greatest impression on you? Why?

Q. What is a quality standard for a pocket?
A. • Flat and smooth
• Decorative and attractive
• Positioned correctly on body
• Even topstitching, length of stitch and distance from edge
• Stitching suitable to fabric and garment design
• Facing on hem in proportion to shape and size of pocket
• Upper corners are reinforced
• Square corners are mitered

Process:
Q. Why is it important to be able to judge clothing quality?
A. As you learn to consider clothing quality before purchase you can decide to buy the garment that will serve your needs the best—equaling the best buy for you.

Q. What problems have occurred when you have evaluated garments before making a purchase?

Generalize:
Q. Look at a sample garment and point out a place where a quality standard is being met and a sample where one is not being met.
A. Answers will vary.

Q. Everyday, you have to consider choices and make evaluations when making decisions. What is a similar situation you can think of when you need to evaluate something?

Apply:
Q. Discuss what it would be like to be a clothing judge at a fair or contest. How would you feel? Would it be fun?

Q. What kind of judge would you want to be? Why?

GOING FURTHER:
• Assemble and display in a public place an exhibit of examples of clothing or accessory items in which quality can be improved upon.
• Volunteer to help others as a “Shopping Service” to obtain better quality clothing or accessory items. Persons such as disabled, shut-ins, elderly residents.
• Interview local store owner to determine how clothing or accessory costs are related to quality and selling price.
• Have members interview two people before the next meeting to ask them to tell you about a clothing article or accessory they are either satisfied with or dissatisfied with and why. Bring this to the next meeting to discuss.
Leader Notes

- Choose one or more garments (jeans, blouses, coats, etc.) and have members bring them from home to compare for various quality checks at the next meeting.
- Have members interview alteration personnel in your area. They should try to determine the type of closure (or other feature) that most often needs repair.
- Have members construct a doll garment out of various fabrics to see the differences the type of fabric makes to the outcome of a garment.
- Have members survey their closets to determine the most frequently found sleeve finish in their wardrobe.
- Help members construct sample models of various waist casings.

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*Quality Standards In Clothing Construction*, Dorothy A. Ettl, Extension Clothing Specialist, Washington State University, Pacific Northwest Extension Publication

*Clothing Leader Guide*, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

*Ready to Wear Quality Signs*, Betty Feather, Clothing and Textiles Specialist, Extension Division College of Home Economics, University of Missouri-Columbia, Columbia, Missouri 65211

*Men's Wear Garment Fit*, Quality and Care, Betty Feather, Clothing and Textiles Specialist, Extension Division College of Home Economics, University of Missouri-Columbia, Columbia, Missouri 65211


*Children's Clothing*, Jereldine Howe, Extension Specialist, Textiles, Kansas State University, Cooperative Extension Service

*Clothing: An Intelligent Buyer's Guide*, video purchased from Learning Seed

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EVALUATING QUALITY, FIT AND SAFETY IN GARMENTS
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Member Handout

Characteristics of Quality in Clothing

Belts:
- Flat, smooth, free from bulk
- Straight belt is uniform in width
- Contour belt has smooth, gradual curves
- Interfaced to maintain shape
- Even, uniform shape at end of belt
- Closure is appropriate, attractive, durable, secure, and functional
- Appropriate size and length for garment and individual
- If used, belt carriers should be secure and even

Buttons:
- Have a purpose, either functional or decorative
- Securely and neatly fastened
- Have a shank
- Placed in relation to buttonholes; when buttoned, fabric is completely flat and smooth
- Reinforced on the wrong side with interfacing or reinforcement button
- Appropriate spacing for size of button and garment type
- Appropriate type for fabric and garment

Buttonholes:
- Flat
- Secure
- Even length, width, equally spaced, uniform in appearance
- With grain or yarn direction of fabric
- Correct length—button will pass through and yet will hold garment closed
- Correct placement:
  - On right front of women’s garments
  - On left front of men’s garments
  - Overlay occurs where it was designed
  - Holds garment securely closed
  - Placed in direction of strain from the button
- Bound Buttonholes:
  - Rectangle has perfectly square corners
- Machine or hand worked buttonholes:
  - Stitched in thread that matches or decoratively contrasts with fabric
  - Stitching is regular and smooth in appearance, uniform in length
EVALUATING QUALITY, FIT AND SAFETY IN GARMENTS
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Member Handout

Characteristics of Quality in Clothing, continued

Casings:
- Flat, do not twist
- Stitching even and secure
- Even in width
- Width allows drawstring or elastic to slip easily and to stay in place during wear

Collars:
- Free from bulk, curved seams clipped or notched, seams trimmed or graded
- Only the top collar is visible
  - Seam line just under the edge of collar
  - Built-in roll prevents under-collar from showing
- Understitching or topstitching holds under-collar in place
  - Collar-stays inconspicuous if used
- Interfaced to maintain shape
- Enclosed seam allowance is invisible on outside
- Appropriate use of interfacing to prevent imprints from seam allowances
  - Collar smoothly pressed
- Left and right sides are same shape—compare curve of collar, angle of collar points and location in relation to center front or center back

Cuffs:
- Flat, smooth, free from bulk
  - Enclosed seams trimmed or graded
- Appropriate use of interfacing to prevent imprints from seam allowance
- Interfaced to maintain shape
- Even in width
- Built-in roll prevents cuff facing from showing
- Seam line on edge of cuff

Darts:
- Tapered and smooth
  - Come to a tapered point
  - Free of puckers or bubbles
- Securely fastened at end
- Appear as straight lines from outside of garment
- Evenly spaced, if in groups
- Matched on left and right side of body in shape and length
- Well pressed, stitching line smooth, without bubbles, puckers or folds
- Shaped to conform to the body
- Pressed smoothly
- Slashed and pressed open in bulky fabrics

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EVALUATING QUALITY, FIT AND SAFETY IN GARMENTS
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Member Handout

Characteristics of Quality in Clothing, continued

Facings:
- Flat, smooth, free from bulkiness, pulling or strain
- Enclosed seam graded, clipped, or notched
- Interfaced, if needed, to prevent stretching, to provide stability, to maintain shape
- Free edge is secure, stable, and free from raveling
- If finished—edge is flat, smooth and free from bulk
- Securely held in place, not visible from outside
- May be secured by turning on seam line, understitching, tacking only at seams and darts, inconspicuously attached to garment or smoothly pressed from outside

Fitting:
- Silhouette lines on garment follow silhouette lines on the body
  - Vertical seams fall perpendicular to the floor
  - Vertical side seams divide body in half visually
- Circumference line follows body circumference at neckline, waistline, armhole
- Darts point toward and stop short of the fullest part of the area they shape
- Hem is parallel to the floor
- Ease is adequate for comfort and smoothness
- Garment is neither too loose nor too tight
- Free of wrinkles that pull and draw—too small
- Free of wrinkles that lie in folds—too big
- Balance is equal from right to left; top to bottom; front to back
- Overall smoothness
- Enhances the wearer—good design lines for individual figure variations

Fusing:
- Smooth, unpuckered
- Invisible from right side
- Garment edges unstretched
- Does not change hand, or color of fabric

Gathers:
- Uniform, evenly distributed
- Full and attractive, not pressed flat
- Enough fullness to not appear skimpy

Hems:
- Width is appropriate for weight of fabric, style of garment and size of individual
- Width adequate to provide weight to hang well, uniform
- Free from bulk; fullness reduced or controlled by easing or shrinking—free from tucks or pleats
- Seams pressed open and graded
- Seams clipped at edge of pleats
- Flat and smooth
- Finished to prevent raveling if needed—if finished the finish does not add bulk or create ridges
Characteristics of Quality in Clothing, continued

- Seams are matched
- Inconspicuous from right side/outside
- If topstitched, stitching is uniform and corresponds with other topstitching on the garment
- Hemming stitches are evenly spaced, secure, free from drawing, and invisible on outside
- If fused hem, they must not alter hand or appearance of fabric, no ridges
- Hangs evenly, uniform distance from floor

Hooks, snaps, other fasteners:
- Neat, small even stitches used to attach
- Stitches do not show on right side of garment
- Reinforced on wrong side
- Location is aligned with all sets
- Functional
- Secure

Interfacing:
- Adds shape, body and support without bulk or changing the character of the fabric
- Enhances the hand of the fabric
- Color blends with color of fabric or is inconspicuous, especially at buttonholes
- Prevents seam allowance from showing through to outside
- Not visible
- Free from raveling
- Interfacing seams and darts are treated to eliminate bulk

Lapels:
- Lie flat against the body
- Left and right are same shape
- Free from bulk
- Interfaced to maintain shape
- Reinforced or taped on roll line in tailored garments
- Only facing is visible above end of roll line
- Seamline slightly under edge of lapel
- Inner edge of facing not visible

Lining:
- Conceals inner construction
- Color and weight coordinated with garment fabric
- Care requirements compatible with garment fabric
- Fits smoothly inside the garment
- Has a neat, finished appearance
- Lining and garment seamlines aligned
Characteristics of Quality in Clothing, continued

- Allowance for body movement
  - Vertical pleat in back lining of jacket or coat
- Ease length allowed in fold at bottom of sleeve and at garment hem of jacket
- Free-hanging lining linked to garment seams at hemline with thread tacks

**Plackets:**
- Flat and neat
- Free from bulk
- Secure and durable, no pulling at corners, no raw or raveling edges
- Functional
- Made in matching fabric and thread

**Pleats, tucks:**
- Uniform in width, unless design requires variation
- Flat and pressed in one direction, except released tucks and unpressed pleats
- Free from pressed-in ridges from hidden edges
- Free from marks from basting, pins
- Hang straight and even with adequate fullness

**Pockets:**
- Flat and smooth
- Decorative and attractive
- Positioned correctly on body
- Even topstitching, length of stitch and distance from edge
- Stitching suitable to fabric and garment design
- Facing on hem in proportion to shape and size of pocket
- Upper corners are reinforced
- Square corners are mitered

**In-Seam Pockets:**
- Not visible, unless meant to be decorative
- Lies flat; does not gap; lining invisible
- Seam or foldline reinforced to prevent stretching

**Welt Pockets:**
- Flat, smooth, even in width
- Free from bulk or buckling
- Corners secure, symmetrical
Characteristics of Quality in Clothing, continued

**Sleeves:**
- Smooth and pressed in the curve and rounded cap
- Ease, gathers, darts or tucks evenly distributed
- Free from bulk
- Armhole reinforced in area of strain
- Underarm seam allowance trimmed or reinforced as appropriate to design
- Free from raveling or finished to prevent raveling
- Free from drawing or pulling

**Understitching:**
- Holds facing in place
- Not visible on outside of garment
- Thread blends with fabric
- Done from right side of facing through facing and all seam allowances after seam allowances were trimmed, graded, clipped or notched

**Waistbands:**
- Smooth, free from bulk
- Uniform in width
- Corners are square, tab comes to a point
- Overlap flush with placket; underlap extends beyond the placket and under the band for side or back closure
- Skirt or pants eased slightly onto waistband

**Waistline seams:**
- Inconspicuous, smooth, and flat
- All seams and details finished and pressed before waistline was stitched
- Secured with a waistline stay
  - Adds reinforcement
  - Prevents stretching
  - Stay can be woven seam binding, twill tape, or grosgrain ribbon

**Zippers:**
- Placket, when closed, is flat and smooth
- No puckers or does not buckle
- Zipper tape does not show unless part of the design
- Stitching is straight and even
- Placket is open to end of zipper teeth unless zipper has been shortened, then chain or coil is securely held with several stitches
- Correct length to be useful
- Slides easily and does not catch
- Compatible weight with fabric
- Horizontal seams meet across the placket opening
Your Wardrobe Dollars

Clothing & Textiles, Level III, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to develop a clothing budget
• How to determine cost per wearing

ABOUT THEMSELVES:
• How to set priorities
• By careful planning, family members can stretch their clothing dollars further and gain more use from them

Materials Needed:
• Clothing Inventory and Planning Worksheet (this can be given out at previous meeting, completed and brought ready to discuss)
• Buymanship Worksheet
• A field trip to a local mall could be done with this lesson, if a short meeting was held first to make a shopping list for items to compare, or use a catalog (be sure to arrange with stores ahead of time)

ACTIVITY TIME NEEDED: 50 MINUTES

ACTIVITY:

We have talked before about planning your wardrobe. You know how to look through your closet for what you have, make an inventory, survey your needs, plan for needed items, decide on color style to purchase, and evaluate the most becoming styles for your body silhouette. We have discussed the types of retail stores and type of sales so you will be aware of where and when items you might want would be available to you at the best price. Today, we will bring all this together in this lesson and talk about your wardrobe dollars.

If you are buying items from a wardrobe plan, the actual purchase is usually one of the last steps. Much preparation has been done by you before this point. The more preparation you have done, the better purchase you will make. The one factor we have not talked about in depth is how to make yourself a clothing budget.

One important thing for each of you to keep in mind is that a clothing budget will vary greatly between one family and another. You must sit down with your parents to discuss this. Most families do not have unlimited income. Some families value personal appearance greatly and are willing to budget a large percentage of their income to it. Other families are just the opposite. Regardless of your family type, you will benefit by

Leader Notes

If members do not know each other, allow them to introduce themselves to each other. If the meeting is held at a shopping center, you may want to meet in a food establishment to help them make their plans before doing the shopping. Have each member tell about their most recent clothing acquisition. You begin. If parents are agreeable, you may have members do the wardrobe plan and budget at home so they can bring a budgeted amount of money and a garment needed to purchase to the lesson. Members can then help each other look for and evaluate the items. Members can purchase if this has been approved by parents, or they can share their findings with parents for a purchase decision at a later date.
taking time to plan clothing purchases. If you belong to a family that budgets its clothing purchases, you are probably well on your way to knowing how this assists your decision making. If your family does not budget, this may be a lesson you can share with your parents to help them get more from the family’s clothing dollar.

Ideally, a master clothing plan for the family would be the framework that each person should be expected to work within. Individual clothing needs should fit into a total plan for family harmony. Sometimes, teenagers find this difficult to understand, as their perceived immediate needs seem to take priority. If your family has a clothing budget, ask your parents what it is. Ask what amount is to be spent on your clothing; this can be by year or by season. Discuss with your parents how much control they will allow you to have over your own clothing purchases. Sometimes, it is tempting to want to make all these decisions for yourself. As you plan more and can justify to your parents your needs and practice responsible use of money, most parents will allow you greater freedom to make your own clothing decisions.

For those of you who don’t have a budget and an item that you needed to buy, we will use a hypothetical example. Since we know from records kept by the Farm Management Association that a typical Kansas farm family spends an average of $2,132 on clothing per year, we will use this to plan a budget. This typical family has four members, with the oldest child in high school. Let us begin by dividing that amount by 4, to find out how many dollars per person that equals ($533). Realize that some members may require more and some less. With sports, rapid growth and more special occasions, usually teens spend more than the average amount.

Now, let’s look at the different seasons you need garments and accessories. Divide that amount by four to allow you to spend equal amounts before and during each season. This allows you to take advantage of the sales. By allowing funds to prepare for the season, and some to buy during the season, you can take advantage of sale items. This gives you $133 per season. Some seasons, such as when you go back to school in the fall, you may want to allow more dollars to get prepared and less for summer clothing, or to buy later during the season.

Now that you know how much you have to spend, it is a matter of deciding what items you want and the priority of your need.

Sometimes, priorities can be hard to set. One tool that can help you determine this is to figure the cost per wear. The more you wear an item, the lower the cost per wearing. As you set your priorities, think about the approximate cost per wear. For example, maybe you plan to wear your jeans twice a week, but the skirt/dress slacks would be worn once a week. The jeans will be worn for eight months of the year and the skirt/dress slacks for all twelve. They both cost $40. Which costs the least per wearing?
Jeans: 8 months × 4 weeks × 2 wearings per week = 64 wearings
$40 divided by 64 wearings = $0.63 per wearing (Can the jeans be worn more than one year?)

Skirt/dress slacks: 12 months × 4 weeks × 1 wearing per week = 48 wearings
$40 divided by 48 = $0.83 per wearing (Will the skirt/dress slacks last two years? If so, the cost per wearing goes down to $0.42. This illustrates why classic styles are usually the best buy in the long run.)

If both will be worn only one year, which is the best buy? The jeans. Which one would have the highest priority for you to purchase? The pair of jeans. (Do you have another item to use for the skirt/dress slacks occasions? If not, the jeans may have to wait while you fill the void in the wardrobe.)

Sometimes, the quality of clothing is an important consideration. How do you decide when to buy a $20 blazer or a $59 blazer? Is it more economical to buy a $50 skirt and wear it two, three or more years, or a $15 skirt that will only survive for one year? Quality is another factor to consider in figuring cost per wear.

Next, consider the cost of upkeep. Will the item have to be dry-cleaned or can it be machine washed and dried? Any special care costs in money or time. Do you have that extra money or time to spend? For example, to dry-clean, add $3 for each cleaning. For home machine laundry, plan on $1 per load. If an item is laundered in a normal load, the cost may be as low as $0.05 per item per washing, or as much as $1 if the item is laundered by itself. Have members add these costs to your planned purchased items.

As you shopped, it probably was harder than you thought to pick an item. This may be because of the wide choices available. Some items seem to be similar, but the prices can vary greatly. This may have to do with the marketing and retailing prices, or it may have to do with the garment quality. See lesson for details about garment quality checks.

One thing you may find as you budget is that it isn’t big enough! If you know how much you require and how much you have to spend, you may decide you need to increase the amount of clothing you get for the dollar or the amount of dollars you have to spend. Many teens begin to work part-time to increase the amount of money they have to spend on clothing. This may be a reason to begin working for others for a fee. Many teens will babysit, do lawn chores, run errands, or a variety of other things to increase the amount of money they have.

Another possibility is to look for reduced priced clothing at garage sales, off-price stores, auctions, swapping, or sewing your own. This can give you more clothing for the dollar, and can help you stretch your purchasing power.
As you gain skills in clothing budgeting, you will find you become more confident in your ability to plan for yourself. As you begin to anticipate your future needs and plan to meet them, you will grow in confidence and will be well on your way to independence. Just as planning pays off in clothing purchasing, it pays off in other areas of your life too. The more organized and disciplined you become in this area, the easier it will be to use these principles in other areas. A successful plan implemented helps you to avoid impulsive, poor decisions. Success gives youth increased self-confidence in their abilities for good planning and decision-making leading to accepting responsibility in one’s own actions and self-control.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. How did you feel while making your clothing inventory?

Q. What was the most difficult? the easiest to do?

**Process:**
Q. What similar experiences have you had in making other inventories?

Q. Why is knowing how to set priorities important?

**Generalize:**
Q. Calculate the cost per wearing of accessories the members are wearing.

Q. Have members estimate the number of wearings they expect to receive from the items they have on today.

**Apply:**
Q. How might the loss of a parent’s job affect your family’s income and clothing budget?
A. It would reduce it. Children may have to earn more of their own clothing money. They may have to do without many items, to shop at more economical retailers, or to sew at home.

Q. How might you suggest to change your county’s buymanship classes to reinforce the things you learned today?

**GOING FURTHER:**
- Visit or have local shoe repair person talk about the cost of having shoes resoled, leather items restitched, belts repaired, etc. Figure how these items add to total cost, or if they save money.
- Have members make and display a cost-per-wearing exhibit in a visible location.
• Help younger members calculate cost-per-wearing information.
• Have members help their families make a clothing budget for the coming season or year. If not available, have them keep track of their family’s clothing expenditure or review past records so a budget can be made.
• Have members list items that are not garments that should be included in the clothing budget. Accessories, undergarments, outerwear, shoes, boots, cleaning products (leather cleaners, polishes, etc.).
• Have members list an item that was an impulsive buy. Has it proven to be a good or poor decision. Have them discuss why.
• Visit a dry cleaners to check current prices, available coupons, and compare the differences between men’s and women’s clothing cleaning costs.

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Managing Your Clothing Cents, Betty Feather, State Clothing and Textile Specialist, Extension Division, College of Home Economics, University of Missouri, Columbia, Missouri, 65211
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YOUR WARDROBE DOLLARS  
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING 
Activity Sheet

Clothing Inventory and Planning Worksheet

<table>
<thead>
<tr>
<th>Clothing Categories</th>
<th>Clothes in Closets</th>
<th>Clothes to Buy or Make</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. # not worn last</td>
<td>7. colors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. # to fix</td>
<td>8. source</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. # to sell or give</td>
<td>9. price per item</td>
<td></td>
</tr>
<tr>
<td></td>
<td>away</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. # ready to wear</td>
<td>10. total $ per category</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. main colors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. # needed this year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. # plan to get next year</td>
<td></td>
</tr>
</tbody>
</table>

Coats, all weather  
heavy  
light  
rain  
Snow suits, coveralls

Outdoor jackets,  
parka, leather

Suits (dress up)  
2 pc.  
3 pc. coordinate  
Jacket, blazer, coat  
sweaters, vests

Slacks, jean corduroy  
Shirts L.S.*  
S.S.*  
T-shirts, L.S.  
S.S.

Sweaters—cardigan  
L.S.  
S.S.  
pullover L.S.  
S.S.

Uniforms  
Work clothes

Sweatshirts  
Warm-up suits  
Shorts  
Swimsuits  
Spec. sport clothes

Long underwear  
Undershirts  
Briefs or panties  
Bathrobe  
Pajamas or gowns

Caps, hats  
Scarves  
Gloves, mittens

Shoes, gym, work,  
dress  
Boots, waterproof fashion

Sport socks  
Knee socks  
Hosiery
## Clothing Inventory and Planning Worksheet, continued

<table>
<thead>
<tr>
<th>Clothing Categories</th>
<th>Clothes in Closets</th>
<th>Clothes to Buy or Make</th>
<th>Total Clothing Expenditure ($ sum of all categories):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. # not worn last year</td>
<td>5. main colors</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>2. # to fix</td>
<td>6. # needed this year</td>
<td>10. total $ per category</td>
</tr>
<tr>
<td></td>
<td>3. # to sell or give away</td>
<td>9. price per item</td>
<td>11. # plan to get next year</td>
</tr>
<tr>
<td>Additional female clothing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dresses, short</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>long</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skirts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jumpers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underslips</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bras</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foundations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handbags</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pantyhose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* L.S. = Long sleeve
* S.S. = Short sleeve

Total Clothing Expenditure ($ sum of all categories): $ 

Dollar amount you plan to spend: $
YOUR WARDROBE DOLLARS
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Activity Sheet

Buymanship Worksheet

Assume you have a budget of $150 to purchase your back-to-school wardrobe. After sorting through your closet, you have determined the following wardrobe needs:

<table>
<thead>
<tr>
<th>Item</th>
<th>Chain Store</th>
<th>Locally Owned Store</th>
<th>Catalog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressy skirt/slacks</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Casual blouse/shirt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Pair of jeans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Knit top</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School shoes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$</strong></td>
<td><strong>$</strong></td>
<td><strong>$</strong></td>
</tr>
</tbody>
</table>

Arrange with local store personnel to bring members on a project tour and share this assignment. Encourage parents to attend. After each member has made their wardrobe choices, have each one pull together the choices made and what the total purchase price would be. Share your findings with the rest of the project group.

This is what I learned about:
1. Planning __________________________________________________________.
2. Reading cost and care labels ________________________________________.
3. Fiber content ____________________________________________________.
4. Wardrobe versatility ______________________________________________.
5. Budgeting ________________________________________________________.
6. Make wise consumer choices _______________________________________.
Update and Reuse
Clothing & Textiles, Level III, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
- How to plan and conduct a used clothing sale (could be a club fundraiser)
- Ways to reuse, recycle, or swap clothing for more wear
- Ideas of updating with accessories or minor changes to extend wear of garments

ABOUT THEMSELVES:
- Choosing to update and reuse clothing saves money but not time
- Decisions made about clothing uses impacts the environment

Materials Needed:
- Copies of Activity Sheets and Member Handouts

ACTIVITY TIME NEEDED: 45 MINUTES (IF ITEMS WILL BE BROUGHT TO BE REMADE, TIME COULD BE UP TO TWO HOURS OR TWO MEETINGS)

ACTIVITY:
Have you decided to do something with those clothes you’ve been pushing toward the back of the closet? People of all ages and incomes are finding that recycling clothing can help them control their clothing costs. Recycling takes many forms—from garage sales and hand-me-downs to restyling an outdated suit coat. The key is deciding which type of recycling approach is best for you, your talents, time, money, or tools. The most efficient type of recycling uses the least amount of time and money possible.

Your decisions will vary as you consider the possibilities of each garment.

Any garment that hasn’t been worn in the last year needs to be looked at. Now is the moment of truth. If you can’t say yes to all of the following questions about a garment, it’s best to get rid of it.
- Do you like the garment?
- Do you like the color and fabric?
- Is the fabric in good condition?
- Will the garment be worn if it’s remodeled or repaired?

If you answered no and if you have decided you don’t want the garment, someone else may. They may be able to use the item as it is or recycle it so it is wearable. Swapping clothing with friends and relatives works especially well for special occasion garments like formal wear, that aren’t

Leader Notes
Welcome all members. Have them sit in a comfortable place. Allow time for members to introduce themselves if they do not know each other. Have them tell the last article they recycled and how they did it. You begin.
worn often. You also can donate clothes to charity. You can deduct the value (use) of the clothing on your family’s income tax if you receive a receipt from the charitable organization. You can regain a little more of your clothing investment by selling unwanted garments at a consignment shop or having a used clothing sale. Likewise, you can extend your clothing dollars by shopping in consignment shops and at garage sales.

Let’s talk about how to have a used clothing sale. This is becoming a popular way to get rid of unused items and allow you to regain some of your investment. Keep in mind that you will only recoup a fraction (approximately 10 to 30 percent for formal wear) of the cost of the garment, whether it was worn a great deal or never. Used clothes sell for very low prices, and you need to consider this and the time it takes to prepare for the sale. You may want to join forces with someone else. In that case, careful planning is even more necessary. First, ask yourself these questions:

1. Why am I having a sale? There’s no faster way to get acquainted in a new neighborhood than by having a used clothing sale. Everyone will come to see what you are discarding. If you really want to earn some money, you may want to mark prices a little higher at first. If you just want someone to carry away your used or outgrown things, then start with very low prices, and begin markdowns early.

2. Who will be in on the sale? When cooperating with others, be sure to have a clear agreement beforehand about how the work and profits will be divided. This will avoid misunderstanding and trouble later.

3. Where will the sale be? You need space to show clothes, with enough room for customers to walk around without being too crowded—a garage, porch, or in a basement (if it has an outside entrance). Remember, shoplifting is a major problem for retail businesses, so it’s probably best not to invite the public into your home.

4. When will I have the sale? Spring and fall are the most common times for used clothing sales. Friday and Saturday are often preferred to catch both those who work at home and those who work away from the home. In some places, sales are planned for the morning after the free weekly advertising supplement is distributed.

5. What items can I sell? Just about anything goes. Remember, clothing sells better when it is fresh, clean, unstained and pressed—rather than wrinkled and dirty. Be prepared to suggest ways adult clothes can be changed for other uses. Children’s and maternity clothing generally sell better than other adult clothes. Even worn cloth tennis shoes that are washable tend to sell.

6. How can I tell people about my sale? If your community has a free weekly advertiser, that may be the best place to advertise. Local newspapers reach fewer people because of their subscription charges. Also, they may charge more per line. You can tack notices on public bulletin boards in grocery stores or laundromats. Sometimes local radio stations will make free announcements.

If members desire one, distribute the handout on suggested prices of clothing. Members may want to plan for a used clothing sale as a money raising project. If so, allow them time to plan.
7. Should I put up yard signs? Some towns and cities have regulations about the use of signs. It is usually okay to put up a sign in your own yard, but be sure to check with local officials before you put a sign anywhere else.

8. What should my ad say? Try to make your ad seem special, in a clever way if you can. Recycling may bring a better response than rummage. Be sure to tell the date, time, and place, as well as the number of persons contributing merchandise. Your customers will probably assume more sellers means more clothes to choose from. List any currently popular items that will be for sale. If you have many items one size, mention it. The more lines you use in advertising, the more it will cost you, so hit the highlights and say “much more.”

9. Who will mark the prices? Marking prices can be a group activity, or individuals can mark their own items. Do this before the sales begins to avoid confusion and uncertainty during the sale. Allow plenty of time for this task. Decide in advance if you will mark down prices during the sale. Put up a sign that tells customers when you plan to do this.

10. Do all items need price tags? Price tags help customers know if they can afford to buy an item. Tags save time at the sale because customers do not have to wait to be told a price. Also, clear marking is helpful for record keeping.

11. How can I mark prices on clothes? Customers find it easier to shop at a sale if you arrange your merchandise according to sizes. You may be able to have a separate table for infant, toddler, preschool, and school-age children’s clothes. You may want to display some clothing on hangers. If you put up a clothesline or rod, be sure it is stable enough not to fall on anyone. Have a tape measure handy to help customers measure sizes if they are in doubt. Be sure all two- and three-piece outfits are safety-pinned together so that pieces don’t get lost. If suits are hung up, pin both parts to the hanger so they don’t fall off and get separated. You many want to rope off a corner and hang up a sheet to make a dressing room so people can try things on. Avoid taking strangers into your house.

12. When and how do I set up for the sale? Plan enough time to arrange your merchandise neatly on tables or racks before customers come. The more things you have to sell, the longer this will take. Picnic tables or old doors across sawhorses make good display spaces. Card tables work well too, and you’ll need one for a cashier’s desk. Be sure that none of your tables are easily tipped over. You don’t want a liability suit because a table fell on someone’s foot. Check with your homeowner’s insurance agent to be sure you have liability coverage for a garage or yard sale. Have only one exit, if possible, and put the cashier’s table nearby to be sure people pay for things as they leave.

13. Who will help with the selling? It is best, if possible, to have at least two persons helping with the sale. That way one can assist with merchandise while the other acts as cashier. Plan a work schedule for each day. Leave enough time for clean up.
14. What else should I decide before the sale starts?
   Decide your sale policies and post these the day of the sale. This will
   avoid any confusion on the part of the customers.
   Will you make refunds or exchanges?
   Do you want all sales final?
   Will you accept personal checks?
   Will you hold items back? If so, for how long?
   Will you break matched sets and sell pieces individually?
   Must all items be paid for the day of the sale?
   Must all items be taken away the day of the sale?
   Will you sell to the persons arriving before your advertised starting
   time?

15. What about the money? It’s a good idea to start with $15 to $20
   worth of change. Have at least $5 in quarters, dimes, and nickels, and
   at least $5 to $10 in $1 bills. As your cash drawer fills, it’s best to
   take some of the larger bills to a safe place inside the house. Also,
   you should balance the books at the end of the sale. To do this, first
   count the amount of change used to start the sale. Return it to the
   donor(s). Next, count the money that remains in the box. Then, tally
   up the amount of sales each person was supposed to have according
   to the tally sheets. Add these sums together. If the total equals the
   amount left in the box, a miracle has occurred! Chances are there will
   be some small discrepancy. It seems fair to share losses or gains more
   or less equitably among participants—along with the cost of
   advertising. So, add these two items together, and divide by the
   number of persons who shared in the sale. Subtract the answer from
   the tally sheet for each person, and you should come out with the
   right share for everyone. The receipts from a garage sale are not
   taxable (unless you sold an item for more than you paid for it), as
   long as your sales are infrequent.

16. What about leftovers? Do you really want to pack up and store things
   you brought out to get rid of? If not, give to a local charity or church.
   If you get a receipt, it can be deducted from the family’s taxes.

As you can see, planning a sale is a great deal of work, so maybe this is
not for you. You may decide you can save some money, such as by
shopping for yourself at such a sale. This makes good economic sense and
could be an adventure in finding unique, one-of-a-kind items. You will
learn more about your community as you navigate into less familiar
neighborhoods. This can be a fun activity for families who share extra
time and common interests, but have limited resources.

Here are some helpful hints if you plan to be the buyer at a used clothing
sale.

Places to shop include:
Garage sales—Selection of clothes at a garage sale may be limited if only
one person is listed in the ad. Look for sales where several families or
individuals have collected items to sell so you’ll have more to choose
from. You may wish to shop in affluent neighborhoods.
Church rummage sales—Many churches have regular sales every spring or fall. Many times these sales offer a wide selection of good quality used clothes at very low prices. Some churches even offer free clothing exchanges that are open to the public. Ask your neighbors about the ones in your community.

Consignment shops—These stores offer clean clothes that are usually still fashionable, but prices may be more than other second-hand sources. The sale price is shared between the shop’s management and the owner of the clothes. Some shops sell new clothes from stores or manufacturers who want to get rid of excess stock. Often, consignment shops hold merchandise for a limited time, then reduce prices drastically. So when you check in often, you can save extra money.

Thrift shops—Many organizations sponsor stores that sell used clothes at very low prices. You may have to sort through to find the fashion and quality you like, but for many items, this may not be important.

Private sale—These may be found in your local newspaper for sale ads. This is usually for special items like prom or wedding dresses, or items that are many of the same thing or size. If the size is right, you may have a bargain on your hands.

When you shop, carry a tape measure and a list of measurements of clothes that fit you well. Clothes of the same size can measure differently in the chest, waist, and hips depending on how tightly or loosely they are meant to fit. Even so, the measurements you have can be a useful guide.

Remember, clothing purchased for a small price is still a waste if it is not worn. As you shop, ask the same questions you would if you were in a traditional retail store. Will it fit? Will it stretch out of shape? Is it a good color for me? Will it match the other colors in my wardrobe? Will it be comfortable to wear? Is it in good condition? Do all closures work? Can it be washed at home? Will care be expensive or more than I want to do? Is it still fashionable? Do I need this item or something else more?

If you decide to keep and remake or recondition an item, first you need to calculate the real cost to you before you begin. By estimating the cost to remodel, you can determine if the savings will be worthwhile. Be sure to take personal satisfaction into account, too.

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What’s the best times to hold garage sales?
A. Spring and fall.

Q. What would be the hardest thing to do in planning and conducting a garage sale of used clothing? What would be the easiest?

Process:
Q. Why should someone choose to recycle clothing items?
A. Because it reduces the waste in landfills, saves resources, and can save personal resources.
Leader Notes

Q. What expenses have you had in recycling or reusing clothing?

Q. Why should you not allow your home to be used to try things on at your garage sale?
A. Because you may be putting your possessions in jeopardy of theft.

Q. What are some other items you might consider remaking or remodeling?
A. Answers will vary. Don’t forget to update using new accessories, etc.

Generalize:
Q. What did you learn about yourself through this activity?

Q. Planning for a garage sale takes a lot of planning and work. What other situations can you think of that require a lot of planning to be successful?
A. Club tour, achievement night, county fair, etc.

Apply:
Q. Be creative! Design a plan that would recycle at least half of your community’s clothing that would otherwise end up in the landfill.

GOING FURTHER:
• Bring out some of your items that are not worn and ask members for their suggestions as to how to remodel them.
• Visit a second-hand store to shop for and get ideas on articles that could be remade.
• Host a club swap shop for members to swap and update wardrobes.
• Have members host a “How to Hold a Garage Sale” meeting for the community.
• Have members host a coat, hat, and glove exchange in October for members of your community.
• Have members volunteer to assist in uniform or costume repair for a school athletic team, drama production or music group.
REFERENCES:
How to Recycle Clothing by Restyling and Making Over, and Decisions About Recycling Clothing, Ardis Koester, Textiles and Clothing Specialist, Oregon State University Extension Service, Oregon State University, Corvallis, Oregon
Castoffs to Showoffs, Nadine Hackler, Florida Cooperative Extension Service, University of Florida, Gainesville, Florida 32611
Recycling Your Clothes, Shopping for Used Clothing, and Having a Used Clothing Sale, Jan Stone, Rae Reilly, Barb Abbott, Extension Specialists, Cooperative Extension Service, Iowa State University, Ames, Iowa 50011
Serger Update, July 1994
A New Look for Your Denim, Nadine Hackler, Florida Cooperative Extension Service, University of Florida, Gainesville, Florida 32611

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
How can I mark prices on clothes?
A masking tape marking system works well for most people. Put the price and initials of the seller on a small piece of masking tape and stick it on the garment. When it is sold, remove the tape and put it on a tally sheet. At the end of the sale, these can be added up and should equal the total cash receipts.

What price should I mark clothes?
Used clothing usually sells for very low prices, compared to new clothes. Go to a few sales yourself to get some ideas about prices in your community. The price list in this publication gives you some idea of typical prices that used clothing sells for. You may want to ask more or less depending on the quality and condition of the clothes you have to sell. Ask yourself these questions when pricing:

- How much is the item in a mail order catalog or at a discount house, if you buy it new?
- Is the item free of stains, tears, or rips?
- Are all zippers, snaps, and buttons present and working well?
- Is it still bright or has it faded in color?
- Is it in its original shape, or has it become distorted through wear and laundry? Cotton knits often get shorter, wider, or skewed.
- Are the labels still on the garment naming the brand, fiber, content, care information and size?

Suggested Price List (avg):

<table>
<thead>
<tr>
<th>Items</th>
<th>Adult’s</th>
<th>Child’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aprons, bibs</td>
<td>$.50</td>
<td>$.25</td>
</tr>
<tr>
<td>Bathrobe</td>
<td>1.00</td>
<td>.65</td>
</tr>
<tr>
<td>Belt, billfold</td>
<td>.35</td>
<td>.35</td>
</tr>
<tr>
<td>Blazer</td>
<td>4.00</td>
<td>1.50</td>
</tr>
<tr>
<td>Blouses, shirts</td>
<td>1.00</td>
<td>.50</td>
</tr>
<tr>
<td>Boots</td>
<td>2.00</td>
<td>1.50</td>
</tr>
<tr>
<td>Caps, hats</td>
<td>.50</td>
<td>.35</td>
</tr>
<tr>
<td>Coats, parkas, snowsuits, coveralls, snowmobile suits</td>
<td>5.00</td>
<td>3.50</td>
</tr>
<tr>
<td>Costume jewelry</td>
<td>.50</td>
<td>.25</td>
</tr>
<tr>
<td>Diapers (dozen)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Daytime dresses, jumpers</td>
<td>2.00</td>
<td>1.75</td>
</tr>
<tr>
<td>Long dresses</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Gloves, mittens</td>
<td>.50</td>
<td>.25</td>
</tr>
<tr>
<td>Jackets</td>
<td>2.00</td>
<td>.60</td>
</tr>
<tr>
<td>Jeans, slacks</td>
<td>1.00</td>
<td>.50</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Items</th>
<th>Adult’s</th>
<th>Child’s</th>
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<tbody>
<tr>
<td>Long underwear</td>
<td>.50</td>
<td>.35</td>
</tr>
<tr>
<td>Maternity clothes</td>
<td>1.50–3.00</td>
<td></td>
</tr>
<tr>
<td>Necktie, scarves</td>
<td>.35</td>
<td>.35</td>
</tr>
<tr>
<td>Pajamas</td>
<td>.75</td>
<td>.75</td>
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<tr>
<td>Plastic pants</td>
<td>.15</td>
<td></td>
</tr>
<tr>
<td>Raincoat</td>
<td>2.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Scarf &amp; gloves</td>
<td>.75</td>
<td>.50</td>
</tr>
<tr>
<td>Shoes</td>
<td>1.00</td>
<td>.75</td>
</tr>
<tr>
<td>Skirts</td>
<td>.50</td>
<td>.35</td>
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<tr>
<td>Slips</td>
<td>.50</td>
<td>.25</td>
</tr>
<tr>
<td>Socks</td>
<td>.35</td>
<td>.20</td>
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<tr>
<td>Suits</td>
<td>4.00</td>
<td>2.00</td>
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<tr>
<td>Sweaters</td>
<td>1.50</td>
<td>.75</td>
</tr>
<tr>
<td>Swimsuits, shorts</td>
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<td>.35</td>
</tr>
<tr>
<td>T-shirts</td>
<td>.50</td>
<td>.25</td>
</tr>
<tr>
<td>Underwear, panties, briefs</td>
<td>.15</td>
<td>.10</td>
</tr>
<tr>
<td>Warm-up suits</td>
<td>3.00</td>
<td>1.50</td>
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</table>
Suggested List Price For Garage Sales, continued

Why not just put several things in a box labeled “$.10 each?”
This is a quick way to mark many small items such as socks and underpants. Remember, if you are selling with someone else and do this, you’ll need to make a record of these sales at the cash register so your accounts will come out right.

How will I display the clothes?
Customers find it easier to shop at a sale if you arrange your merchandise according to size. You may be able to have a separate table for infant, toddler, preschool, and school-age children’s clothes. You may be able to display some clothing on hangers. If you put up a clothesline or rod, be sure it is stable enough not to fall on anyone.

Remember some sweaters, T-shirts, and jeans can be worn by either boys or girls. You may have better luck selling them if they are not labeled by sex. Have a tape measure handy to help customers measure sizes if they are in doubt.

Be sure all two- or three-piece outfits are safety-pinned together so that pieces don’t get lost. If suits are hung up, pin both parts and the hanger so they don’t fall off and get separated.

You may want to rope off a corner and hang up a sheet to make a dressing room so people can try things on. Avoid taking strangers into your house.
Measurement for Clothing

These are helpful measurements to have for each person you are shopping for at a garage sale.

**Tops**

<table>
<thead>
<tr>
<th></th>
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<th>Names and clothes measurements</th>
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<td>a</td>
<td>b</td>
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<td>b. chest</td>
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<td>c. sleeve length</td>
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**Slacks and skirts**

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<td>a. waist</td>
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<td>c. length</td>
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**Jumpers and dresses**

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<tr>
<td>c. waist</td>
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<tr>
<td>d. hips</td>
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<tr>
<td>e. back neck to waist</td>
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<td>f. length</td>
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**Winter coats and jackets**

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158-Clothing & Textiles, Level III
UPDATE AND REUSE
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Activity Sheet

Value of Remodeling Clothing

How to figure the value of remodeling clothing
Use this dollar value exercise before starting a remodeling project to estimate if the savings will be worthwhile. Also remember that economics may not be the only reason for remodeling something. Take personal satisfaction into account, too.

Garment: ________________________________

(1) Present value of old garment (what you could get for it at a clothing sale or consignment shop) $_______

(2) Cost of materials ________

(3) *Labor value (optional):
_____ hours at $_____ per hour ________

(A) Total investment to remake this garment (add 1+2+3) ________

(4) Approximate cost to buy or make similar garment ________

(5) *Labor value for shopping or sewing time (optional):
_____ hours at $_____ per hour = ________

(B) Total investment to replace this garment (add 4+5) ________

Subtract A from B to get what you will save: (A) ________ -(B) ________

Savings $_______

*Time is important, too. The optional numbers 3 and 5 let you include sewing and shopping time in your estimate.
Remodeling Guide

How do I go about remodeling an outfit?
There are some general principles that will help make your remodeling project a success.

—Try to keep the basic construction of a garment as it is, if possible, to save you time and effort. Major details like bodice shape or neckline treatment should fit well and be flattering because they may be too difficult or time consuming to be worth changing.

—When adding fabric to the garment, choose something that is compatible in weight, texture, and care requirements. If you are adding contrasting colors, see how they look on the garment up close and far away.

—When you add topstitching, trims, fabric, etc., to one area of the garment, you may also want to add it somewhere else for pleasing repetition.

You want a unified blend of color, line, shape, and texture. The changes you make should look as though they were always part of the garment.

Look through the rest of this lesson for ideas for your specific remodeling projects.

What can I do with things that are too short?
A garment can be lengthened easily by letting down the hem and facing it. However, the hemline crease often shows. Try one of these ideas:

—Machine topstitch on the crease line and again 1/8 inch away. Repeat the topstitching elsewhere on the garment to tie it all together.

—Add trim to cover the crease line. You may use one or more rows, all one kind of trim, or a combination of colors and types. Make sure the trims are compatible with the weight of the garment fabric. For a pleasing proportion, the bands closest to the bottom edge should be the widest.

—Add a ruffle, band, or some other kind of trim at the hem.
Recycling Denim

Objectives:
Recognize economic value of recycling garments
Become familiar with different ways to recycle jeans
Use creativity and skill in recycling jeans
Use different trims and embellishments

Materials Needed:
Old pair of jeans
Trims such as lace, beads, jewels, braid, fabric paint

Recycling can be simple updating or a major change:
• adding an accessory
• sewing on a fastener
• shortening
• lengthening
• adding width
• altering to fit
• reducing width
• changing the neckline
• making a “new” garment
• wearing in a different way
• covering up a stain
• adding new buttons
• removing pockets
• adding trim
• painting

Before actually getting into a recycling project carefully think about the advantages:
• controls clothing costs
• stretches family budget
• makes an inactive garment “active”
• keeps wardrobe up-to-date
• provides creative satisfaction
• involves time, skill, creativity, but few dollars
• frees up dollars for other needs
• lengthens life span of clothing investment
• challenges the creative spirit
• maintains person and family values
• preserves, protects, and utilizes clothing resources
• creates a “new” item from a sentimental old favorite too treasured to give away

Decision making is very important in not only deciding whether to make a garment usable again, but also throughout the process. You must think (and decide) the following—especially if you will be refashioning (remaking) a garment.
• Will I be willing to spend the time?
• Do I have the creative ideas?
• Do I have the necessary skills?
• Am I enthusiastic about the project?
• Is it a reasonable cost—will it be worth it?
• Do I like the color and fabric?
• Will I wear it in order to justify my time?
• Is the fabric in good condition, of good quality?
If the answers are positive, then you need to prepare the garment for recycling by cleaning it, removing stitching, if needed, and removing creases if needed.

Fabric—Is it in good condition; does it have spots, stains, or holes or thin spots? If not enough for a garment, can it be combined with something else? If combining fabrics and/or trim, do they belong?

Pattern—Select one that the pieces will fit, frequently one with several small pieces is easier to work with.

Fashion—Be knowledgeable concerning current fashion by looking at ready-to-wear, in magazines and in catalogs.

Style—Take advantage of construction details such as buttons, buttonholes, darts, pockets, yokes—either use them, cut around them, or cover them up. Is the style chosen one that is fashionable and one that would be worn in your community?

Preparation—Mini changes will not require you to rip apart a garment. Maxi changes require ripping the garment apart, removing spots and stains, washing or dry cleaning, and pressing. Save all usable notions. Consider using the wrong side of the fabric. If combining more than one fabric or using trims, be sure you have a coordinated look; usually achieved by repeating in one other place. Also, remember the importance of proportion.

Layout and cutting—Place pattern pieces on grain. If it is necessary to piece, do so in an inconspicuous or cover up with a design feature

Braids
Braids have a finished edge on both sides. Use these to lengthen pants or skirts or to give new life to other garments. Make a belt from braid. Place on belting and stitch. Add a buckle or close with another type of fastener.

Other Trim
Use trim, such as rick rack, lace or bias tape to outline design features on a garment. Consider design features such as yokes, pockets, seamlines, waistbands or edges.

Trims can also be used to cover up a stain, tears and old stitch marks. Plan the design then use string or seam tape to measure how much to purchase. Be sure the trim is compatible in care to your fabric. Determine how to apply—stitch, fuse or glue. Always select an inconspicuous area to start and end.

Contrasting Fabric
Use contrasting fabric on a yoke or pocket. Trace area. Cut from fabric allowing ½ inch (1.2 centimeters) seams. Press under seam allowance. Place on garment. Topstitch close to edge.
UPDATE AND REUSE
CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING
Member Handout

**Shirt Serging**

**T-shirt**
1. Trim away the neckline ribbing, the hem, and several inches of each sleeve.

2. Perfect a decorative rolled-edge stitch on the scraps and try lettucing using differential feed at a minus-setting or by stretching the fabric evenly in front of and behind the presser foot as you serge. Woolly stretch nylon in both loopers is great for this project.

3. Lettuce all cut edges, overlapping the ends.

**Buttondown**
Any dress shirt that has extra room at the hips and is long enough can be used as a comfortable cover-up.

1. Either roll up the sleeves, or cut them off just above the placket, then use the cut-away cuffs to perfect a narrow balanced stitch with decorative thread in both loopers. Use this stitch throughout.

2. Serge-finish the cut edges of each sleeve.

3. Trim a frayed collar to, but not through, the original topstitching. If the collar has stays, remove them.

4. Serge-finish the front band edge from the lower edge to the collar stand.

5. Remove the top button and serge-finish that edge from the collar stand lower edge to the collar point.

6. Serge-finish the collar from point to point.

7. Carefully serge-finish the opposite collar end from the point to below the collar stand, overlapping the beginning serging.

8. Secure the thread chains.

Optional: Serge four decorative tucks on the shirt front and back from below the bust (or shoulder blade) to below the waist, adding waistline definition.
International Influences

Clothing & Textiles, Level III, Wardrobe Planning

What Members Will Learn . . .

ABOUT THE PROJECT:
- Some styles are a result of ethnic influences
- The impact of ethnic flavors in clothing and household designs
- How to calculate comfort points and relate them to climate changes

ABOUT THEMSELVES:
- International influences that may be a part of their heritage
- To appreciate diversity and cultural differences in others

Materials Needed:
- Copies of Member Handout

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
As the world becomes smaller because of better and more media communications it is understandable that this would have some influence upon the clothing and textile industry. Not only does this impact upon the economics of all countries, but it impacts upon the fashions of each as well.

As we begin our study of international influence, it is hard to limit this topic. International influences affect us in far more ways than we might realize at first glance. As we look at fashions we borrow from other nations or from different points in history, we find this a fascinating look at new and rich lifestyles.

We cannot overlook the importance of climate to the styles we borrow from others. Keep this in mind as we discuss some of the styles. Think of function—many styles are the result of the occupation of the group from which it evolved. Lastly, think of the natural fiber found abundantly in these countries. New fibers may now be used—but usually the common fiber associated with a style is the one found native in the country of origin.

As we think of clothing styles, begin to broaden your thoughts to include other textiles. Things like home furnishings are greatly influenced by ethnic prints, patterns and styles. Also consider accessories. Look at all these around you and imagine how drab life would be if all textile items were the same style and prints of 25 years ago.
As our world becomes smaller we find more and more of these items become altered, revised and incorporated into another culture. As a result, the original roots may be lost. Tracing dress through the years can be an interesting pastime.

There are companies that make a business of creating authentic historic or ethnic costumes. They may sell the patterns or the complete garments, but either way this is a rapidly expanding enterprise.

Let’s think of some ethnic garments. For example, what do you think of when I say Afro, Gaucho, Peasant or Gypsy styles? They all bring a different look to mind. The Gaucho or split skirt is a fashion style that has been borrowed from Spanish cowboys. They wore baggy wide legged pants that were cool, yet protected them from the heat and sage brush they were subjected to in their jobs. This idea has been changed and redesigned to give us the split skirt for women and baggy cut pants for men and women.

Some designs are altered so much that they seem to lose their true identity.

Let’s look at another example from American history. Today, Levi’s seem to be the single most popular “western wear” garment, worn by men and women, young and old, and rich and poor alike. They were first manufactured in San Francisco, California, in the 1850s by Levi Strauss. A would-be miner himself, Strauss made them mainly for other prospectors. But western horsemen soon found out that they could make the Levi’s form-fitting by sitting in a water-filled horse trough and then wearing them until they dried to eliminate wrinkles.

While pioneer men had the opportunity for comfort and practicality in their clothing, women were expected to dress as ladies regardless of the task at hand.

During the settling of the west, women rode only in carriages. For those women who insisted on riding horses, side-saddles were permissible but the women wore skirts—long voluminous ones. Divided skirts gained popularity in the latter 19th century with the sporting women. Custom-made riding habits included mannish tailored jackets and daringly short skirts (ankle length). While a few women probably began wearing pants around the turn of the century, divided skirts remained the acceptable riding habit for another 20 years. Even then, many mothers were horrified when their daughters began wearing jeans for comfort and practicality, just as men had done many years before.

Since we live in a climate that enjoys extremes in temperature, we can learn from persons that inhabit both warm and cold regions of the world. One purpose of clothing is protection. It may be protection from the cold or protection from the sun. As we have learned from our Northern neighbors, there are some fibers (wool) that usually incorporate a lot of air when made into fabric so they are warmer to wear than others. These types of

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items are still associated with colder climates (Shetland wool sweaters, wool jackets, etc.). In addition, we also learned that people in these regions dress in layers. This serves as an insulator to keep us comfortable.

Likewise, we learned that loose, billowy clothing of lightweight, breathable fabric is a better radiant protection from the sun and keeps us cooler than less clothing.

Here is an exercise to figure our comfort level in different situations by calculating the level of insulation our clothing provides. To give you an idea of how to score your comfort level, look at the Comfort Chart Handout.

As in learning from our northern neighbors, we have a lot to gain by opening up our world to the worlds of others we are unfamiliar with. Sometimes, these costumes and customs may seem strange and threatening to us. But in place of fear, we can develop a sense of curiosity. We can begin to ask questions. As we ask these questions and seek the answers, we may find that we are left wondering more. This is a sign that we are on the road to not only understanding others, but appreciating and valuing the differences of each person.

As we gain appreciation of each person and their heritage, we are then planting the seeds for a more peaceful world.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. Name one textile item that you consider having an ethnic quality.

A. Answers will vary.

Q. What did you do to figure your clothing comfort index?

**Process:**

Q. Name an article or characteristic that comes to mind when you think of oriental influences.


Q. Why is knowing your clothing comfort level important?

Q. Name a current fashion item or fad that is based on an ethnic style.

A. Answers will vary.
Leader Notes

Generalize:
Q. What do we gain by studying other cultures and heritages?
A. Understanding and appreciation of differences and similarities.

Q. What is a comfortable clothing score for someone that is taking a walk in 70°F weather?
A. 31 to 50.

Apply:
Q. How will issues raised in this lesson be useful to you in the future?

GOING FURTHER:
• Have members study an international fashion designer.
• Ask these questions about the designer:
  1. What is their background? (Nationality, current residence, education)
  2. What do they design?
  3. What is their style characteristics or trademark?
  4. How do they influence fashion changes today?
• Design your own accessories from your heritage or one you like.
• Have members construct an ethnic costume.
• Have members develop a program for a special audience on ethnic influences in clothing.
• Have members keep a list of textiles or accessories they notice on others for one day. List the items and the ethnic flavor they get from them. Bring this back to the next meeting to discuss.
• Have members research their ethnic heritage/costume or household furnishings. Report to the group at the next meeting.
• Volunteer at a local museum—make a period costume.

REFERENCES:
Time Out For Clothing, Joyce Ann Smith, Extension Specialist, Kathy Jelley, Carla Menelle, Jill Nolan, Extension Home Economists, Ohio Cooperative Extension Service, The Ohio State University, Columbus, Ohio 75733
Design Your Own New Horizons, Lyla Walker, Cherry Cowan, Gayle Muggli, Lillian Larwood, County Extension Agents, Cooperative Extension Service, Montana State University, Bozeman, Montana 59717
Let’s Dress Western, Carol Bergstrand, Textiles and Clothing Specialist, Home Economics Extension, University of Wyoming 82071
Designing Quilts, Bettina Havig and Betty Feather, Clothing and Textiles Specialist, Extension Division College of Home Economics, University of Missouri-Columbia, Columbia, Missouri 65211

19th Century American Furniture and Furnishings, Magdalene Pfister, Extension Specialist, University of Nebraska, Lincoln, Nebraska

Restoring Old Trunks, Magdalene Pfister, Extension Specialist, Iowa State University, Ames, Iowa 50011

4-H Member’s Clothing Activities-Intermediate, 4-H 4226, Cooperative Extension Service, University of California, Berkeley, California

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
**INTERNATIONAL INFLUENCES**

CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING

**Member Handout**

**Clothing Comfort**

1. Total the points of all clothing items you are currently wearing, using the numbers on the chart.
2. Compare this total to the room temperature and the activity you are currently doing.
   How comfortable are you? Are you under dressed or over dressed? What other things might influence your comfort?

### Guidelines

<table>
<thead>
<tr>
<th>Room Temp.</th>
<th>Seated quietly, reading, sewing, watching TV</th>
<th>School work, computer, office work</th>
<th>Dishwashing, ironing</th>
<th>Dancing, housework walking 3 mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>68 – 69.9 °F</td>
<td>160–141</td>
<td>120–101</td>
<td>90–71</td>
<td>70–51</td>
</tr>
<tr>
<td>70 – 71.9 °F</td>
<td>140–121</td>
<td>100–81</td>
<td>70–51</td>
<td>50–31</td>
</tr>
</tbody>
</table>

**Clothing Comfort Points for Women and Girls**

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
<th>Clothing Items</th>
<th>Points</th>
<th>Clothing Items</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underwear</td>
<td></td>
<td>One-Piece Outfits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pantyhose</td>
<td>1</td>
<td>Lightweight dress</td>
<td>17</td>
<td>Medium-weight, long sleeve</td>
<td>27</td>
</tr>
<tr>
<td>Warm tights</td>
<td>25</td>
<td>with long sleeves</td>
<td>+2</td>
<td>Medium-weight, short sleeve</td>
<td>24</td>
</tr>
<tr>
<td>Warm knee socks</td>
<td>8</td>
<td>below the knee hem</td>
<td>+1</td>
<td>Heavy-weight, long sleeve</td>
<td>37</td>
</tr>
<tr>
<td>Bra and panties</td>
<td>5</td>
<td>Medium-weight dress</td>
<td>42</td>
<td>Heavy-weight, short sleeve</td>
<td>33</td>
</tr>
<tr>
<td>Girdle</td>
<td>4</td>
<td>with long sleeves</td>
<td>+4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camisole</td>
<td>8</td>
<td>below the knee hem</td>
<td>+2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full slip</td>
<td>19</td>
<td>Heavy-weight dress</td>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Half slip</td>
<td>13</td>
<td>with long sleeves</td>
<td>+6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long underwear top</td>
<td>25</td>
<td>below the knee hem</td>
<td>+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long underwear bottom, (knit)</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Footwear</td>
<td></td>
<td>Blouses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandals</td>
<td>2</td>
<td>Lightweight, long sleeve</td>
<td>20</td>
<td>Medium-weight, long sleeve</td>
<td>26</td>
</tr>
<tr>
<td>Tennis shoes</td>
<td>3</td>
<td>Lightweight, short sleeve</td>
<td>17</td>
<td>Medium-weight, short sleeve</td>
<td>25</td>
</tr>
<tr>
<td>Pumps</td>
<td>4</td>
<td>Medium-weight, long sleeve</td>
<td>23</td>
<td>Medium-weight, short sleeve</td>
<td>29</td>
</tr>
<tr>
<td>Boots</td>
<td>8</td>
<td>Heavy-weight, long sleeve</td>
<td>26</td>
<td>Heavy-weight, short sleeve</td>
<td>30</td>
</tr>
<tr>
<td>Knee-high leather boots</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sweaters</td>
<td></td>
<td>Heavy-weight, long sleeve</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lightweight, short sleeve</td>
<td>17</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Vest</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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170-Clothing & Textiles, Level III
**INTERNATIONAL INFLUENCES**

**CLOTHING & TEXTILES, LEVEL III, WARDROBE PLANNING**

**Member Handout**

**Clothing Comfort, *continued***

Clothing Comfort Points for Men and Boys

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td><strong>Separates</strong></td>
<td></td>
</tr>
<tr>
<td>Lt wt shirt, short sleeve</td>
<td>17</td>
</tr>
<tr>
<td>Lt wt shirt, long sleeve</td>
<td>23</td>
</tr>
<tr>
<td>Md wt shirt, short sleeve</td>
<td>20</td>
</tr>
<tr>
<td>Md wt shirt, long sleeve</td>
<td>26</td>
</tr>
<tr>
<td>Heavy wt, woven shirt, short sleeve</td>
<td>25</td>
</tr>
<tr>
<td>Heavy wt, woven shirt, long sleeve</td>
<td>37</td>
</tr>
<tr>
<td>Lt weight trousers/jeans</td>
<td>26</td>
</tr>
<tr>
<td>Med wt trousers/jeans</td>
<td>29</td>
</tr>
<tr>
<td>Hvy wt trousers/jeans</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightweight vest</td>
<td>15</td>
</tr>
<tr>
<td>Med weight vest</td>
<td>22</td>
</tr>
<tr>
<td>Heavy-weight vest</td>
<td>30</td>
</tr>
<tr>
<td>Lt wt sport jacket/coat</td>
<td>22</td>
</tr>
<tr>
<td>Med wt sport jacket/coat</td>
<td>35</td>
</tr>
<tr>
<td>Hvy wt sport jacket/coat</td>
<td>49</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underwear</td>
<td></td>
</tr>
<tr>
<td>Briefs</td>
<td>5</td>
</tr>
<tr>
<td>Sleeveless undershirt</td>
<td>9</td>
</tr>
<tr>
<td>Short sleeve undershirt</td>
<td>9</td>
</tr>
<tr>
<td>Long underwear top (knit)</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Footwear</td>
<td></td>
</tr>
<tr>
<td>Sandals</td>
<td>2</td>
</tr>
<tr>
<td>Tennis shoes</td>
<td>3</td>
</tr>
<tr>
<td>Low shoes (oxfords)</td>
<td>4</td>
</tr>
<tr>
<td>High shoes w/side zips</td>
<td>15</td>
</tr>
<tr>
<td>Hiking boots</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clothing Items</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long underwear bottom (knit)</td>
<td>25</td>
</tr>
<tr>
<td>Lightweight socks</td>
<td>3</td>
</tr>
<tr>
<td>Heavy-weight socks</td>
<td>4</td>
</tr>
<tr>
<td>Lightweight knee socks</td>
<td>5</td>
</tr>
</tbody>
</table>
Kansas 4-H Clothing Leader Notebook

Level IV

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Optical Illusions of Clothing

What Members Will Learn . . .

ABOUT THE PROJECT:
- Techniques for using optical illusions of clothing to enhance appearance
- Personal appearance can be enhanced through color and design

ABOUT THEMSELVES:
- How to evaluate their fashion silhouette and select their most flattering styles
- Analyzing and decision-making skills to identify their most becoming colors

Materials Needed:
- Hand mirrors and large free standing or wall mirror
- White sheet or shirt to cover clothing—one per every 3 to 4 members
- Solid color paper or fabrics—various colors with blue and gold undertones (members can bring as many different colored fabrics as they can find in their house—garments, towels, table linens. Label each with masking tape. Sort according to basic hues; reds, greens, blues, etc.)
- Good lighting
- Copies of Member Handout
- “Your Ideal Silhouette” computer program, instruction booklet and workbook (this program may not work with teens who have not reached adult proportions). Available from area Extension offices with information about ordering booklets.
- Computer compatible with the above program
- Tape measure
- Yard stick
- Ruler
- White paper and tape to hang against wall

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

In past lessons we have talked about the design elements of line, color, and texture. Today we want to individualize these elements. We are going to look at each of you as a unique individual and decide what colors and styles are the most flattering to you.

Surveys have shown that people respond to colors in general ways. But whether a person likes or dislikes a color depends on factors in his or her life. Everyone is born with an inclination toward certain colors, as

Leader Notes

Have members sit in a comfortable place.
If they do not know each other allow them to introduce themselves. Ask them to tell a color they like to wear. You begin.
evidenced by the color of crayons you choose to use as a youth. Each person is a unique individual in terms of skin pigmentation, eye color, and natural hair color. Let’s begin to discover the colors that make you glow.

Let’s begin with skin tone. Take a look at yourself in the mirror near natural light. Look at your skin, hair, eyes—all without makeup. If you color your hair, try to remember its natural color, (or check the roots before you recolor it).

For both men and women, the skin tone is the most important factor in determining the colors that look best. The tone of skin comes from three pigments: Brown, blue, and yellow. It is the particular combination of these three pigments that gives you your skin tone. Because your skin acts as a thin filter, it is the tone just under its surface that determines whether your coloring is cool or warm. Cool skin coloring has a blue undertone; warm skin coloring has golden or yellow undertones. Individuals with cool undertones (blue) will look better in pink, dark red, or burgundy. Individuals with warm undertones (yellow) will look better in peach, orange, or rust. Hold fabrics or papers of these colors next to the skin to determine warm or cool undertones.

NOTE: Be careful not to confuse sallowness with golden skin tone. Anyone can have sallow skin, which appears yellow on the surface, regardless of its undertone. Another mistake people often make is a person with a ruddy complexion, where the capillaries are close to the surface of the skin, giving an intense pinkness to the face. This may not indicate a blue tone. If you have freckles, they may be either warm or cool.

Hair may be either blond, red, black, brown or white with either golden or blue undertones. Blue or ash undertones are common in platinum, silver, or ash blondes. Other blue undertones are the smoky or ash undertones of brunettes: the pink, purple or wine undertones of the reds and auburns; the blue-blacks and jet black; snow whites and silver whites. The golden undertones in hair are found in the honey or golden blondes; the golden or rust undertones of the reds and auburns; the golden or red-gold undertones of brunettes; the brownish-blacks and the creamy whites.

Usually, the closer in value the skin and hair colors, the narrower the range of flattering clothing colors. The greater the value contrast between skin and hair, the wider the range of clothing colors that are easy to wear.

Eye color does not fade or change with age as skin color and hair color do. It remains the same from infancy on, unless it is changed by disease or by the use of contact lenses. Blue, brown, green, gray or hazel eyes are found with either blue or golden undertones. Find colors for your clothes that make your skin, hair, and eyes glow.

The right color will enhance the natural features you posses. Next, we will have each member try out some colors on themselves. As you hold colors up to your face, the right color will smooth and clarify your complexion, minimize lines, shadows and circles and bring a healthy color to your face.
The wrong color will make your complexion look pale, sallow or muddy; will accentuate lines or shadows around the mouth and nose, dark circles under the eyes, and blotches; may age your face; and will look too strong or too weak.

Almost everyone can wear all hues, but the value and intensity of a hue determine which colors are best for you. Each undertone group contains both soft and vivid colors. Some people feel more comfortable with a soft image; others love bright colors, and still others prefer to dress in neutrals. The specific colors you select will reflect your mood and personality. Familiarize yourself thoroughly with your colors so that when you shop for clothes, you will understand the colors best for you. Analyze the new fashion colors carefully before buying, because they may or may not be right for you. By only considering the garments and accessories in colors best for you, you will reduce the amount of time required to shop for your apparel.

Next, we will calculate your body proportions using a computer program. This program takes your measurements and objectively tells us your unique figure type. After the measurements are entered, you will receive nine or 10 pages of suggestions on the styles of clothing that will enhance your appearance.

Remember, as your body measurements change more than 2 inches in any one area, you should reevaluate your body proportions. The color selection should remain the same unless you change hair color. (Often dying your hair reduces the number of apparel colors that give the skin, hair, and eyes a healthy glow.) As you feel comfortable with the styles and colors that are best for you, shopping becomes easier and more enjoyable!

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What did you enjoy most about this activity? Why?

Q. How did it feel to evaluate different colors on your friends?

Q. What are two of your most becoming colors?

A. Answers will vary.

**Process:**

Q. Why is evaluating your color and flattering styles important?

A. It makes shopping easier by reducing the number of choices to items that are most becoming. Saves money by not purchasing fashionable but unflattering styles that will not be worn.

Q. What problems or issues seemed to recur with this activity?
Generalize:
Q. How can you use what you have learned today along with the information about your “clothing personality” (see Level II) to your advantage?
A. You can look for items in the personality style you enjoy wearing that have the color and characteristics that flatter you most. This will ensure many satisfied wearings of a garment.

Q. Discuss differences between this decision-making process and other decisions you have had to make.

Apply:
Q. How can computer applications be used to help analyze and aid in other decision-making opportunities?

GOING FURTHER:
• Go to a retail store and let members try on items and evaluate them for styles and colors. Be sure to arrange this ahead of time with the store manager.
• Have members evaluate the items they own to see if they fit into the flattering color range and recommended clothing styles. Bring this information to the next meeting and discuss.
• Have members offer this service to the public. Charge a fee as a fundraiser or donate the proceeds to buy items for the homeless or others in need of clothing.

REFERENCES:
Appearance Makes a Difference, University of Kentucky, College of Agriculture, Cooperative Extension Service
Color Me Beautiful, Carol Jackson, Acropolis Books Ltd., 2400 17th Street, N.W., Washington, D.C. 20009
Your Ideal Silhouette, Gail Florin, Meridian Education Corporation, 236 E. Front Street, Bloomington, Illinois 61701. 1-800-727-5507

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

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### OPTICAL ILLUSIONS OF CLOTHING
CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY
Member Handout

**Your Personal Coloring**

<table>
<thead>
<tr>
<th>Skin Color</th>
<th>Hair Color</th>
<th>Eye Color</th>
<th>Recommended Colors Clothes</th>
<th>Recommended Colors Lipstick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivory</td>
<td>Red</td>
<td>Dark brown</td>
<td>Oyster white</td>
<td>Orange</td>
</tr>
<tr>
<td>Peach</td>
<td>Coppery (red-brown)</td>
<td>Golden brown</td>
<td>Warm beige</td>
<td>Rust</td>
</tr>
<tr>
<td>Golden beige</td>
<td>Chestnut brown</td>
<td>Amber</td>
<td>Camel</td>
<td>Brick red</td>
</tr>
<tr>
<td>Dark beige</td>
<td>Golden brown</td>
<td>Hazel</td>
<td>Chocolate brown</td>
<td>Coral</td>
</tr>
<tr>
<td>Golden black</td>
<td>Golden blond</td>
<td>Green</td>
<td>Gold</td>
<td>Peach</td>
</tr>
<tr>
<td></td>
<td>Charcoal black</td>
<td>Blue</td>
<td>Teal blue</td>
<td>Mocha and brownish shades</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin Color</th>
<th>Hair Color</th>
<th>Eye Color</th>
<th>Recommended Colors Clothes</th>
<th>Recommended Colors Lipstick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivory</td>
<td>Flaxen blond</td>
<td>Blue</td>
<td>Ivory</td>
<td>Light peach</td>
</tr>
<tr>
<td>Peach</td>
<td>Golden blond</td>
<td>Green</td>
<td>Light warm gray</td>
<td>Coral</td>
</tr>
<tr>
<td>Golden beige</td>
<td>Strawberry blond</td>
<td>Aqua</td>
<td>Camel</td>
<td>Coral pink</td>
</tr>
<tr>
<td>Rosy cheeks</td>
<td>Auburn</td>
<td>Light golden brown</td>
<td>Golden brown</td>
<td>Warm pink (no blue undertones)</td>
</tr>
<tr>
<td></td>
<td>Golden brown</td>
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<td>Clear navy</td>
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<tr>
<td></td>
<td>Golden gray</td>
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<td>True blue</td>
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<td></td>
<td></td>
<td></td>
<td>Aqua</td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td>Apricot</td>
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</tr>
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<td></td>
<td></td>
<td>Orange</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Peach</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Coral pink</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Violet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yellow green</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clear yellow</td>
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</table>
### OPTICAL ILLUSIONS OF CLOTHING

**CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY**

**Member Handout**

Your Personal Coloring, *continued*

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Preventing for the Adult World

Clothing & Textiles, Level IV, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
- Factors that employers look for in prospective employees
- How to dress for an interview
- How to prepare for a job interview

ABOUT THEMSELVES:
- To identify personal strengths and weaknesses through a mock job interview
- Jobs they might be interested in

Materials Needed:
- Job description, “Dressing for the Job”
- Copies of Activity Sheet
- (Optional) videotape equipment

ACTIVITY TIME NEEDED: 30 MINUTES, PLUS INTERVIEW TIME

ACTIVITY

As you prepare to enter the adult world, you will find that judgments about others will often have to be made after one brief meeting. In the adult world people are often called to work together or find themselves thrown together in unusual situations. As a result, people need to make decisions about others in a less than ideal arrangement. Many times those judgments will be based on appearances, as well as a combination of personal gestures and facial expressions. Today, we are going to talk about some of those situations you will be facing and how to project your attributes to your advantage. The first situation will be a job interview.

In a survey of 153 companies, poor personal appearance was the reason most often given by employers for rejecting applicants. Other studies also have shown the importance of dress, grooming, posture, poise and personable qualities in the interview and in success on the job. Although good work performance is essential, a “self-confident, pleasant, put together” appearance will help you create the best possible impression.

Outfits appropriate for work will vary according to the job. For example, many restaurant managers require uniforms with no jewelry, while construction and maintenance firms demand heavy-duty protective clothing. Other employment areas may permit a range of clothing choices. Proper office attire may range from classic business suits to pants/blouse combinations.

Leader Notes

Have members sit in a comfortable area. If they do not know each other allow members to introduce themselves. Ask them to describe the clothing their parents/guardians wear to their job. You begin with yourself or an example of another.
Leader Notes

Even if you know the kind of clothing considered acceptable for your job, deciding what is appropriate for you may be another challenge. Even if your coworkers regularly appear in jeans, such attire may not be right for you or the job. Studies show that wearing outfits in which you feel good, and which are appropriate for the job, will help you project the image that you care about your work and are able to perform above the level of the “average” worker. Researchers also predict that well-dressed and groomed workers are more likely to be paid higher wages and receive more promotions than workers with similar performance ratings who have a less positive appearance.

This same appearance is important for the self-employed person. Homeowners are more likely to hire a neatly groomed youth to mow lawns or shovel snow than to hire someone whose ragged, dirty appearance suggests that they wouldn’t give the job detailed attention. Similarly, parents hiring babysitters want someone who is obviously worthy of their trust. Not someone that appears to care little about themselves. How much might this person care about the children left in their care?

Remember, you are selling a product at a job interview—yourself! If the interviewer thinks that you’re the best person for the job at first glance, you are way ahead of the other applicants. So make sure your appearance has never been better. Try these tips:

- If the job will be in an office or other place of formal business, wear a suit. Make sure it is conservative. This goes for all accessories, hairstyle, and other items such as purse/briefcase. The exception is to dress fashionably if the job has fashion-related responsibilities.
- For an interview for a more casual job, a sport shirt and slacks (with or without a jacket) for males or dress (skirt/blouse) for females would be appropriate.
- Always dress in good taste. If unsure ask your parent/guardian or a trusted adult to help you.
- Groom like you mean it. Hair should be trimmed and clean. For both males and females, a conservative hairstyle is suggested. Nails should be neat and trimmed. A bath or shower, use of deodorant and if cologne is worn, a light touch is recommended.
- Whatever is worn should be neatly pressed.
- Shoes should be shined and in good repair.
- Tie tied correctly and proper length.
- Choose simple jewelry that doesn’t jingle.
- Teeth freshly brushed.
- Makeup should be subtle.

Some non-apparel tips include:

- Be punctual. Allow yourself enough time to arrive a little early. Make sure you know where to go and who to see.
- Take along anything you might need, pencil, pad, social security card, working papers, references, diploma, resumé etc.
- Make a pre-interview visit to the washroom. Make a quick appearance check.
• Once you are in the office, don’t forget to stand tall, sit straight (after you are invited to do so) and answer questions honestly and briefly. Don’t ramble or be vague. If you have questions, wait until the end of the interview to ask them (unless invited to do so earlier).

Do you look like the right person for the job? What clothing will be practical and suitable for the job activities you will be doing? To answer these questions, you need to know what type of clothing the job requires, and what kind of dress your employer and potential customers expect.

The best way to learn this is to visit an actual job site. You may set up an interview with a potential employer or make an appointment to simply observe. Remember, any exposure you have at the place of employment is a reflection on you, so be sure to plan your visit carefully.

Before you go do these things:
1. Call, introduce yourself, explain your goals and what you would like to do, and make an appointment.
2. Prepare your questions and take a firm notebook for writing notes.
3. Dress in an appropriate manner—similar to interview outfit—for your visit.
4. Arrive on time.

When you get there, do these things:
1. Introduce yourself and keep your questions concise and to the point. Be considerate of the person’s time.
2. Observe people at work in the job in which you are interested.
3. Thank the person who made the arrangements for you to visit.

After you leave, write a note thanking the manager for allowing you to visit or for granting the interview.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. How did it feel to prepare for an interview?

Q. What was difficult? Easy?

Q. Name three things you should do to prepare for a job interview.
A. Know who you are to meet, be punctual, practice good grooming.

**Process:**
Q. What similar experiences have you had?

Q. Why is it important to understand this process?

**Generalize:**
Q. Give an example of appropriate work clothes for different occupations.
Q. What tips would you give a friend getting ready for a job interview?

**Apply:**

Q. What resources in your school or community are available to help you match or identify potential job interests?

Q. How will you act differently the next time you interview for a job?

**GOING FURTHER:**

- Bring in a panel of employers to discuss what they look for during an interview.
- Have members list as many occupations as possible before next meeting and the appropriate attire for each. Bring to next meeting to discuss.
- Look for accessories that various occupations require. Examples: briefcase, apron, stethoscope, hard hats, special footwear, etc.
- Trace a particular occupation from early times to today looking for the change of attire it has developed. Examples: pilot, farmer, factory worker, construction worker, nurse, etc.
- Have members write a description of themselves, not including physical appearance. Exchange these sheets with each other; have members rate which person sounds most interesting to them.
- Have each member write a description of themselves in 10 years. Discuss what they have listed. Encourage character description more than physical description. Also include career plans.

**REFERENCES:**

*Preparing For a Job Interview*, American Institute of Men’s and Boy’s Wear, Inc., 1290 Avenue of the Americas, New York, New York 10019

*Dressing For the Job*, Monica Goetz and Norma Deyo Pitts, Ohio State Cooperative Extension Service, Ohio State University, can be ordered if you want a more complete activity

**Author:**

Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist Cooperative Extension Service, Kansas State University

**Reviewed by:**

Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Interview Questionnaire

Select a job and company that you would like to have hire you. Think about the type of clothing that you should wear based on the types of activities and situations involved in the job.

List the activities and situations of the job you want:

1. 
2. 
3. 
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Arranging an interview with the person who does the hiring for the job that you would like to have will give you useful information about clothing and appearance expectations. Call the employer and explain why you would like to interview them and set up the time for the interview. Be sure to have a list of questions to ask and have a notebook to write the answers down. Dress as you think you should if you were interviewing for a job and be sure to be on time.

Some suggested questions follow. Develop more that seem appropriate for the job that you are interviewing about. Do remember that this is a very specific interview and you are not having a true interview for this job.

1. What are your clothing guidelines for your employees?
2. Do your employees have to wear uniforms? If so, do you provide them or do they have to provide them?
3. Are there special types of clothing that are required because of the types of activities involved in the job?
4. How important is the appearance of someone interviewing for a job?
5. What do you notice or look for in clothing or appearance when interviewing someone for a job?

You will come back and report to the group what you learned at your interview. Wear what you would wear if you were going back for another interview at the same business. How is it different from what you wore for the first interview? Why did you change what you would wear, if you did?
Self Expression in Dress
Clothing & Textiles, Level IV, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT:
• How people express themselves by the clothing they wear
• Some psychological aspects of clothing
• How skin care can enhance rather than detract from self-concept

ABOUT THEMSELVES:
• Confidence in making clothing and public presentation choices

Materials Needed:
• Plain paper and pencil, one per member
• Cosmetologist (not a makeup sales person or dealer) as a guest speaker. If no specialist, have members bring a current fashion magazine
• A resource person such as a school counselor, mental health worker, school psychologist, nurse or clergy may be helpful in facilitating this lesson. The intent is not to label or become judgmental of others, but help youth understand how clothing choices send messages to others about how youth are perceived.

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:
We have talked before about expressing yourself through clothing. Good grooming, clothing selection and poise all provide a snapshot glimpse about how you feel about yourself. Throughout your teen years you will experiment with your dress and what feels right for you. This is one step in the journey to adulthood. Today, we are going to look at the psychological aspects of clothing. In this area, specialists evaluate how dress is used to better understand yourself through an analysis of the way you dress and present yourself to the public. Intensive clothing therapy is also used as part of the treatment for persons with various mental disorders. Caregivers know that a person is healing when they begin to take an interest in their appearance and grooming. It is a fascinating look at just how powerful appearance is to our mental well-being. Good skin care may also enhance your appearance. We will also discuss some techniques for proper skin care and makeup application.

When life gets difficult, almost all youth at some time, use defenses to distance themselves from others. The way youth dress sometimes reveals the problems they are having. They often use dress to cover up their real selves.
When youth use clothing to make a personal statement they usually do not see themselves as others do. The person may have conflicts with people because of this perception. They may not be liked at school, yet no one is really able to identify the reason. These “covers” or defenses that the youth may use are sometimes good if they do not last forever. For a short period, they help one mature. They may be just “experimenting.” It is often called “going through a stage.” You may use one or more of these defenses at sometime in your life. If you can see yourself using one of these defenses, you are probably already on your way to becoming a more mature person and finding out who you are and your place in life.

Here are some common defenses seen in youth and adults—identified by dress:

*The conformer/copier*—This person never seems to make choices of their own. They don’t seem as interested in being an individual as they do in becoming a carbon copy of people they admire. Too much of this behavior indicates insecurity. A youth may copy the most popular person at school in dress and manners. Although the two people may look alike in appearance, the copier’s personality may not be anything like the most popular person being imitated.

*The flirt*—This may be the youth who wants to attract the opposite sex’s attention by means of their clothes. These persons are not secure enough to attract others by means of personality or just being themselves, so they depend upon the sexual attraction affected by clothes or mannerisms.

*The excuse giver*—This person may want clothes they do not need; either because others have them or they think they need them. In order to get them and still not admit the real reason to themselves, the youth may use false excuses for having them. The boy who says that he must have a certain coat or the group at school will not accept him is giving a false excuse about his relationship to the group and a false excuse for buying the coat. These youth do not realistically look at their own worth as an individual.

*The projector*—These are the people who assign qualities they do not understand or accept in themselves to other people or another person. They tend to dislike others that remind them of themselves. They can’t tolerate their flaws in anyone else. They also may blame their obesity, wardrobe choices, personal habits, etc., on someone else.

*The cover up*—This is one person who will not let you know the real reasons for their dress. The real reasons for dressing are hidden from people and opposite reasons are given. This type of individual may spend a lot of time planning what they will wear and yet say to others who may comment on their clothes, “I just threw this together.”
The not interested person—This may be the person who just doesn’t seem interested in clothes. They may never notice what you are wearing and obviously don’t pay much attention to their own clothes. At an early time in this person’s life, they may have had many very embarrassing and bad experiences with clothes. Because of this, this person may have decided to put clothes out of their mind and just say that clothes don’t matter. If this person came from a very poor family they may have had to wear things that caused much frustration. Thus, this person decided that clothes will never be allowed to be important.

The clock stopper—This may be the person who has never quite grown up. Or they may have grown up and then things started getting tough. They “regressed” and seemed to get childish. This person may wear sloppy clothes because of the desire to have someone take care of them again. This reminds them that maybe they don’t have to face the real problems or the real world. You may have noticed this person as an adult. They continue to dress in the same styles/clothes of 10 to 20 years ago. This may be because those styles represent a time in their life that they were happiest.

The loner—This person may feel so confused and unworthy that they withdraw completely into a shell. The person dresses to not be noticed. This person, however, may be worth getting to know and have many fine qualities and hidden talents.

The show stopper—This person may try to make up for feelings of inadequacy by dressing in showy or very expensive clothes with the “right” labels. Sometimes these people impress others as being egotistical, but in fact may feel inferior to others.

The “wallflower”—Most people assume everybody wants to be noticed. Actually, lots of people want to go unnoticed. It is safer. Being noticed forces one out into life; so they put life away by fading into the background. This is not done consciously, of course, but is none the less a major effort by a lot of frightened people. These people may be afraid of being rejected so becoming unattractive gives them a reason for being rejected. Some of these people may have been abused as children and to avoid having to deal with their mental scars they instead internalize them and retreat by becoming less attractive as a defense mechanism.

In the field of clothing therapy, scientists study such things as “The Role of Clothing in Extended Inferences.” This means they test a research theory to see if in fact people judge not only appearance but the values of a company by the way its employees dress. They may discover something about color and customer or employee preference for it. They study improving the self-image of the socially disabled; and clothing and depression. Another study cites the use of dress to provide more effective therapy for troubled youth. As you can see, appearance is a reflection of self-worth. This field is a fascinating one with many areas yet unexplored.
If members of your club belong to religious groups prohibiting the use of makeup, do not embarrass or belittle them in any way. Also, do not force experimentation with makeup. It is equally important that the young men learn to clean and care for their skin, and protect it with sunscreen.

Since make-up is personal, it is best to have a cosmetologist (not a makeup salesperson) come to the meeting to offer suggestions or apply a make-over. Before discussing makeup application, they should discuss daily cleaning and care of the skin. If a make-over is not available, you may be able to arrange a field trip to a business for this purpose. Another option may be to look through magazines and catalogs (members can bring one from home) for new makeup colors and techniques. Do not allow members to swap makeup with each other, because this spreads bacteria. Discuss their feelings about what they see. What about someone with too much makeup? Sloppily applied makeup?

Enhancing Your Facial Features
Most of the young women are at the age where they may begin to apply some makeup. Makeup can be a beauty enhancer. Yet a caution needs to be made that this is a huge industry. Competition is fierce and advertisers would like for you to think you need many products to be attractive. I first want to remind you that many people choose to go without makeup. This is a very acceptable option. You may not need to use makeup. By taking care of your skin you will save considerable time and money. Good skin care, exercise, and sleep should keep your skin, hair and eyes healthy looking.

In this country, the present fashion is for women to wear some makeup. In other countries makeup styles may be different. Currently, makeup is used to emphasize your best features and minimize the less desirable ones. The secret to makeup is a natural look, not one that looks made-up. You must begin with a good skin care routine. Makeup cannot adequately hide poor skin care, poor diet, or lack of exercise and sleep.

Your personal makeup strategy depends on the color scheme that is correct for your skin tone. Knowing how to put colors together is the secret to a flattering look. Your best colors will harmonize with your natural skin tone. Either warm (yellow undertones) or cool (pink/blue undertones). (See the lesson Optical Illusions of Clothing, Level IV, and distribute the personal coloring handouts from that lesson.)

The basic application steps are: (this will done by the specialist if presenting lesson)

Moisturizer: Moisturizer should be used by everyone—(men too) regardless of skin type. It protects the skin. It also makes makeup application easier.

Concealer: Use any finger to gently blend concealer into dark circles and minor skin flaws. Select a concealer one shade lighter than your skin tone.

Foundation: Match foundation shade to the jaw/neck coloring. This is important for a natural look. Use a cosmetic sponge for clean application and a natural finish. Do not use foundation on the neck. Place dots of foundation on the face and blend into skin. Many youth with healthy skin do not need to wear foundation. Powder is optional for most youth. Makeup can clog pores if left on too long and contribute to blemishes.

Translucent Powder: Eliminate shine by dusting powder on the face with a soft brush or cotton puff. This also helps “set” the makeup.

Blush: Start under the center of the eye. Brush color on cheek bone, fading the color as you near hairline. Achieve a soft, natural “glow” with no hard streaks of color.

Eyeshadow: The key word for eyeshadow is blending. Use colors to enhance the color and shape of the eyes. Recommended colors are as follows:

- blue—brown, pink, plum, grey
- hazel/green—yellow, orchid, sand, topaz
- brown—mauve, olive, tan, sapphire
- black—plum, tan, pink, blue
**Eye Pencil:** Apply pencil along top lash line. Smudge into a thin, natural looking line. Avoid bright colors as these take away from the eyes’ natural color. Eye pencils define and enhance eyes, for the best results, keep them sharpened to a fine point. Lining the lower lash may cause eye to look more droopy.

**Mascara:** Apply mascara to top and bottom lashes. Some tips include; prevent clumps by pushing in and pulling out the wand several times, wipe wand against rim to remove any excess. Apply one to two thin coats. Let dry between coats. Do not apply mascara to the lower lashes if it smudges easily. To take off mascara use baby oil, petroleum jelly or oil-based eye makeup remover. Treat the area around the eye gently. Allow remover to soak the mascara for a minute then gently remove with a soft cloth. Brown mascara is OK for very light-skinned girls, otherwise use black or black-brown. Toss out mascara every six months whether it is used up or not because bacteria grows rapidly in the moist liquid. Warning: Optometrists recommend that contact wearers should avoid mascara to reduce the chances of eye infect. Never share mascara. Don’t wear mascara around the clock, it is hard on the eye lashes. Never apply in the car or elsewhere that a sudden jolt could cause eye damage.

**Lip Color:** Lip pencils may be used for definition along the lip line. Fill in color neatly with a lip brush. Brushes help the color go on smoothly and evenly.

**Eyebrows:** Don’t over-tweeze eyebrows. Maintain your natural arch and only pluck stray hairs underneath. If your brows are light, softly fill in with a brow pencil. Follow the natural arch of brow. Use a brow brush to blend and soften the line.

Remember that a look as close to natural is the best guide for you to strive for when experimenting with makeup.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What did you see or do in this lesson that made you feel good? Uncomfortable? Why?

Q. Why is good skin care important for both men and women?

Q. Why do females use facial makeup more than men?

**Process:**

Q. What was one of the most significant things you learned from this activity? Why is that important to you now?

Q. What do psychological aspects of clothing mean to you?
Leader Notes

Generalize:
Q. How have you used clothing to reflect how you were feeling based on the descriptions you heard in this lesson?

Q. How does the way we dress today reflect on our culture?
A. Greater variety and acceptance of ethnic styles as a part of the global community.

Q. Realizing we make quick first impressions about others by their clothes, how will you be more sensitive about them in the future as a result of this lesson?

Apply:
Q. Can you think of other expressions of dress associated with other cultures?
A. Special dress for religious reasons; climate conditions.

GOING FURTHER:
• Explore in more depth the expression of dress through the years in American culture or one of your choice.
• Have someone from another country present a lesson about the dress norms and makeup styles of other places.
• Have members track colors and hemlines with historical economic conditions. Then have members draw a conclusion about what is ahead of us depending on our economy.
• Arrange for members, along with a beauty consultant, to offer makeovers to residents of a retirement facility.

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The Role of Clothing in Extended Inferences, Jane E. Workman, Department of Vocational Education Studies, Clothing and Textiles Programs, Southern Illinois University at Carbondale, Carbondale, Illinois 62901 and Kim K.P. Johnson, School of Human Resource Management, P.O. Box 5248, University of North Texas, Denton, Texas
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The Total Me
Clothing & Textiles, Level IV, Me & My Body

What Members Will Learn . . .

ABOUT THE PROJECT
- The components of a “Total Look”
- How to select and use accessories to finish a look

ABOUT THEMSELVES:
- To self-evaluate and set goals for personal growth

Materials Needed:
- Pencils
- Copies of Activity Sheets
- For young women, “How to Do a BSE (self-exam)” or for young men, “How to do TSE (self-exam)”—available from your local health department or Cancer Society or call the Kansas Chapter of the American Cancer Society at 913-273-4114 for copies
- Optional—“The Spotlight is on You” or “The Magic of Accessories” video (available for checkout from area Extension offices, Department of Communications Media Center, Kansas State University or may be purchased from McCall Pattern Company, 1-800-255-2762)
- Television and ½ inch VHS video player

ACTIVITY TIME NEEDED: 50 MINUTES

ACTIVITY:
If you ask five people to describe the phrase “Total Look” you would probably receive five different answers. Today, we will try to get a group decision as to what is a part of your “Total Look.” We will also have you evaluate yourself to identify areas that may need improvement to enhance your “Total Look.”

Now that you have had a chance to offer your ideas it is apparent that a true “Total Look” encompasses much more than just your clothing. To help you evaluate yourself in some of these areas, complete the following questionnaire.

For all young men and women it is very important that you begin with regular health check-ups. Monthly self-exams along with regular doctor visits are the best preventive maintenance you can give yourself. (Have copies of the self-exam leaflets available to pick up after the meeting.)

Leader Notes
Have members sit in a comfortable place. If they do not know each other allow them to introduce themselves. Then ask the group to name as many areas as they can think of that would be included in a “Total Look.” You begin by naming one area. (Examples, clothing, accessories, hair, posture, poise, health habits, nails, personality, etc.)

Pass out questionnaire. Allow members to complete. Encourage honesty, no one else will see the answers. After the members have completed it, allow them to discuss how they might improve their total look. Assist them in making a plan that will work for their lifestyle. Support them in looking for others that may be of assistance.

23-Clothing & Textiles, Level IV
Now that you are aware of areas that you can improve upon, let us turn for a moment to look at what makes the “Total Look” of an outfit. These of course are the accessories you choose to wear to complete an ensemble.

Accessories play an important part in how you look. They should compliment your garments and add to the harmonious look.

Let’s talk about some of the most common accessories you will be choosing.

**Shoes**—Shoes are worn to protect your feet. They can spoil or enhance the appearance of your outfit. They should not only fit the physical structure of your feet (i.e., no pointed toes), but should also contribute to your total look.

Shoes are often the most expensive and important accessory, so should be the first accessory selected to go with your outfit. Current fashion and garment proportions greatly affect the available shoe styles. Low heels or flats are healthier for your back than high heels. Generally speaking, shoe color should be closely related to skirt, pant or hemline color or be darker, such as black. White shoes or sandals can be worn with summer sportswear.

Shoe color, line, and texture affect appearance. Basic colors and smooth, dull textures provide the greatest value in shoe purchases. Leather offers the most comfort and is generally your best choice. If you have plump feet and would like for them to appear slimmer, select simple styles, closed-in shoes, in darker colors or shoes with thin straps. If you have thin feet and would like an illusion of added width, select crisscross straps, contrasting colors, contrasting leathers, sandals, open toed shoes or shoes with decorative trim.

It is important to wear properly fitting shoes, because poorly fitted shoes can cause foot problems, especially later in life.

A sports shoe is an important part of your wardrobe, both for sport and casual wear. Fit and flexibility are extremely important, so twist, jump, and run in place before buying.

Other popular styles include the dressy slip on, dress shoe, hiker boots, classic loafer, and mud/rain/snow boots.

**Socks and Hose**—The socks or hose you select to wear contribute to your overall look. Here are a few guidelines:

*Young Women:* White socks are for sportswear. Avoid hosiery with reinforced toes or heels when wearing sandals or open-toed shoes. Coordinate the color of your socks or hose to your pants and shoes or to your skirt, dress and shoes. Be sure to keep in mind the purpose of the occasion when selecting the socks or hose. Fashion in legwear fluctuates with the times. Contrasting or brightly colored hose tend to call attention to the leg, as do textured and patterned hose.
Young Men: White or gray tube socks are for sportswear. Dark colored socks are for dressy occasions. Coordinate socks with garment fabric and shoes. Heavier weights and textures look good for casual occasions and with tweeds, nubby wools, denim and the like. Sheer socks go with lightweight, sheer and dressy fabrics. When wearing slacks or pants, if you cross your leg, the top of the sock should not be visible.

Belts—Belts can add interest to an outfit. Almost any material or item can be turned into a belt. The material, color, and texture should be carefully coordinated with the outfit.

The size and shape of the belt must enhance the figure as well as the outfit. Almost everyone can wear a narrow, smooth leather or self-fabric (a belt made from the same fabric as the garment) belt which blends with the color of the garment. Wide, rough textures, and bright contrasting belts are great for tall, lean and long-waisted persons.

Handbags and Backpacks—The handbags that girls select should harmonize with their clothing. For school and casual activities, girls should select one that is durable, has simple lines, and is in proportion to the user. For parties and social events, select one that is smaller and daintier. Long narrow bags make girls look taller; while a short, wide, horizontal bag will cut their height.

Classic shapes such as the flat handled bag, the clutch, the envelope, and the soft pouch are timeless. It is not necessary that handbag and shoes match, but they should harmonize with the total outfit and with each other.

Backpacks are more popular among students. They are large enough to carry school supplies, wallet, and other essential items needed for daily activities. Larger shapes with more detailing, topstitching, and pockets are fine for sportswear and country wear. Remember to alternate sides if you carry the pack on only one shoulder or you could cause one shoulder to be higher than the other. Have members look in a full length mirror to check shoulder level.

Ties and Scarves—These can change your look in a flash. They are important accessory items which assist you in expressing your own personal styles and clothing statement.

For guys, select a tie color that blends with your suit, pants and shirt. If you are tall and want to appear shorter, select a wider tie or one that has horizontal designs. If you are heavy and want to appear slimmer, select straight-lined designs or patterned ties, but avoid circular designs. Select small and neat designs if you are short, avoid bright and shiny ties that may overpower you.

Wear narrow ties with narrow lapels and collar; wider ties with wider lapels and collar. Ties should be long enough to almost reach the beltline. Knotting is a matter of taste and fashion. Windsor and half-windsor make a fuller knot, while four-in-hand makes a smaller knot.

Pass out copies of the Member Handout, “Accessorizing with Ties and Scarves.” You may want to provide samples to practice.
Scarfes come in a variety of shapes—square, long bias, rectangle, or shaped; and provide a variety of possibilities for making an exciting change in your look. Wear them on the head; at the neck; under a collar; at the waist; at the hipline; or draped over a shoulder. Scarves tied at the base of the collar can introduce a dash of color and accent to the face. Keep scarves in scale with the body; large scarves for the large figure and small scarves for the small figure.

Ties and scarves should be tied securely and firmly anchored. This can be achieved by using small, inconspicuous safety pins, a tie clip or tie tack.

**Jewelry**—Jewelry is available in every price range, from the inexpensive costume variety to expensive pearls and fine jewels. Jewelry should reflect the occasion for which the outfit is worn. Silver and gold are classics and appropriate for most occasions. Reserve sparkling stones for nighttime or festive occasions.

The size, shape and placement of jewelry has a definite relationship to the individual. A tall or large-boned person can wear larger pieces, while a small individual must keep to smaller, daintier items. When more than one piece is worn, they should be related in texture, color and type.

Jewelry adds gleam and the finishing touch. Watch for fashion changes and select only items flattering to your coloring and physique. One or two pieces of jewelry may be all you need if they are well chosen.

If any accessory is a fad item, pay as little as possible and wear it often while the fad lasts.

**DIALOGUE FOR CRITICAL THINKING:**

**Q.** What should you keep in mind when choosing accessories?

**A.** The overall look, their proportion to your body size and the garment, the texture combinations.

**Q.** Name some classic accessories.

**A.** Ties, scarves, clutch purse, pumps, loafers, gold and silver jewelry.

**Q.** How did you feel when completing the questionnaire?

**Process:**

**Q.** Why did you feel that way?

**Q.** What similar self-evaluation experiences have you had?

**Generalize:**

**Q.** What did you learn about yourself that you are willing to share with the group?

**Q.** What is needed in the group for you to feel comfortable in sharing strengths and weaknesses?
Apply:
Q. What new habit are you going to begin? How will you implement it? Who can help you?

Q. Name one person that you think has a “Total Look.” Describe that person to the group.

GOING FURTHER:
• Have members collect pictures that show clever use of accessories for their age group.
• Have a lesson on sport shoes only. Take group to an athletic shoe store and arrange for the manager to discuss types of sport shoes.
• Help members make some accessories, braided belt, fabric covered earrings, scarf, tie, hat bands, etc. Notify members ahead of this meeting to bring required supplies.
• Tour store that sells accessories and experiment with different sizes and shapes.
• Have members host an accessory exchange for the project group or their club. Members bring items in good repair to swap for different accessories.
• Pick a country for members to study with emphasis on the accessories.
• Assist boys in learning how to tie ties, girls with new ways to wear scarves.

REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas
Time Out For Clothing, Ohio Cooperative Extension Service, The Ohio State University
The Spotlight is on You, McCall Pattern Company, in cooperation with National 4-H Council
The Magic of Accessories, McCall Pattern Company, in cooperation with National 4-H Council

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THE TOTAL ME
CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY
Activity Sheet

Total Me Questionnaire

Circle the number of the statements which you can honestly answer yes.

Grooming:
1. Do I bathe/wash daily, use deodorant, and change underwear?
2. Do I brush and floss daily?
3. Do I have a daily skin care routine?
4. Do I know my hair type, the proper products for it and do I practice the proper hair care routine for it?
5. Do I eat a balanced diet that is varied, low in fat, and contains lots of fruits, vegetables, and whole grains?
6. Do I get plenty of rest (8 to 10 hours) per night?
7. Do I enjoy at least three sessions of exercise per week lasting 30 minutes or more consisting of aerobic activity?
8. Do I do a weekly manicure?

Health Habits:
1. Do I average less than 2 hours of television/video games per day?
2. Do I enjoy two or more lifetime sports?
3. Do I make regular dental visits? (2 per year)
4. Do I make regular physician visits? (1 per year)
5. Do I use sunscreen whenever I will be exposed to the sun?
6. Do I wear seat belts every time I am in the car?
7. Do I do a monthly self exam?
8. Do I avoid the use of drugs, alcohol, or cigarettes?

Choice and Utilization of Clothing:
1. Do I wear every piece of clothing in my closet and drawers?
2. Do I know and buy the styles and colors of garments most flattering for my unique body shape, coloring, personality and lifestyle?
3. Do I understand and use the design elements of line, color and texture to my advantage when purchasing clothing or fabric?
4. Do I know my face shape and two flattering hair styles for it?
5. Do I think about the scale, balance and proportion of the accessories I purchase in relationship to my size and unique body characteristics?
6. Do I have a wardrobe that contains clothing for all needed occasions from relaxed to dressy?

Clothing Care:
1. Do I always put clothing away (or in laundry basket) immediately after wearing?
2. Do I do needed repair, mending, or spot treatment on clothing items immediately?
3. Do I press items that are wrinkled before wearing?
4. Do I have adequate storage space for my clothing items?
THE TOTAL ME  
CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY  
Activity Sheet  

Total Me Questionnaire, continued  

Inside Myself:  
1. Am I conscious of and practice good posture?  
2. Do I regularly try new social situations to increase my poise?  
3. Do I make an effort to listen to others and see things from their point of view?  
4. Am I satisfied to let others be the center of attention?  
5. Do I have an upbeat disposition?  
6. Do I like myself?  
7. Do I genuinely like and trust other people?  
8. Do I like working on a task and seeing it through to completion?  
9. Can I make good decisions for myself most of the time?  
10. Do I speak honestly in most situations?  
11. Can I offer criticism to others in a kind way?  
12. Do I have two or more hobbies in which I am interested?  
13. Do I have much to be proud of?  
14. Do I feel I can do things as well as most other people?  
15. Do I respect myself?  
16. Do I feel useful?  
17. Do I take time to reflect upon myself?  

Support Systems:  
1. Do I have a close relationship with an adult I trust?  
2. Can I disagree with my friends without the fear of losing their acceptance?  
3. Do I belong to a group that I feel I can identify with?  
4. Do I know productive happy adults that I can see myself becoming like in the future?  

Total the yes answers. Total the no answers.  

The total of yes answers in each section should be close to three-fourths the total number of questions in each section. If not, then select one to work on until you have mastered it. When you have mastered one area at the 75 percent level then work on another area. Maturing takes time, so love and accept yourself during this process.
Fashionable scarves and ties can be used to accessorize and/or update garments within your wardrobe. Look through current fashion magazines, clothing books and catalogs for examples of how scarves and ties can be draped and/or tied to achieve fashionable looks. Learn different ways to use scarves and/or ties and demonstrate them to your group.

Accessorizing With Ties and Scarves

Bow Tie

Four in Hand

30-Clothing & Textiles, Level IV
Care and Storage of Heirlooms and Special Items

*Clothing & Textiles, Level IV, Care and Maintenance*

What Members Will Learn . . .

**ABOUT THE PROJECT:**
- How to store heirlooms to decrease the damage done by aging
- How to treat special conditions of textile heirlooms, such as stains and soiling

**ABOUT THEMSELVES:**
- The importance of textile heirlooms in family history
- Their role in protecting family heirlooms for future generations

**Materials Needed:**
- Copies of Activity Sheet
- Heirloom textiles
- Pencils
- Optional: Acid free tissue and/or boxes
- Needles
- Fiberglass screening (enough to sandwich item being cleaned)
- Thread
- Hand-held vacuum
- Bathtub, sink, or large plastic pans
- Neutral soap (Neutrogena or Orvis available through farm supply stores)
- Distilled water
- 30 percent hydrogen peroxide
- Warm water
- Sodium perborate
- Non-ionic detergent
- Sheet of clear plastic
- Thermometer
- Undyed cloth towel

**ACTIVITY TIME NEEDED:** 30 TO 50 MINUTES

**ACTIVITY:**
Most families, whether they realize it or not, have several textile family heirlooms. These heirlooms usually begin as a result of handiwork or to fill a special need (fancy tablecloth). They unobtrusively end up as an heirloom because of their sentimental value.

Textile heirlooms can range from clothing items such as wedding gowns, christening gowns, frilly dresses and formals, hats, college sweatshirts, letter jackets, and doll clothing, to items such as handwork pillows or .

*Leader Notes*
If you have time ahead of the meeting, have members bring a textile item that is a family heirloom or they hope will be some day. Have each member share this with introductions, if they do not know each other. You begin.
pictures, linens, weavings used as art, quilts, throws, rugs, and stuffed toys. Perhaps you have some of these items that with proper care will enhance their value to you and your family. How often have you heard a remark at an auction or antique store, “I had one just like that!” Most textile items do increase in value over time because of the nature of textiles to disintegrate after long periods. This is especially true of textile items made before the 1920s because most textiles were made from natural fibers. The introduction of man-made fibers has greatly increased the life of textile items.

Proper care, storage, and display can be the difference between a heirloom that is passed from generation to generation with pride or simply rags in the rag sack.

Let’s discuss the steps in proper handling of family heirloom textiles.

1. Take an inventory and write it down. List all heirlooms and any important information: age, reason for keeping, who it belonged to, to whom it has been passed down, who made or wore it, any other historical information. Also, write down the fiber content if known, care label procedures if known, care it has received, if spotted or soiled—diagram the item and note these and any repairs made.
2. Evaluate and decide what you want to do with the item. Display, store, or use.
3. Use—Determine the frailty of the item. It may be used occasionally, or frequently depending upon the condition of the item. Observe all care labels and wash immediately after use and observe proper stain removal techniques for fiber content.
4. Store—Be sure to remove all dust and soil before storage. Store in well ventilated areas that will be dark most of the time to avoid mildew and light damage. Choose areas without extremes or variations in temperature and humidity. Attics, basements and closets along outside walls are poor choices for storage areas. Make sure storage areas are clean. Check regularly for signs of infestation. Cedar chests, or chests and trunks made of wood or lined with paper give off an acid that is harmful to some dyes and fibers, especially cotton and linen. Pack in acid-free boxes after wrapping in well washed sheets or cotton fabric or line containers with acid free paper. Launder the storage fabric yearly as well as clean the storage area. Refold the item frequently to prevent permanent creases. Pad the folds with rolled fabric or crumpled tissue paper. For special items such as wedding dresses, some dry cleaners offer special storage boxes. Call for information.
5. Display—The method of display can vary greatly from hanging on the wall or sitting out to being framed. Keep these safeguards in mind. Your display area should have little variation in temperature and humidity. Avoid locations near heating vents, fireplaces, or outside walls. Use areas that don’t collect dust or pollution. Avoid areas close to kitchen where oils, vapors and foods accumulate. Keep fibers away from areas where people or animals would touch the item. Keep away from fluorescent lighting and away from direct sunlight. Keep light levels low to control light damage.

Pass out Heirloom Inventory Sheet and pencils. Have members complete the heirloom inventory for any heirloom they brought. Encourage them to complete the inventory of other heirlooms they have in their homes.

The leader also may want to make copies of these pages on care, storage and display for members to keep in their member notebook.
Washing fragile textiles can be a unique challenge. Since most articles that fall into this category are most generally older items, here are guidelines to observe for wet-cleaning undyed cotton and linen.

1. Carefully identify the material to determine that the thread and decorations, as well as the basic fabric, are of undyed cotton or linen. If any elements are not of undyed linen or cotton, remove before beginning the described cleaning process, if possible.

2. The article should be kept perfectly flat throughout the entire cleaning process. If this is not possible because of the size of the article, fold with as few folds as possible.

3. Be sure to note any weak or worn areas in the material that might require especially careful treatment. Soaking increases the fabric weight and will put extra strain on already weakened areas.

4. To give support to a weak fabric or areas, sandwich the fabric between two layers of fiberglass screening for the entire cleaning process (available through hardware stores). This works especially well for handkerchiefs and collars.

5. Lace and crochet pieces will come out flatter and with a more finished appearance if sewn between the screens. Sew article to one piece of screen, carefully passing the needle between the fabric’s warp and weft to prevent the needle from damaging the yarns. Stitches should be at least half an inch long to spread support. Reinforce weak spots with extra stitches. After you have secured the fabric to the screen backing, stitch the second piece of protective screening in place.

6. Remove all loose dust and soil from the fabric before submersing it. Do this gently, by hand brushing or using a low-powered hand vacuum cleaner. If using vacuum, place article flat below the screen.

7. Start by soaking in plain distilled water at room temperature for a half hour. Lower the article into the container of water—never pour or run water on top of an antique fabric. Support the item by the screens when lifting and lowering into the water or solution.

8. If the article is not clean as desired, soak in a solution made with 1 ounce of non-ionic detergent to 1 gallon distilled water that has been warmed to 95°F. Use a thermometer to test the temperature. If unsure of detergent formulation, contact producers. Soak the article in the solution until the water appears dirty, then rise it in distilled water. If the article still appears to be unclean, repeat the soaking and rising process. Do not squeeze or agitate the fabric while it is soaking. When the article no longer appears soiled, rinse it thoroughly (five to six times) in distilled water that is the same temperature as the wash solution.

9. For cleaning extremely fragile or lightly soiled fabrics, soak the article in a solution containing neutral soap (e.g. Neutragena). As a cleaning agent, soap is not as effective as a detergent, but is easier on the fabric. For solution, dissolve about ⅛ of a 3½ ounces cake of neutral soap in 1 cup of distilled water; then add 1 ounce of this to

Often, it will be necessary to wash fragile textiles. Using a cotton or linen textile, you may want to demonstrate how to wash it as follows.
Leader Notes

1 gallon of distilled water. The rinsing process must be more thorough than when you use a detergent solution.

10. If after washing, stains or discolorations (yellowness) remain, you may want to try a bleaching solution to remove these. Mix ½ ounce of 30 percent hydrogen peroxide to 1 quart of distilled water at room temperature. To hasten the bleaching process and to stabilize the hydrogen peroxide, add ¼ ounce of sodium perborate (all available in drugstores). Soak the article in the solution for no more than 5 minutes; then lay the saturated piece out flat on a sheet of clear plastic and fold lightly so that the entire piece is enclosed without severe creasing. Leave folded until the desired whiteness is reached. Most bleaching will occur in the first hour. Some items may need to lay longer but limit time to no more than three hours. After bleaching, unwrap and rinse thoroughly in distilled water at room temperature.

11. After rinsing, lay the fabric flat on an undyed cloth towel and allow to dry at room temperature. Do not use paper towels for this absorbing process as they may contain harmful acid.

DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What happened when you began to explore heirlooms with your family?
Q. How easy was it to identify a textile heirloom in your home?

Process:
Q. Why is this important to you or your family?
Q. How can heirloom textiles fit into a person’s lifestyle?
A. They can be used for intended purpose, displayed, remade into another item, shared at family gatherings or given to a museum for display.

Generalize:
Q. Can you think of textiles that are associated with various ethnic groups and would likely be heirlooms to future generations?
A. Native American Indian beaded garments and blankets, Chinese silk pants suits, Egyptian cotton sharis, Irish lace curtains and Shetland wool sweaters.
Q. What did you learn about yourself through this activity?

Apply:
Q. What do textile heirlooms tell us about human nature?
A. The need to create, to have a separate but common identity to others, national-racial-cultural pride, our need for tradition, our need to link the past and future.

Q. What other non-textile heirlooms such as antique furniture, etc., does your family have, and how will you care for these items?
GOING FURTHER:
• Attend area museums that feature textile works, quilt shows, or art galleries that contain textile art.
• Have members volunteer to clean and restore heirloom pieces at a museum or for the elderly (be sure to inform persons that the process does contain risk for fragile and old items and results cannot be guaranteed) as a public service project.
• Look through magazines for ethnic styles that remind us of special cultures or people.

REFERENCES:
Quilt Conservation, Cooperative Extension Service, Manhattan, Kansas 66506 (C-632), Reprinted with permission through Cooperative Extension Service, University of Maryland, Margaret T. Ordonez author
How to Wet-Clean Undyed Cotton and Linen, Smithsonian Institution, Office of Museum Programs, Washington, D.C. 20560

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What Members Will Learn . . .

ABOUT THE PROJECT:
- Career opportunities in fabric care and maintenance
- Education required to secure positions in this field

ABOUT THEMSELVES:
- 4-H projects can lead to future careers
- Career planning is a critical skill requiring goal setting and decision-making

Materials, Resources Needed:
- Pencils
- Copies of Member Handout and Activity Sheet

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:

As you begin to search for occupations in which you are interested too often we define our roles to those with which we are familiar. This can result in a premature decision that does not match your interests or abilities with the chosen field of study. It is quite common for young adults to switch occupation interests numerous times before graduation from college or trade school. Today, I would like to share with you some areas of study or opportunity that you may be unaware of.

We are going to look at careers in the field of textile care and maintenance. As you will see, there are numerous avenues of study or on the job training that will provide for a career in this field. You may be surprised to find out that there are jobs available for those who like to interact with people, as well as those who prefer to work alone. Big, as well as small firms, employ persons and special interests such as math, science, computer, history, marketing, business and education are all in demand. So as we talk about these today see what jobs sound exciting to you and you may be on the road to “loving” your job someday.

Leader Notes

Have members sit in a comfortable place facing each other to facilitate interaction.
Have each member introduce themselves if they don’t know each other and state one occupation that interests them and why. You begin.

Pass out copies of the Member Handout, “Careers in Fabric Care and Maintenance,” and review with members.

Work with each member to complete the Activity Sheet, “Marketing You.” Meet at a later time after the questionnaire has been processed to determine possible interests and directions to develop members’ interests.
Leader Notes

DIALOGUE FOR CRITICAL THINKING:
Share:
Q. How did it feel to complete the interest survey?

Process:
Q. What two things are important to you as you consider a career selection?
A. Answers will vary.

Q. What other jobs do you think may be interesting in these areas that were not mentioned?
A. Answers will vary.

Generalize:
Q. What did you learn or re-learn about goal setting and self evaluation through this lesson?

Q. Would being physically challenged stop someone from pursuing any of these careers?
A. Blindness may if around lots of mechanical equipment, members may have more ideas.

Apply:
Q. How can you use what was learned today to other situations?

Q. How has this activity stimulated you to “look beyond the obvious” when considering alternatives?

GOING FURTHER:
• Have textile career professional(s) as guest speaker or go to place of work to tell members about their career.
• Attend college or vo-tech open house that offer course work in these areas.
• Have members write a job description around their interests, and skills let others guess what the job is.
• Invite parents to attend project meeting or tour.
• Encourage local school counselors to have material about textile careers for handout to youth.
• Write or call the International Fabricare Institute to request a packet of careers in the care and maintenance of clothing and textiles (see reference at end of this lesson).
• Write and order the resource “Marketing You” from the National 4-H Council (see reference at end of this lesson). It has additional activities about identifying personal strengths, goals, and developing a resume.
• Write to Coordinator, Academics and Career Information Center, 14, Holton Hall, Kansas State University, Manhattan, Kansas 66506, 913-532-7494, for more information on career exploration and majors. DISCOVER is a computer-based system that is available.
REFERENCES:
Textile Chemistry Program, Kansas State University, Department of Clothing, Textiles, and Interior Design, KSU, Manhattan, Kansas 66506
Exploring Career Choices
International Fabricare Institute, 12251 Tech Road, Silver Springs, Maryland 20904, 301-622-1900
National 4-H Council, “Marketing You,” 1995, National Center for Workforce Preparation, 7100 Connecticut Ave., Chevy Chase, Maryland 20815-4999
Academic and Career Information Center, Holton Hall, Room 14, Kansas State University, Manhattan, Kansas 66506, 913-532-7494, e-mail tafra@ksuvm.ksu.edu

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Household Equipment and Appliances—This includes many specialized jobs in the design and marketing of major equipment systems and appliances for the home. These include heating and cooling systems, solar energy, laundry systems, refrigerators, stoves, home computer systems, home entertainment systems, and other major appliances. Some typical jobs are:

- Appliance Information Specialist
- Utility Family and Consumer Scientist
- Utility Consumer Information Specialist
- Appliance Consultant
- Appliance Marketing Manager
- Manager of Training and Demonstrations
- Industrial Designer
- Human Factors Engineer
- Product Designer
- Technical Service Representative
- Sales Representative

Some of these jobs may not require advanced study, however, many will. You may be required to take many marketing or design classes to meet the job requirements. Or, if consumer education is the area of interest, many education classes may appear in the basic classroom study.

Textile Technology—Working with plant, animal, and synthetic fibers to devise improved methods of making new or better textile products. Some more specific types of technology include:

- Fiber Technologists
- Textile chemists
- Production Technologists

All of these jobs require advanced study. Use of chemistry, statistics, and computers are usually required. These jobs include duties, such as analyzing samples for strength, durability, absorbency, color fastness, resistance to flame, chemicals, shrinking, soil, mildew, insects, wrinkles and keeping records about such testing. Chemists weigh and mix dyes to standard formulas and oversee the operations such as dyeing, finishing, and printing, usually done by computer. Production technologists set product standards and test at each stage. Quality control is important, a hole, flaw or color streak can ruin fabric. Technologists search for better ways in which to make textile products less damaging to the environment. They research nontoxic chemicals and dyes, and less wasteful, energy-saving production methods and machinery. They may also function as company representatives at trade shows and other special events. The majority of jobs are in the southeast-Atlantic states do to the huge textile manufacturing base in this area. However, more companies (especially smaller, newer ones) are beginning to locate in the Midwest.
CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE AND MAINTENANCE
Member Handout

Careers in Fabric Care and Maintenance, continued

Cleaning Products Technology—These jobs would be quite comparable with those above. Advanced degrees would be required with emphasis in chemistry, math, computer, marketing, business and perhaps education.

Typical jobs include:
- Chemical Technologist
- Sales Representative
- Marketing Representative
- Consumer Liaison

These positions would deal from new product formulation, research and testing, to advising consumers and the textile industry how to use new products. These may be products from new soaps and detergents, to stain removers, spray on soil or water repellents, water softeners and other chemicals for use in wet or dry cleaning.

Some careers that may not require advanced degrees, but do require some training are those of commercial cleaning outlets such a laundries, drycleaners, and upholstery and carpet cleaning businesses. A good way to test your interest is to apply for a job in these businesses to gain some experience. These are growing times for such operations. With the longer wear-life of textiles, more routine and special cleaning is needed to extend the quality of many textile items.

Other careers such as Extension specialists and consumer spokespersons are available to those with good speaking and writing skills. Don’t overlook a favorite passion of yours and how it complements textiles to give a unique job that is quite original. If you love history, specialize in textile history. Jobs may be available in museums and art galleries that specialize in restoring or dating textile articles. Countless other jobs are available to the person with a real passion for their profession. Look first at what you want in a job. Then, evaluate your skills and weaknesses, check for job compatibility with your interests. The closer the match, the closer you are to finding a job that will be a joy for you to show up for each day.
CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

Marketing You

“Learning by doing” is the principle on which 4-H is founded. As you have participated in 4-H, and perhaps in other activities, you have acquired knowledge and skills related to your interests. Many of these skills are transferable—you can use them to help you achieve other goals you may have, such as gaining admission to a college or other post-secondary school, getting a job, or qualifying for a scholarship program. It may take some thought to pin down and describe your skills and the accomplishments, but the time you spend on this exercise will pay off in helping you to reach your larger goals.

Think of yourself as a detective solving a mystery—the mystery of who you are and what you have to offer at the moment.

Skills Assessment Worksheet
We have designed a worksheet to help you explore your experiences and accomplishments and to identify those skills that will be most useful to you in higher education and in the workforce. On the worksheet, these skills appear in five clusters, called Workforce Competencies. These competencies include Resources, Interpersonal, Information, Systems, and Technology.

You will find that some of these clusters and skills appeal to you more than others. This is normal and is, in fact, important to know in planning for education, training, and choosing a career. Vocational psychologists have found that the only good predictor of how successful somebody will be in a particular career is how much interest they have in the work they have chosen—in a word, their motivation. So pay close attention to your preferences!

Following the workforce competencies are three more sets of skills, called Foundational Skills. These are skills that everyone in the workforce will need to succeed, regardless of their field of work.

Using the Self-Assessment Worksheet
Materials You Will Need. Before you begin, you will need to gather some materials. If you have been keeping a portfolio, you will already have most of what you need at hand. If not, gather as many of the following items as you can:

- Project records and other records
- Awards and certificates
- Programs or materials from conferences or workshops you attended
- Scrapbooks, newspaper clippings, or other reports of accomplishments
- Report cards
- Club minutes

You will also need about a dozen sheets of scratch paper and a pen or pencil.

Printed with permission from National 4-H Council.
Writing Your Stories. Begin by looking through your portfolio or other materials you have gathered, and think back over your 4-H and school career. What have been your most enjoyable and satisfying experiences or accomplishments? Jot down as many as you can think of in a sentence or two on a piece of scratch paper. Try to list at least 10. If you have trouble thinking of this many, think about your years in school one by one. What did you learn? What did you do with your family? What outside activities did you participate in? Did you win any contests or awards?

Pick the experience or accomplishment that seems most important to you now. On a fresh sheet of paper, write it out as a brief story—no more than two or three paragraphs. Focus first on the task you performed. This could be a problem you solved, a challenge you overcame, or something you mastered or produced or created. Then think about how you performed the task, and what tools or means you used. Did you get people to help you, or did you get hold of important information? Did you use tools or technology, create a system, or work with resources such as time or money? Finally, what was the outcome? How did things change because you succeeded? Did you receive tangible recognition, such as an award? Did you gain confidence or a sense of achievement?

Here is an example of a story that is too short: The time I organized my 4-H group to adopt and clean up a park and we won a prize from the mayor for beautification. Here’s the same story in a usable form:

Last year, I organized my 4-H group to clean up our neighborhood park. There were no trees or plantings, the benches were broken, and there was a lot of trash lying around. I talked to the City Parks Department, which knew about the park’s condition but had no money to fix it. Then I went to a Citizens Association to ask for their help, and they formed a committee to work with our 4-H group.

We planned a neighborhood clean-up day. Our 4-H members made flyers to put up in local stores and hand out door to door. Thirty people showed up and worked for four hours. The Citizens Association committee chairman and I invited the local newspaper to cover the clean-up, and a reporter interviewed us. I mentioned that our 4-H group was planning a bake sale to raise money for trees and grass, and the newspaper printed it. A big nursery called the Citizens Association to see if they could donate some plantings, and a local garden club offered to help. A hardware store heard about it and donated new benches. And our bake sale made more than $400.

Now the park is clean and inviting. More kids play there and families bring picnics. Next year, the Citizens Association will put in a softball diamond and backstop. Because of our work, the mayor gave our 4-H group a plaque and a $100 prize for neighborhood beautification, and the Citizens Association sponsored a thank-you dinner for us.

Identifying Your Skills. After you have written your first story, you are ready to identify the skills you used. Look at the worksheet on the following pages. Along the side, you will see the skills clusters called Workforce Competencies and Foundational Skills, and the individual skills that belong to each. Across the top, you will see a series of blank diagonal lines. Write a short title for your story on the first blank line, as has been done for the “Neighborhood Park Clean-Up” example.
CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

**Marketing You, continued**

Read each skill and ask yourself, “Did I use this skill in my story?” If you did, color, or place a check mark, in the block for it in your story column. Look at the “Neighborhood Park Clean-Up” example.

When you are done, take a fresh sheet of scratch paper and write a story about another significant project or experience on your list. Enter its title on your Skills Assessment Worksheet, and identify the skills you used in the second story. Continue until you have completed at least five, but no more than seven stories.

When you have completed all your stories and filled in the worksheet, look at the skills and skill clusters listed under Workforce Competencies. Count the number of times each skill has been used (that is, count the number of times you colored in a box for that skill) and write this number next to the skill. Take a piece of scratch paper, and list the 10 skills you used most often. From that list of 10, choose the five skills you most enjoyed using and list them in order of preference, beginning with the one you liked best.

Look at the Workforce Competencies again. Do three or more of your favorite skills fall into one competency—Interpersonal, for example? If so, you may have a flair for projects and jobs that require a high degree of this competency. You may want to explore careers and majors with this in mind. If your favorite skills are spread out over most or all of the competencies, don’t worry. Your interests may not have jelled yet, or it may be that the projects or experiences you found significant required a variety of skills. If you use the skills assessment process over a number of years, you should find your interests becoming clearer.

Take one more sheet of scratch paper—this is the last!—and write down the first of your five favorite skills. Look back at the stories in which you used that skill, and write a sentence about how you used it and what you accomplished in each story. For example, let us say that the favorite skill of the writer of “Neighborhood Clean-Up” turned out to be “Exercises Leadership.” She might say, “Persuaded my 4-H group and the Board of the Citizens Association to co-sponsor a neighborhood park clean-up project. Organized the project, including a clean-up day and a bake sale.” Now think once more about your favorite skill. Now that you’ve identified it, can you find evidence of it elsewhere in your life? If so, write it down.

Write down the “evidence” for each of your five favorite skills from your stories and other recollections. (This is called demonstrating a skill.)

*Your Basic Skills Check-Up. Look at the Foundational Skills you have checked. These skills don’t go on your resume, but you will need all of them in the future. Are there any that you don’t seem to be using, or feel uncomfortable about? If so, talk to your 4-H counselor, a teacher, or a parent. You may well have that skill and be unaware of it. Or you may need to learn and practice a skill such as speaking or self-management. Building your basic skills now will enhance your employability, confidence, and job and school performance in the years ahead.*
CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

The Self-Assessment Worksheet

<table>
<thead>
<tr>
<th>WORKFORCE COMPETENCIES</th>
<th>Neighborhood Park Cleanup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources: Identifies, organizes, plans, and allocates resources</td>
<td>✓</td>
</tr>
<tr>
<td>Time-selects goal-relevant activities and ranks them, allocates time, prepares and follows schedules</td>
<td>✓</td>
</tr>
<tr>
<td>Money-uses or prepares budgets, makes forecasts, keeps records, prepares and follows schedules</td>
<td>✓</td>
</tr>
<tr>
<td>Material &amp; facilities—acquires, stores, allocates, uses materials or space efficiently</td>
<td>✓</td>
</tr>
<tr>
<td>Human resources—assesses skills and distributes work accordingly, evaluates performance, provides feedback</td>
<td>✓</td>
</tr>
<tr>
<td>Interpersonal: Works with others</td>
<td></td>
</tr>
<tr>
<td>Participates as a member of a team—contributes to group effort</td>
<td>✓</td>
</tr>
<tr>
<td>Teaches others new skills</td>
<td></td>
</tr>
<tr>
<td>Serves clients/customers—works to satisfy customers’ expectations</td>
<td></td>
</tr>
<tr>
<td>Exercises leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies</td>
<td>✓</td>
</tr>
<tr>
<td>Negotiates—works toward agreements involving exchange of resources, resolves divergent interests</td>
<td>✓</td>
</tr>
<tr>
<td>Works with diversity—works well with men and women from diverse backgrounds</td>
<td></td>
</tr>
<tr>
<td>Information: Acquires and uses information</td>
<td></td>
</tr>
<tr>
<td>Acquires and evaluates information</td>
<td>✓</td>
</tr>
<tr>
<td>Organizes and maintains information</td>
<td></td>
</tr>
<tr>
<td>Interprets and communicates information</td>
<td>✓</td>
</tr>
<tr>
<td>Uses computers to process information</td>
<td></td>
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</tbody>
</table>
CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

The Self-Assessment Worksheet, continued

NOTE: Lay this page over the preceding page, lining up columns, so you can see the title of the story you are working on.

<table>
<thead>
<tr>
<th>WORKFORCE COMPETENCIES</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Systems: Understands complex relationships</strong></td>
<td></td>
</tr>
<tr>
<td>Understands systems—knows how social, organizational, or technological systems work; operates effectively with them</td>
<td>✓</td>
</tr>
<tr>
<td>Monitors and corrects performance—distinguishes trends, predicts impact on system operations, diagnoses deviations in systems’ performance, corrects malfunctions</td>
<td></td>
</tr>
<tr>
<td>Improves or designs systems—suggests modification to existing systems, develops new or alternative systems to improve performance</td>
<td></td>
</tr>
<tr>
<td><strong>Technology: Works with a variety of technologies</strong></td>
<td></td>
</tr>
<tr>
<td>Selects technology—chooses procedures, tools, or equipment, including computers and related technologies</td>
<td></td>
</tr>
<tr>
<td>Applies technology to task—understands overall intent and proper procedures for setup and operation of equipment</td>
<td></td>
</tr>
<tr>
<td>Maintains and troubleshoots equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies</td>
<td></td>
</tr>
</tbody>
</table>

| FOUNDATIONAL SKILLS | | |
|---------------------|------------------|
| **Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, speaks** | | |
| Reading—locates, understands, and interprets written information in manuals, graphs, and schedules, and the like | | |
| Writing—communicates thoughts, ideas, information, and messages in writing; and creates letters, directions, manuals, reports, graphs, and flow charts, etc. | ✓ | |
| Arithmetic/Mathematics—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques | ✓ | |
#### CAREERS IN FABRIC CARE AND MAINTENANCE
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

**The Self-Assessment Worksheet, continued**

NOTE: Lay this page over the preceding pages, lining up columns, so you can see the title of the story you are working on.

<table>
<thead>
<tr>
<th>FOUNDATIONAL SKILLS</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Listening</strong>—receives, attends to, interprets, and responds to verbal messages and other cues</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Speaking</strong>—organizes ideas and communicates orally</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Thinking Skills:</strong> Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, reasons</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Creative Thinking</strong>—generates new ideas</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Decision Making</strong>—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Problem Solving</strong>—recognizes problems, devises and implements plan of action</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Seeing Things in the Mind’s Eye</strong>—orGANizes and processes symbols, pictures, graphs, objects, and other information</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Knowing How to Learn</strong>—uses efficient learning techniques to acquire and apply new knowledge and skills technologies</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Reasoning</strong>—discovers a rule or principle underlying the relationship between two or more objects, uses it to solve a problem</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Personal Qualities:</strong> Displays responsibility, self-esteem, sociability, self-management, integrity and honesty</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Responsibility</strong>—exerts a high level of effort and perseveres towards goal attainment</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Self-Esteem</strong>—believes in own self-worth and maintains a positive view of self</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Sociability</strong>—demonstrates understanding of friendliness, adaptability, empathy, and politeness in group settings</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Self-Management</strong>—assesses self accurately, sets personal goals, monitors progress, and exhibits self-control</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Integrity/Honesty</strong>—chooses ethical courses of action</td>
<td>✓</td>
</tr>
</tbody>
</table>
Make-up of Soaps and Detergents
Clothing & Textiles, Level IV, Care and Maintenance

What Members Will Learn . . .

ABOUT THE PROJECT:
• The chemical make-up of laundry cleaning agents
• The purpose of the ingredients in laundry cleaners
• Why producers change product formulations

ABOUT THEMSELVES:
• How to make wise decisions when choosing a laundry product
• How to apply scientific principles to other areas
• How to be active, responsive consumers of products

Materials Needed:
• One quart glass jar for each member
• Soap
• Each member needs to bring 2 cups of their family’s tap water.
• Clock or timer
• Copies of Activity Sheets, Detergent and laundry quiz (optional only if using the “Clothing Care” video
• Various detergents and other laundry aides with ingredient labels
• Pencils
• Ruler or tape measure

Optional:
• Learning Seed Video “Clothing Care,” available to check out from Area Extension Offices and Department of Communications Media Center, Umberger Hall, Kansas State University
• VHS Tape player and television

ACTIVITY TIME NEEDED: 30 MINUTES (WITH VIDEO 45 TO 50 MINUTES)

ACTIVITY:
In the last 10 years we have seen huge changes in the soaps and detergents that are available for us to buy. Almost weekly a new product or commercial is added about new improved formulas. It is often difficult as a consumer to know what to believe.

It may sound like you need a degree in chemistry to do laundry, but we will simplify things so you can have a good idea just what those ingredients do toward helping you to achieve a clean fresh wash. Detergent manufacturers are constantly reformulating their products in response to consumer comments, polls and buying practices. In addition, as new chemical technologies are discovered they are often applied to achieve even better cleaning power.

Leader Notes
Have all members sit around a table so they can see the detergents, and other laundry aids you have. Have these items set out when members arrive. If they don’t know each other, allow time for introductions and have each member read the ingredients on one item label. You begin.
The laundry cleaning product business is a multibillion dollar business. As with any large company, new research and development is an ongoing part of these companies. These companies often know more about our household than we do. For instance, they know our time is more limited than ever and we do not want products that require a lot of mixing, measuring, or special instructions. They know we are making more choices with a strong feel for the environmental impact of the products and packaging. They know we are using more warm and cool water temperatures than a few years ago and we wash fewer loads that are larger in quantity. In addition, as the population begins to shift to older Americans, the ease of package opening and measurement will be a factor that will become important in the decision to buy. Consider also the environmental concern over limited water supplies in many areas and the effect that may have on laundry. Couple all this with the water hardness or softness of various water supplies in the country and you have an idea of the monumental task that detergent manufacturers are facing as they try to meet the demands of the public for items that clean an ever widening variety of fibers, finishes, and dyes.

Let’s begin by discussing the categories of ingredients in most detergents. Soap is the organic cleaning agent that holds dirt in suspension so that it can be carried away in water. Soap for many soils and water hardness is not a very effective cleaner. Consequently, most consumers rely on detergents—these are a synthetic alternative to soap.

Surfactants—These are the common active ingredient in detergents. These act as wetting agents that loosen dirt and suspend it in water. They may be anionic or nonionic—carrying an electrical charge.

Builders—These aid the cleaning benefit of the surfactant. They may function to bind with a mineral to then allow the surfactant to bind with the soil. Names such as carbonate are builders.

Chemical Cleaning Additives—These are chemical additives such as color safe bleaches and water softeners that aid cleaning. Names such as sodium carbonate (this replaced phosphates that were found to harm the environment), sodium borate, sodium bicarbonate, CMC are some you may find.

Other additives—These are ingredients that may replace another laundry product that would be added seperately, such as fabric softeners, optical brighteners, bleach and perfumes. In addition, silicates are added to protect metal parts of the washer from corrosion.

All of these ingredients are found in both powder and liquid forms of detergents. Consumer preference is basically responsible for which brand purchased. Liquid detergents have recently become a larger portion of the market share, mainly due to the fact that they are easy to use in pretreatment of stains. Also, the products that have softeners or bleaches added are increasing in market shares probably because of their ease and time-saving factor.
Most pre-soaks and spot and stain removers are concentrated formulas of basic detergent formulas that may contain special cleaning agents for special staining problems. Observe all label directions for best outcome.

If your suds last four minutes or more, you don’t need a water softener. Little or no suds, or if suds break up in less than four minutes time means you will need to soften your water. Numerous softening agents, from powders to expensive mechanical systems, can be used.

If you need a water softener, buy a detergent with a softener built in. Read labels to determine if softener is there. If your water is very hard, you may need to use an additional water softener product. Or your family may want to invest in a water softening system.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. What happened when you tested your home water with the soap?
- Q. What is the active cleaning agent in detergents?
  - A. Surfactants.

**Process:**
- Q. Why is it important to understand how hard or soft your water is?
- Q. How can your choice of detergents save you time?
  - A. By choosing a detergent with fabric softeners and bleaches which saves time in measuring, adding and shopping for these items.

**Generalize:**
- Q. What did you learn about making good decisions from this activity?
- Q. How did you go about making this decision?

**Apply:**
- Q. How do manufacturers know if you are or are not satisfied with their products?
  - A. If you choose to purchase their product, consumer comments received by mail or phone (addresses and phone are usually listed on box), consumer surveys, if you choose to purchase another product.

- Q. What power do you have as a consumer to make a difference? As a group, develop a consumer letter praising or criticizing a product.

At this time, pass out quiz if you viewed the video. Have members complete the quiz. Have all members pour 2 cups of their home water in a 1 quart glass jar. Add 1 teaspoon Soap (not detergent). Shake the solution hard. Measure the amount of suds and length of time suds last.
GOING FURTHER:

- Test different detergents and soaps in varying water temperatures and hardness on the same soil.
- Go to a store to compare detergent labels for contents and compare price of detergents with added ingredients to the cost of adding them yourself.
- Tour hospital or care home laundry that is especially designed to control cross infection of persons via laundry. Investigate how laundry products affect wear and care of different types of fabrics.
- Investigate the proper laundry procedures for clothing used while applying pesticides. Make a display or report.

REFERENCES:

- Clothing Care Video, The Learning Seed, 330 Telser Road, Lake Zurich, Illinois 60047, 1-800-634-4941
- Detergents in Depth, 1989 Video Conference, Ohio Extension Service and The Soap and Detergent Association
- Clothing Care, Capable Kids Can, Deanna Munson, Textile Specialist, Justin Hall, Kansas State University, Manhattan, Kansas 66506
- Laundering Guide, MF-1014, 1991, Deanna Munson, Textile Specialist, Justin Hall, Kansas State University, Manhattan, Kansas 66506

Author:

Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:

Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
Determining Water Hardness

As you learned in this lesson, you should know your water hardness to successfully do your family’s wash. Complete the following activity to determine if you need to soften your water.

- Fill a jar with two cups water you brought from home. (You may want to warm it slightly in the microwave.)
- Add one teaspoon soap (not detergent).
- Shake the solution hard.
- Measure the amount of suds and the length of time suds last.

If suds last four minutes or more, you don’t need a water softener. Little or no suds, or if suds break up in less than four minutes means you will need to soften your water.

If you need a water softener, buy a detergent with a softener built in. Read detergent labels to determine if softener is there. If your water is very hard, you may need to use an additional water softener product. Be sure to tell your parents how hard you found the water to be. They may want to invest in a water softening system for your household water supply.

You are now ready to do the family laundry. Don’t forget to practice all that you learned. Good luck!

<table>
<thead>
<tr>
<th>Member’s name</th>
<th>Amount of suds in inches</th>
<th>Length of time suds last in seconds or minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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53-Clothing & Textiles, Level IV
MAKE-UP OF SOAPS AND DETERGENTS
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

Detergent and Laundry Quiz

Questions About the Video, “Clothing Care, Part 1” by The Learning Seed

Any or all of the following substances are found in detergents. What is the purpose of each of these ingredients?

Using the list of answers, choose the best description for each ingredient.

1. aqueous solution
2. anionic and nonionic surfactants
3. sodium carbonate
4. perfume
5. sodium silicate
6. whiteners and brighteners
7. phosphate
8. fabric softener

Answers to choose from:
   a. an agent that softens water and the only ingredient that can be used in place of phosphate, but is not as effective as phosphate
   b. agent to protect metal parts of washer from corrosion
   c. liquid
   d. ingredient found in some detergents that softens fabric, and reduces static and dirt attraction
   e. a chemical-fluorescent dye to give whiteness
   f. fragrance
   g. softens hard water and boosts cleaning power but are banned in some areas due to environmental concerns.
   h. basic chemistry common to all detergents that loosens the dirt

9. Your water is no more than moderately hard. According to the label, the detergent you’re using contains water softener. You (will, will not) need to use an additional water softening product.

10. Soaps (do, do not) clean as well as a detergent.

11. Soaps (do, do not) work in hard water.

12. Soaps (do, do not) work in cold water.

13. Which is better to use to clean a synthetic fabric? (soap, detergent)
MAKE-UP OF SOAPS AND DETERGENTS
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

Detergent and Laundry Quiz, continued

14. You can tell a soap from a detergent by the words (alkali or alkaline, surfactant) on the label of soap.

15. You can learn more about a detergent from a (label, TV ad).

16. A front loader washer should use (high, low) sudsing detergents.

17. Cashmere articles should be laundered by hand in a (hot water detergent, cold water detergent).

18. You should (rub, soak) dirt out of a garment.

19. How can you tell if you have hard water?

20. Do you have to use a prewash to remove ring around the collar? (yes, no) If your answer was “no,” tell what you would use.

21. What can you use in the laundry to prevent static buildup in fabrics?

22. Applying liquid detergent, or a paste of powdered detergent to a stain or heavily soiled area (may, will never) be as effective as using a laundry booster.

23. What should you do with dried mud on clothing before laundering the item?

24. If you regularly wash heavily soiled clothing, you (should, should not) use a detergent labeled heavy duty.

25. What should you do with collar stays in shirts when you launder the shirt?

26. How do you decide how to separate clothes to prepare the laundry?

27. A care label gives (one cleaning method, all the cleaning methods) that will successfully clean the product.

28. If a care label gives no information as to what temperature to use to wash your clothes, what temperature can you safely use?

29. If a label says nothing about ironing, will you need to iron the garment? (yes, no)

30. If the label says nothing about bleach, can you safely use bleach? (yes, no)

31. Is there any difference in how you would care for something labeled machine wash permanent press as compared to something labeled machine wash durable press? (yes, no)

32. Wool garments are weaker when (wet, dry).

33. A label that says machine wash separately means wash the garment (alone, in a small load of delicates).
MAKE-UP OF SOAPS AND DETERGENTS
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

Detergent and Laundry Quiz, continued

34. Why should clothing be removed from a dryer as soon as they are dry?

35. Can you safely wash leather garments? If your answer was "no," how should you care for them?

After watching the video as many times as necessary and answering these questions to the best of your ability, you are now ready to check your work against the answers listed on the back of this page. Score your work. Subtract one point for each question missed.

If you scored 31 or better, you are ready to do your family’s wash. If your score was 30 or lower, you need to view the video again paying particular attention to the areas you missed before proceeding with the family laundry.
What Members Will Learn . . .

ABOUT THE PROJECT:
• How to properly remove more difficult stains

ABOUT THEMSELVES:
• How to take personal responsibility for care of textiles
• Desire for life-long learning and the personal satisfaction resulting from new skills

Materials Needed:
• Copies of Member Handout
• “Clothing Care” and/or “Stain 2” computer software and compatible hardware, available from Kansas County Extension office or Area Extension Office

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY:

Stains pose an unusually difficult problem on many items. Often, proper treatment can make the difference between a little extra effort and the loss of a prized garment or household item. Prompt treatment is always recommended. Today, we will be discussing treatment of special hard to remove stains.

As you would expect, the first thing for you to do is to identify the stain. Second, identify the care label with methods of care. If the label states “dry clean only” then take immediately to the cleaners and inform them where and what the stain is. Different finishes, or stain resistant properties may require special handling, so the care label is your best guide to refer to for proper laundering procedures.

If the stain is unknown you may want to take it to the dry cleaners for them to attempt stain removal. These professionals have attended special training for advanced stain removal and you may feel more comfortable in allowing them to attempt to remove the stain. This may be especially true if the area is large, fabric is bulky, fragile, or expensive.

Stain removal basics are found in Level II, “Mystery Stain Removal.” This discusses techniques and general classes of stains such as greasy and non-greasy.
Leader Notes

DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What was one of the most important things you learned from this lesson? Why?

Q. Why is it important to know how to remove stains?
A. It is economically beneficial to remove stains instead of replacing stained items.

Q. What are some items you need to have on hand for stain removal?
A. Prewash spot and stain remover, dry cleaning fluid, enzyme presoak, detergent, ammonia, rust removers, white vinegar, and waterless hand cleaner.

Process:
Q. If you used the computer software, what similar experiences have you had in using computer-assisted learning?

Q. How can stains be prevented?
A. Wear protective items when stains may happen (aprons, paint shirts). Cover rugs and upholstery when painting. Keep dirt at the front door. Remove shoes at the door, wash dirty hands upon entry after outside play. Use napkins at meal times. Other suggestions may be made.

Generalize:
Q. What did you learn about responsibility, consequences, or using community resources form this lesson?

Apply:
Q. Discuss how you see the computer or other technology being used in your home in the future.

GOING FURTHER:
- Visit dry cleaners to view stain removal on premises.
- Experiment with carpet samples, removal of various stains.
- Volunteer to help at a local shelter to remove stains and repair clothing for homeless persons.
REFERENCES:
Stain 2 and Stain and Odor Removal For Washable Fabrics, computer software, Bette Jo Dedic, Cooperative Extension Service, University of Kentucky, Lexington, Kentucky 40506-0050
Clo Care, Care and Maintenance of Clothing, computer software, 1990, Linda Heston, Clothing and Textile Specialist, University of Florida
Spot and Stain Removal for Washable Fabrics, C-368, Cooperative Extension Service, Kansas State University

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The use of brand names in this, or any other lesson, does not imply endorsement of that product.
Advanced Stain Removal

There is more than one way to remove most stains. As you refer to various stain removal charts, manuals, or computer software you will find the following as well as additional methods and solvents recommended. If one procedure is unsuccessful, try another. Always attempt to remove the stain promptly and never dry in a dryer till the stain is totally removed.

Today, we will deal with some harder to remove, yet fairly common stains.

- Ballpoint, Felt-tip Marker solvent sensitive type—Sponge with dry cleaner solvent until all bleeding stops. Follow same procedure using alcohol and/or glycerine. If stain still remains, apply detergent. Let stand overnight. Apply pre-wash and launder. Launder with bleach safe for fabric. Some may be impossible to remove.

- Felt-tip Marker non-permanent or water sensitive type—Rinse under cold water to remove as much as possible. Wash using detergent, hot water and bleach safe for the fabric. Some may be impossible to remove.

- Blood—Rinse fresh stains in cold water and rub with bar soap or liquid detergent. If dried—scrape off as much as possible—soak remaining stain in warm water using product with enzymes. Launder. If stain remains—rewash using bleach safe for fabric.


- Chocolate—Pretreat by soaking or prewashing in warm water using laundry product with enzymes. If oily stain remains, treat with dry cleaning solvent or waterless hand cleaner. Rinse, apply detergent to stain. Launder using hot water and bleach safe for the fabric.

- Cosmetics: Water-based—Dampen and rub with bar soap/liquid laundry detergent/or paste of granular detergent. Launder.


- Dye transfer from non-color fast garment—May be impossible to remove. Use commercial remover (Rit™, Tintex™) on white fabric, or chlorine or oxygen bleach if safe for fabric. It may help to soak in enzyme presoak.

- Mustard—Scrape off excess with dull knife. Sponge with dry cleaning fluid or apply prewash soil and stain remover. Rinse and launder using bleach and hottest water safe for the fabric.

- Paint: Oil Base—Remove quickly before paint dries. (If not possible, wrap in plastic or air-tight wrap) If a particular solvent is recommended as a thinner treat with that solvent. If a specific solvent is not recommended use mineral spirits. Rinse. Pretreat with stain remover, bar soap or detergent. Rinse and launder. Commercial pencil mark removers are available from some quilt supply stores.

- Paint: Water Base—Quickly sponge with water, rub in detergent and rinse. If allowed to dry, stain is permanent. Also try sponging with dry cleaning solvent or waterless hand cream.

- Pencil—Erase as much as possible with a soft eraser. Sponge with dry-cleaning fluid. Or, apply prewash spot and stain remover. Launder. Commercial pencil mark removers are available from some quilt supply stores.

- Perspiration Odor—Dampen area and rub with bar of deodorant soap and launder. Or, pretreat and launder with detergent formulated for odor control (Surf™, Dash™). Or, soak overnight in 4 teaspoons of salt to 1 quart warm water. Rinse and launder.
Advanced Stain Removal, continued

- Perspiration Stain—Soak with water and enzyme presoak 15 to 30 minutes. Launder with hottest temperature and bleach safe for garment. If garment color has changed due to stains, apply a few drops ammonia to new stains or a few drops white vinegar to old stains to restore color.
- Rust—Use rust remover, following directions on package. Do not use chlorine bleach on stains or in water that contains large amounts of iron. Buy removers that are formulated for the color of fabric stained or for white fabric (Whink RoVer™). For stain of a few spots use the above method. For rust deposit on entire wash load—launder with commercial remover available at appliance service companies (Maytag-RoVer).
- Scorch—Wash using detergent, hot water and chlorine bleach, if safe for fabric. Otherwise, soak in oxygen bleach and hot water, then launder. Severe scorch is permanent.
- Soft drinks—Sponge or rinse promptly in cool water. Pretreat by: soaking with laundry enzyme product. Or, rubbing with liquid detergent or paste of granular detergent. Launder using chlorine bleach if safe for fabric (if not use oxygen bleach). Or, soak in solution of 1 quart warm water, ½ teaspoon detergent and 1 Tablespoon white vinegar for 15 minutes. Rinse with water. If the stain remains, sponge with rubbing alcohol. Rinse and launder. Add chlorine bleach if safe for fabric NOTE—Permanent yellowing may result if allowed to stay on fabric.
- Soiled collars, cuffs—Treat with prewash spot and stain remover. Apply detergent to soil and launder.
- Urine—Use enzyme presoak or soak in cool water. Rub detergent into stain. Launder with bleach safe for the fabric discolors, sponge with ammonia and rinse. If the stain remains, sponge with white vinegar. Use a color remover if safe for fabric. Read and follow directions carefully.
- Vomit, Feces—Use enzyme presoak as directed. Launder using chlorine bleach if safe for the fabric. Otherwise use oxygen bleach.
What Members Will Learn . . .

ABOUT THE PROJECT:
- How to compare prices when shopping for appliances
- The feature factors to compare when shopping for appliances
- Basic upkeep of cleaning equipment to increase equipment life and efficiency

ABOUT THEMSELVES:
- The importance of wise consumer decision-making skills
- How to prioritize price and feature factors to determine the best appliance for their individual/family needs
- How to find and use consumer information for decision-making

Materials Needed:
- Copies of Activity Sheet
- Pencils
- Consumer comparison magazine or similar guide
- Local appliance store
- Manufacturer’s Specifications for models being evaluated
- Manufacturer’s 800 numbers, use 800 numbers to order from manufacturers several weeks ahead of project meeting so you have appropriate specifications available for members (check local Extension office or call the 800 information directory.)

ACTIVITY TIME NEEDED: 45 MINUTES TO 60 MINUTES

ACTIVITY:
As you can see, a major appliance purchase is not a simple matter these days. The choice of brands, features, colors, and price can be overwhelming for a consumer wanting to purchase an appliance. Today, we are going to try to help you walk through the steps of what to do when you are looking to buy a piece of major equipment.

I will pass out the comparison sheets and give each member or team a family structure to purchase for. Look for features this family will need. Examples are:

- Newlyweds, both working, $2,000 in savings, renting, monthly income generous, one monthly car payment. Average loads per week = 5.
- Single woman, working, no savings, renting, car payment, income adequate but can never save, lives in small apartment. Average loads per week = 4 small.

Leader Notes
Have all members meet at a local appliance or department store that carries a variety of brands and features of several types of appliances. Be sure to notify store owner or manager during the week ahead to make sure that they will welcome your group. If the store is having a sale, be sure to bring the ad with you for further comparison. Before the lesson, choose an appliance to compare, either washers or dryers.
Family with 2 small children, owns home, one working parent, one parent at home, income very limited, lives in area with water rationing. Average loads per week = 8.

Family with 4 children, two in high school, one junior high and one grade school, father farms, mother works full time, owns home, income adequate but not excessive. Average loads per week = 15.

Widower, lives alone in apartment, income plentiful, no outstanding bills. Average loads per week = 3 small.

Family with two children in college, income very tight, paying on home, two cars, college loans, and credit card loans, both spouses work full time. Average loads per week = 6 (plus 6 more when kids come home).

Disabled single man, income limited, works part time in factory (conditions that soil clothing greatly), renting small house, has large medical bills. Average loads per week = 4 small.

Take your appliance comparison sheet and list the features you will be looking for. Don’t forget to look five to 10 years ahead and what the family may look like then. Hopefully, the appliance averages at least an eight-year life.

Now that you know the features you are looking for, find the price range of the different models with those features. Next, let’s look at the cost per year to use those models. The energy cost is the cost to run the appliance. Now look at warranties and what they cover and for how long. Ask where servicing will be done if on sight or if you must bring it to an approved service center. Then look in the consumer guide for frequency of repairs and other comments that may make a difference to you.

Now that you have done all this, figure how much your first, second and third choices would cost.

Another common question you will face may be extended service contracts. These are contracts a consumer signs and pays for to secure an extended warranty or a more comprehensive contract for service than the current warranty offers. Be sure to read the contract closely, more often than not the service contract will not save you money. Also check if the store will discount for a trade in and if a delivery fee is charged. Also check on all state and local taxes because these can add a considerable amount to the total cost of the appliance. Next, consider the type of purchasing you are considering from cash to financing. If you use credit be sure to compare the cost of several methods of financing. Much money can be saved by comparing finance charges.

Once a consumer knows the three models, prices, and terms of purchase then they can do a competitive evaluation of retailers, and specificaion sheet to get the best price possible.

This is the same process you use for appliance purchase from irons, to washers and dryers, to refrigerators, in fact for almost any purchase, appliance or not.
Once you get your new appliance you should immediately fill in and mail the owners registration cards. These are kept on file at the manufacturer and used in the case of recalls and to gain more information about the type of person who buys their product. Next, read the instruction guides. Make any notes that will help you as you use the appliance and put them in the areas that the appliance will be used. Then put the instruction booklet and warranty information along with the receipt of purchase in a file or safe place for keeping. Note that most instructions have a section devoted to troubleshooting. Refer to these as problems arise.

Proper care and maintenance will prolong the life of the appliance. Look in the instruction booklet for things such as how often and where to find lint traps to dump, type of products to use in service and for cleaning. Keep all areas around washer and dryer clear so access can be gained and a fire hazard is not created. Make sure the correct electrical outlet is provided for any electrical appliance. Repair cords at the first sign of wear and observe any other precautions mentioned.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. What happened when you completed your comparison worksheet?

Q. How did it feel to take on the role of a particular family?

**Process:**
Q. What differences in appliance features did each family have in their selection of appliance?
A. Answers will vary.

Q. How might the American consumer differ from someone living in another country?
A. More items available, in some countries the average worker cannot afford, some populations do not have access to electricity, indoor plumbing, or living spaces large enough to keep these appliances.

**Generalize:**
Q. What costs above point of purchase price do you need to consider in the overall price of an appliance?
A. Price of energy to run the appliance, sales taxes, delivery charges, average cost and frequency of repair. Additional—extended service contracts and finance charges.

Q. What did you learn about wise consumer decision-making in this lesson?

**Apply:**
Q. How could you use this same process to purchase other major items for youself or your family?
GOING FURTHER:
• Provide work sheets to calculate finance charges for various methods of financing including saving—minus laundry cost during the saving period.
• Attend business showcase where new appliances are featured, have sale representatives discuss new item features and marketing strategies.
• Invite appliance repairman to demonstrate one or two easy common repairs that can be done by owners.
• Have members bring washer or dryer instruction booklets to meeting and read to see if proper maintenance is now being done in their home.

REFERENCES:

Maytag, Consumer Education Department, One Dependability Square, Newton, Iowa, 50208

*Laundry Water Temperature Guide*, Form 396 YG
*The Maytag Laundering Guide*, Form 60 FE
*Appliance Usage Handbook*, Form 393 YG
*Automatic Washer*, Form 211YG
*Dryer*, Form 212YG

*Consumer Choice—Product Warranties and Service Contracts*, 1993, EHU-lesson, Extension Home Economics, Kansas State University

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Appliance Comparison Worksheet

### Clothes Washer

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<thead>
<tr>
<th>Category</th>
<th>Make/Model</th>
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<tbody>
<tr>
<td>A. Construction material</td>
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<tr>
<td>B. Washing cycles</td>
<td></td>
<td></td>
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<tr>
<td>C. Tub capacity</td>
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<tr>
<td>D. Energy usage</td>
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<td>E. Water usage</td>
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<td>F. Warranty</td>
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<td>G. Price</td>
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<tr>
<td>H. Trade-in value</td>
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<tr>
<td>I. Delivery fee</td>
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<tr>
<td>J. Taxes</td>
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<tr>
<td>K. Finance charge</td>
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### Clothes Dryer

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<tbody>
<tr>
<td>A. Construction material</td>
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<tr>
<td>B. Fabric cycles</td>
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<td>C. Control for fabric temperatures</td>
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<tr>
<td>D. Energy usage</td>
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<tr>
<td>E. Venting options (if gas)</td>
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<tr>
<td>F. Warranty</td>
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Fiber Labeling Laws

What Members Will Learn . . .

ABOUT THE PROJECT:
- Current labeling laws that are now in place
- Where to complain if textiles are improperly labeled
- When and where they can expect to find fiber information on textiles they purchase

ABOUT THEMSELVES:
- How to use these laws to make better consumer decisions

Materials Needed:
- The leader may want to make copies of the next three pages of the lesson to use as a member handout
- Various garments to check for fiber labeling compliance—one per member (many retailers will probably be glad to loan garments for this purpose.)

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

There are labels found on almost every textile product purchased from a retail outlet. These labels cause additional expense to textile producers. Do any of you know why producers add these labels? (Because it is a federal law.) Today, we are going to discuss labels required to be in or on textile products.

Earlier we discussed the laws requiring care labeling (see Care Labels lesson, Level II). In addition to the care label you may find a brand label in a garment. The brand label is optional and is not required by law. If a producer has a brand that is easily recognized or has earned consumer regard they will often choose to include the brand label to increase sales. There are other labels required by law—fiber or fur content labels. These laws require certain textile products to be labeled truthfully and carry certain specific information.

These laws include the Textiles Fiber Products Identification Act (TFPIA), Wool Products Labeling Act (WPLA), Fur Products Labeling Act (FPLA), and in addition a flammability regulation for children’s sleepwear has special labeling requirements.
Leader Notes

Textile Fiber Products Identification Act: This act affects the broadest scope of textile products. Let’s take a look at what this law mandates to producers.

1. Three items must be identified on a label at the point of purchase.
   a. Fiber content.
   b. Name or RN number of the product manufacturer. (see #7 below)
   c. Country where product was made.
2. This act covers wearing apparel, draperies, floor coverings, bedding, and household furnishings.
3. The fiber generic name must be given if that fiber is found in at least 5 percent of the total. Trade names such as Trevira (polyester), Lycra (spandex), etc., may be used. If trade names are used then the generic name of the fiber must appear with it in type of equal size.
   a. If only one type of fiber is used either “all” or “100 percent” may be used with the fiber name.
   b. If two or more fibers are used the label must state the percent in order of amount by weight. If any fiber is less than 5 percent it must be listed as “other fiber,” unless the fiber has a structural purpose. If you see an amount greater than 5 percent labeled as “other fiber” then two or more fibers are used in less than 5 percent by weight but when totaled equal more than 5 percent.
   c. Fiber added for structural purposes need not be identified—interfacings, paddings, etc. If added for functional purposes, fiber must be stated.
4. Items that can be sold apart like suit jacket and skirt must be labeled separately, if sold together requires only one label.
5. Fibers used in ornamentation or decoration need not be identified other than “exclusive of ornamentation” if below 5 percent of the total fiber weight of the garment.
   a. Fiber used in trims, braids, ribbons, etc. need not be identified unless they cover more than 15 percent of surface area of the garment.
6. Piece good fabrics must have the fiber content printed on the end of the bolt, on a tag attached to the bolt, or both.
7. The manufacturers name or RN must be attached so the consumer knows who is responsible for the merchandise.
   a. The RN is a registered number issued by the Federal Trade Commission to qualified firms residing in the U.S. This takes up less space. Examples of such numbers are RN27163 or WPL10415.
   b. These numbers are not confidential and can be found by purchasing a directory from P.S. Press, 620 Herndon Parkway, Herndon, VA 22070, or phoning (703) 481-8559. Also, your county Family and Consumer Sciences agent can find the information for you.
   c. RN numbers may be withdrawn and canceled by the FTC if the number has been obtained or used improperly.
8. The label must be affixed to a prominent location in the garment, such as the neck line, between shoulder seams or near the brand label as long as its size is equal to the brand label.
9. The country of origin label is to inform consumers the place where the textile product was processed.
a. For a garment with a neck area this label must be placed in this area.
b. If a garment is domestically made the label must be securely attached until sold or can be permanently attached if the manufacturer desires.
c. If the garment is imported the label must be permanently attached.
d. If a product is made in the United States from U.S. materials, it must be labeled “Made in the U.S.A.” If made in the United States but not from U.S. materials, it must be labeled “Made in the U.S.A. of imported fabric,” or “Made in (foreign country), finished in U.S.A.”

10. Mail order products must include fiber content, whether an item is imported or made in the United States and whether it is a combination of domestic and foreign made material.

11. Imported products are covered by this Act and it is the responsibility of the importer to see that the products are properly labeled.
   a. The FTC has the authority to inspect, analyze, test, and examine products for mislabeling. Offenders can be tried in a court of law and may be fined or imprisoned if found guilty.
   b. If a consumer cannot find a fiber content label, contact the retailer then report the findings to the Federal Trade Commission, Division of Enforcement, Bureau of Consumer Protection, 6th and Pennsylvania Avenue, N.W., Washington, DC 20580, or phone (202) 326-2966.
   c. The United States customs service regulates imported textile products.
   d. Manufacturers must retain records of their products for three years.

Wool Products Labeling Act:
1. The amount of wool, recycled wool or other generic fibers must be listed by percent of the total weight as long as it makes up at least 5 percent of the total weight of the item.
   a. If a product contains both new and recycled wool, the percentage by weight and classification must be stated, even if it is less than 5 percent.
2. The fiber content of the wool product’s component parts must be listed separately on the label.
3. The hair or fur fiber of any animal other than sheep, lamb, angora goat, cashmere goat, camel, alpaca, llama, and vicuna are listed as “Fur Fiber.”
4. The manufacturer’s registered identification number is required on all labels and is seen with a WPL prefix number.
5. The stamp, tag, or label with the above information must be affixed in a conspicuous area and securely attached at the point of purchase.

Fur Products Labeling Act:
1. Fur is defined as any animal skin with hair, fleece, or fur fibers that are not intended for conversion to leather by removing any of the above.
2. No trade names, coined names, or words descriptive of a fur may be used in labeling, advertising, or selling a fur product.
   a. The label must state the name of the animal that produced the fur, the presence of used fur, and disclosure of bleached or dyed fur.
3. Used fur is any fur that has been worn by an ultimate consumer previously.
4. The fiber content of all materials is listed on the same side of the label, such as interlining and trim.
5. If a fur product is composed of furs with different countries of origin, they are listed in order, based on the country’s fur which has the greatest surface area.
6. When marketing, the required label should have minimum dimensions of 1 3/4 inches × 2 3/4 inches. It must be securely attached so that it will remain on the product until it is purchased by the consumer.
7. If the item consists of two or more parts to be sold together, each part must be labeled separately.

Note: In addition, both the Wool and Fur Acts must list the RN or product manufacturer name and country of manufacturing. Both acts are enforced by the Federal Trade Commission and apply to imported products.

DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What did you see when you began comparing all the different labels?
Q. How did you feel knowing there are so many laws and regulations? Why did you feel this way?
A. Overwhelmed, surprised, satisfied, etc.

Q. What is a RN number and where do you get one?
A. It is a registered number from the Federal Trade Commission for a manufacturer to produce a textile or fur product.

Process:
Q. Haven’t you always wondered why pillows and other upholstered items have the label that says, “It is illegal to remove this label?” Explain why you now understand.

Q. What should you do if you find an item with no fiber label?
A. Take it back to the retailer if possible, contact The Federal Trade Commission.

Generalize:
Q. Why is fiber content important on a label for a consumer to see?
A. Assist in purchasing decisions, to know expected garment performance, information about quality of garment, truth in advertising, and accountability of manufacturer.

Q. What did you learn about consumer decision making from this lesson?
Apply:
Q. What are other federal or state regulations you can think of that are designed to inform and/or protect the consumer?
A. Building codes, food labels, children’s car seats, etc.

GOING FURTHER:
- Invite a customs official to discuss the inspection procedure.
- Invite a fish and game official to discuss the poaching of live animals for their fur or skin.
- Visit store to examine labels to see what is in compliance.
- Write a letter to complain about a misrepresentation in a mail order catalog, if one is noted. If not, write a hypothetical one.

REFERENCES:
A Consumer’s Care Guide to Apparel Products, Consumer Advisory Committee for the American Apparel Manufacturers Association, 2500 Wilson Boulevard Suite 301, Arlington, Virginia 22201
Federal Trade Commission, 6th and Pennsylvania Ave NW, Washington, DC 20580, 202-326-3034

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What Members Will Learn . . .

ABOUT THE PROJECT:
- The immense size and scope that textiles and their production play in the global market
- Some of the many factors that affect the textile market
- How those factors affect the textile industry and the countries of the world

ABOUT THEMSELVES:
- How their consumer decisions have consequences as a global citizen
- How personal values influence consumer decisions

Materials Needed:
- Copies of Member Handout and Activity Sheet
- Public access to the World Wide Web, such as public library

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

It is easy to have a narrow-minded view of textile production. We often see only a small segment of this industry. We have been surrounded by textiles our entire lives and often we think of textiles as buying or making clothing (or home furnishings) to fill our needs. Today, we are going to take a look at the rest of the textile industry. The one that extends even past our national borders. I want you to begin to understand how complex and massive this industry is. In addition, you will learn that politics and economics are as much a part of textiles as fibers, colors, and consumers.

Food, clothing, and shelter are the basic needs of every person on earth. Textiles then are required by everyone. In addition to textiles as body coverings, they are also used in shelter and food requirements. As we grasp the scope of textile usage it is of little surprise that the creating of fibers, the use of fibers, and the disposal of them, make up a gigantic industry. This industry encircles the globe. Textiles do in the purest sense “link” the peoples of the world.

In the United States, the textile industry employs over 2 million people—more than any other industry. This is true of many other countries as well. The textile industry is influenced by many factors. We will discuss some of these factors to help you begin to understand how complex the global textile market is.

Leader Notes

Have members sit in a comfortable area.
Allow time for introductions if members do not know each other. Have members state a country other than the United States that produces fibers or apparel.
You begin.
Leader Notes

**Factor one**—Stage of textile development a country is in.

There are concrete stages that countries pass through with regard to their textile development. By knowing these stages and understanding that these stages have historically coincided with the overall economic development of a country, we can at any one time predict where that country is in its development. This provides a “snapshot” of where a country or region is in its overall industrial development.

As we look at these stages, the terms of “developing” and “developed” countries are used. This refers to the overall industrial development of a particular country (amount of factories and automation). As a general rule, the developed countries have higher per capita (per person) income yet spend less (percent of income) on textiles. Where as the developing countries have lower per capita incomes, yet spend more (percent of income) on textiles. This means that the residents of developing nations have very little disposable income (income to spend for things other than the basics of food, clothing, and shelter).

Once we know the stage a country is in with regard to its ability to produce textiles we can then look at the other factors that have an effect upon where and why textiles are produced.

**Factor two**—Employment and wages.

As wages increase in developed countries there comes a point that firms look to countries with cheap labor to keep the production costs of apparel down. As more automation is installed, workers lose jobs and those who remain become more productive requiring less workers.

**Factor three**—Type of apparel produced.

More apparel production tends to be done in less developed countries because the volume of inexpensive clothing needed requires inexpensive labor. Since less developed nations are more populated, they require more volume of apparel items and thus respond to meet these needs. More sophisticated apparel tends to be produced in developed countries. Their consumers can afford a higher price tag and will pay to keep up with the new trends requiring new technology.

**Factor four**—Consumer trends.

Consumer buying patterns play a major role in the industry response and the overall well being of the textile industry. When countries with a high disposable income have an economic downturn it can have devastating effects on the economies in other countries that depend on their textile exports for an influx of dollars. There are two measures of consumer consumption the industry tracks:

1. Fiber consumption—the measure of fiber demand (per person) of a country. This has shown little overall growth in the past decade. This is measured in pounds. For example the world fiber consumption per person is 15 pounds. The person fiber consumption for developed nations is 37.9 pounds. In developing nations it is 7.3 pounds per person. The United States averages 52.5 pounds per person when Africa averages 3.3 pounds per person.
2. Consumer expenditure data—the measure of demand for finished textile products. In developed countries this has slowed since 1987. This tells us the amount of change in spending that consumers initiate on clothing purchases. This is the best guide available by which the textile industry monitors its health.

Another important piece of data is the per household percent of income spent on clothing. This ranges from 15 percent in developing countries to 4 percent in some developed nations (United States is 6 percent).

Factor five—Trade and marketing.

The last important factor that affects the textile industry is the trade and marketing dynamics. As markets expand to include the entire world many factors complicate the process of buying and selling of textiles. Here are some of the major factors:

1. Type of economy—countries may vary from a “free market” to a centrally controlled economy. Each has it’s own particular set of objectives and regulations.
2. Natural resources—not all countries have equal natural resources. Certain climates are conducive to special fiber production. Access to harbors make textile factories more economical to operate due to the amount of importing and exporting done. This can increase profits.
3. Technology—having the newest technology usually keeps a country on the edge with regards to demands of consumers. This also brings a premium price to the new special items. New technology can reduce labor costs by increasing productivity or reducing the amount of workers required to complete a task.
4. Specialization—if a country develops a speciality product it may corner a more secure market share in the textile industry. Example British woolens, Italian shoes, etc.
5. Political objectives—these may be internal or external. Governments in some countries may impose tariffs or trade sanctions, offer government subsidies, or openly invest in the textile systems, depending on their own objectives—governments make unstable business partners.
6. Exchange rate—the current cost to exchange one country’s currency to another country’s currency. This fluctuates constantly and can swing greatly. The higher the value of a particular country’s currency the more it can buy from others.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. Name three factors that affect trade of textiles.
A. Exchange rate, type of economies of the countries involved, natural resources, technology and specialization, political objectives.

Q. If you were able to connect on the World Wide Web, what happened?

Process:
Q. Why do so many developing nations enter the textile market?
A. It requires little cost, can be done in homes, raw goods are usually accessible, may be a way to export an item for some dollars.

Q. What surprised you the most about the answers to your questionnaire?

Q. Why do you think you received the answers you did? What’s unique about that country’s economy that affect textile issues?

Generalize:
Q. What stage of the textile industry do you think the United States is in and why?
A. Full maturity—loss of textile jobs, however, not a loss of firms. We have become highly automated with technology being developed and exported.

Q. How did this activity help you understand and appreciate our economy?

Apply:
Q. Just as there are specific stages in textile development in a country’s economy, many life situations have stages. List and discuss some of these situations.
A. Examples—life cycle stages; stages of butterfly development; seasonal stages, etc.

GOING FURTHER:
- Study the political and economic structure of a less developed nation, look especially at its textile industry.
- Trace the production of an item good—from fiber harvest to consumer purchase of the apparel item.
- If a speaker from another country is available, ask them to talk about textiles and their country.
- Trace a specialty item and its history.
Six Stages of Textile Development

The stages of textile development are as follows:

1. Embryonic stage—in poorest counties. Production is done as cottage industries (in home fabrication). Usually for domestic consumption (in country purchase), the fabrication is of simple garments from natural fibers. Production of natural fibers for export may be one of the few ways these countries can earn foreign exchange. Problems—land may be used to produce fibers that are more urgently needed for food production; labor used in production has low wages and tends not to increase per capita income; changes in weather patterns can cause devastating economic conditions.

2. Early export of apparel—seen in poor countries that have abundant, cheap labor. This labor is used for component assembly or labor intensive items (extensive hand stitching). Resulting products are usually at the low end of price range and quality is not predictable. Since additional labor can add to the price of garments many poor countries begin at this stage then move into the next stage. Problems—assembling components from other countries (which demands buying the components); workers paid low wages and are not well trained; usually results in little to export.

3. More advanced fabric and apparel production—seen in advancing developing countries. The fabric improves in volume, quality and sophistication. Some sizeable exporting may begin. Some garments may be made from components and fabrics produced “in country.” In general, the textile companies become larger, more diversified, more concentrated and more internationally active. At this stage the benefits outweigh the problems. Companies at this stage often receive great assistance technically, from manufacturers in developed countries.

4. The “Golden Age”—enlarged, sophisticated fabric and apparel production is seen in these countries. The domestic industry can supply a good portion of fiber and fabric needed for garment and other textile products. The industry tends to diversify its product mix and becomes a powerful, international market force. Manufacturers tend to reach out to other countries to form joint production arrangements.

5. Full maturity—employment in textiles starts to decline (not necessarily output). Most of the drop is usually seen in the apparel sector. The industry is more concentrated—products and processes are at a fairly advanced level. There is a increased production of manufactured fibers and complex mill products. Because of the high degree of technology this stage seems to be capital intensive (requires large sums of money). Large investments are needed to automate mills that will then offset cheap labor advantages seen in less developed nations.

6. Significant decline—the number of firms as well as the number of workers decrease. A trade deficit then occurs in many segments of the textile market, particularly apparel and fabric. Some segments may remain healthy while others decline or are replaced by “out of country” companies.
World Wide Web


2. Research and identify a World Wide Web address of a country and a city you want to work with.

3. Provide your World Wide Web internet address so your international youth partner(s) can respond back to you. Send the answers to your global partner(s) for the same information as you request from them.

4. Develop a sample questionnaire to discover clothing and textile issues that interest you, for example:
   A. If you want to purchase a pair of blue jeans, where would you go to find the market to buy the jeans?
   B. How much would the jeans cost?
   C. How, and how often, would you care (laundry) the jeans?
   D. How long would you wear this pair of jeans before you discard them? How would you discard them?
   E. If you do not wear jeans in your country, what kind of garment would you select instead?
What Members Will Learn . . .

ABOUT THE PROJECT:
• New fibers that will be commonly used in the coming years
• How technology is creating new fabrics from existing fibers

ABOUT THEMSELVES:
• Life-long learning is critical to keep up with rapidly changing technology
• How to apply new information in making wise consumer choices

Materials Needed:
• Field trip to local fabric or apparel store that carries some of the newest textile fabrics, for example—microdenier fabric, and apparel with special finishes
• The Textile Update '93 Ring Binder, Notebooks 1 and 2 available for checkout from the area Extension office (you will need to get this reserved through your county office ahead of time. It contains samples of some of these fabrics.)

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY:

We have talked in the past about fibers, yarns, finishes and fabrications. What we are going to discuss today are some of the newest textile products and ones that you'll be dealing with more frequently in the future.

The textile market is one that has to be very responsive to consumer demands. The market can change almost overnight—due to a change in trends or an economic upswing or downturn. Because of this, textile companies need to be able to respond to the color trends as well as functional factors that consumers desire. Following are a list of the most important factors that consumers like to see in a high quality fabric.

1. A trendy color.
2. Soft fabric with enough stiffness to drape.
3. Durability—item lasts after many wearings and still appears new.
4. Easy care that consists of machine washing and drying with little to no ironing.
5. Reasonable price.
6. Comfortable to wear—allows for vapor evaporation and lightweight.
7. Special functions that are desired—stretch for active wear, water repellent in outer gear, etc.

New technology is allowing the textile industry to meet these objectives and so to create fabrics that contain many of the above characteristics, thus

Leader Notes

Have members meet at a local fabric or apparel store. Make arrangements ahead of time with the store owner/manager. Question the owner so you know which new fabrics are available for viewing. Allow the owner/manager to discuss these with the members if she/he feels comfortable doing so. Otherwise, you will lead the lesson. Have members introduce themselves and the number of years in 4-H if the owner/manager will be leading the lesson.
being more responsive to the wants of the consumer. As with all new
technology the initial items tend to be in the expensive price range which,
if a product preforms well, is then perceived to be “worth the price.” As
the supply becomes more available, if demand is created, price may drop
as suppliers compete for dollars or as the cost of the technology is re-
gained by manufacturers.

One of the most exciting introductions into the textile market are
microdenier fabrics. If you recall how filaments are measured, the method
of measure is in deniers. “Microdeniers” is descriptive of the size of the
filaments used to make these yarns. Silk measures 1 denier. Microdenier
filaments are smaller than silk. They can measure from .01 to .7 deniers.
1 to .7 deniers are lower quality yarns. .01 to .4 denier yarns are high
quality. One pound of “microdenier” fibers will stretch around the equator.
Because they must be produced to be this small they must be of man-made
products.

Characteristics of microdeniers are a soft and silky hand due to their
fineness. They are easy to care for because they are made from easy care
man-made fibers, and strong as well. They can be either woven or knit.
The new technology is expensive—hence they demand a premium price.

Advantages of microdenier fabric:
1. Nice hand.
2. Small size of yarns allows for more dye absorption and more brilliant
colors and sharper prints.
3. Fineness of weave or knit allows for vapor evaporation, yet is small
enough not to allow water molecules to pass through, thus is water
resistant.
4. Easy to care for.
5. Wrinkle and shrink resistant.
6. Can be blended with other fibers.
7. Can be sanded, napped, etc. with minimal loss of strength—because
of high concentration of fibers.

Disadvantages of microdenier fabric:
1. Cost.
2. Requires special construction techniques for successful finished
product.
3. No uniform labeling—prevents knowledge to determine if high or
low quality, or how much is microdenier if blended.
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. How did it feel to compare microdenier to regular fabrics?

Q. Were you surprised to learn about the rapid growth in new textile fibers? Why or why not?

Process:
Q. Can you tell by just looking if a fabric contains microdenier fibers?
   Why?

Generalize:
Q. How will you be able to keep up with technology changes in the future?

Q. Why may microdenier items be “worth the price?”
   A. Longer durability, easy care, increased comfort, etc.

Q. How could these textiles be of use other than in apparel?
   A. In home furnishings, job related uniforms, medical supplies.

Apply:
Q. How would you inform a consumer about a new textile product?
   A. Answers will vary—for example, increased advertising with celebrity endorsement, proving better wear qualities with tests, contests, free samples, discounts of price, etc.

Q. What other ideas do you have for a new textile product?
   A. Answers will vary. UV blocking fabric, that can change color easily (not heat sensitive dyes), etc.

GOING FURTHER:
- Have member make a handout of trade names of microdenier fabrics.
- If samples can be obtained, have members do various stress tests on this versus regular similar content fabric. Keep a notebook of the results.
- Conduct a cost comparison of fibers of the same family in both traditional and microdenier sizes.
REFERENCES:
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What Members Will Learn . . .

ABOUT THE PROJECT:

• Names and uses of some special textile products
• How special textile products are made and their differences from traditional woven or knit fabrics

ABOUT THEMSELVES:

• To challenge themselves with advanced mastery goals
• As members gain understanding of more complex textile products they can apply these principles to other non-textile areas

Materials Needed:

• Samples of as many of the following as possible: (many of these can be found in “The Textile Update ’93 Ring Binder, Notebooks 1 and 2,” available from area Extension office)
  • Aramid
  • Glass
  • Metallic
  • Novoloid
  • RBI
  • Film
  • Foam
  • Coated Fabrics
  • Poromeric Fabrics
  • Fur
  • Felt
  • Bonded or laminated fabric
  • Quilted fabric
  • Suede-like fabric
  • Leather
  • Recycled fabrics

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

Throughout most of the textile curriculum we have focused on understanding wovens and knits and the fabrication process. There are other special textile products that are available. Today, we will explore some of these items, how they are made, and why consumers demand them.

When we say special textile product we are including such items as foam backing for carpets, films used for rain gear, coated fabrics used in all

Leader Notes

Welcome members. Have them sit in a comfortable place. Allow them to introduce themselves to each other if they don’t know each other. Have each of them tell what they think a “special textile product” might be.
weather coats, suede-like fabrics, leather, fur, fiber webs, non-wovens such as felt, quilted fabrics and laminates. All of these are fabricated in a way different from either weaving or knitting.

“Special Products” may include wovens or knits that are made from unusual fibers, like metals, glass, and other manufactured non-traditional fibers.

Let’s look first at fabric that is woven or knit from unusual fibers.

Aramid—This is used to make fabric that is resistant to high temperatures and chemicals, and when strength is needed. This fabric has very good impact and abrasion resistance. Because of these qualities you will find aramid fibers used in many industrial products from (Kevlar) bullet proof vests to cables, brake liners, radial tires, reinforcements for boat hulls and aerospace uses. Nomex is used for firefighters and race car drivers garments and furnishings for aircraft.

Glass—The positive characteristic that makes glass attractive for use in fabrics is that it will not burn. As a result, glass is often used in draperies for institutions such as motels, nursing homes, public buildings and homes. The possibility of tiny broken fibers limits its use in wearing apparel. “Coronizing” is the process where glass is heat set, dyed and finished in one continuous operation. Since glass is brittle, heat setting at 1100°F makes the yarns pliable enough to bend and assume yarn crimp.

Metallic Fibers—A metallic is a manufactured fiber composed of metal, plastic-coated metal, metal-coated plastic, or a core completely covered by metal. Many metals are used in fibers. Gold and silver date back to ancient times and more recently aluminum and stainless steel have been added to the list of metals used in fibers. Uses for these include carpets and operation room or computer production facilities because of their static free characteristics. You will also find metal fabric as tire cord, missile nose cones and in heart surgery.

Novoloid—This is a manufactured fiber that has outstanding flame resistance up to 2500°C. The yarns won’t melt, burn or fuse. It is elastic, resists sunlight, acids and organic solvents. Often used in clothing for occupations dealing with high heat.

PBI—Also a manufactured fiber. Used for items that may be subjected to high heat. PBI will not burn, or melt and has low shrinkage. It remains supple when charred. Found in fabrics used as upholstery in public transportation and public buildings.

As new technologies are researched and developed, more and more special use fibers will be added to the above list. The possibilities are endless.

Next, let’s talk about production methods used to manufacture fabrics that are neither woven or knitted.
Films—Usually made from vinyl or polyurethane solutions. They are cast onto a hot drum and produced as a continuous piece of film. In order to improve their strength and wear quality, they are usually attached to a support fabric for reinforcement. An example might be the covering on a dentist’s chair, a vinyl attached to a strong under fabric.

Foams—Made by incorporating air into an elastic-like substance (usually rubber or polyurethane). This results in bulk and sponginess. Foam is used as carpet backing, underlays, pillow forms, laminated to fabric, shredded and sold as stuffing.

Coated Fabrics—In this process a regular fabric is combined with a film. The fabric provides the support and strength. The film provides protection from water, chemicals and other environmental factors. They are used in window shades, book covers, upholstery, wall coverings, apparel and shoes, luggage, diaper covers, and ditch liners. The coating may be added by several different methods:

1. Lamination—the film is adhered to the fabric by using an adhesive or heated to melt the film to the fabric.
2. Calendering—the preheated fabric and coating mixture are passed between two large cylinders and pressed together.
3. Coating—A fluid mixture of coating is applied to the fabric by knife or roll. The more solid the mixture the less penetration achieved.

Poromeric Fabrics—These are coated or laminate fabrics but classified differently because the coating or laminate film is very fine and microporous (tiny pores like skin pores). They are small enough to allow for the passage of water vapor—but not for liquid water. Consequently, they are waterproof but comfortable to wear because body heat can escape. These are found in active wear because the coating can be applied to a wide variety of fabrics as well as for filters, medical items, and coatings for wires. A popular trade name is “Gore-Tex.”

Suede-like Fabrics—Made from very tiny fibers that have a resin coating and nonfibrous polyurethane applied to them. They are then needle punched (tiny needles penetrate the fabric). The advantage of these fabrics is their easy care when compared to natural suede. A popular tradename is “Ultra-Suede.”

Leather—Processed from the skin and hides of animals, reptiles, fish and birds. The hides vary greatly from animal to animal due to scarring, disease, marking, and other conditions that may happen during a life span. Tanning is the process that hinders decay and softens an otherwise stiff hide. There are several ways to tan. Skins must go through many steps before the desired end use. That accounts for the high price of leather products. Leather is nonseparable but is sometimes split (like slicing a bun) with the top grain or outer side being the most desirable. If the inside (flesh side) of leather is buffed with a coarse emery board—suede is made. NOTE: Solvents will harden leather so it is important that leathers and suedes are cleaned by specialists. Most dry cleaners send these items to a specialist for such cleaning.
Fur—Part of a skin to which hair, fur or fleece is attached. As with leathers, furs can vary greatly in quality. Special care is needed and it is a time consuming process to dress furs (similar to tanning). Because of the special treatment fur demands, it is expensive to keep. Some of the special treatments include: seasonal storage at a furriers with cleaning, avoid sitting on fur, shake rather than brush fur, and be sure to hang furs on a well constructed hanger with plenty of air space to allow for circulation.

Fiberweb Textile—In this process, fibers are not spun or made into yarns. They are laid out to form a web-type pattern. The pattern can be laid out dry, wet, spun out of spinnerets, laced by shooting water through the fibers, or blown when melted on to a conveyer. The webs are then made into fabrics by using needling (a mechanical process), an adhesive or chemical substance, or by heat. Many products from blankets, road bed fabrics, mattress pads and interfacing are fiber web textiles. A trademark name for such a fabric is “Pellon.”

Felt—A fabric that is held together by the interlocking of the scales of wool fabrics. This is a very old method of fabric production. Basically, it involves wetting layers of wool then compressing them by using friction and heat until it shrinks together into a solid piece. Felt has no grain and does not ravel. It is not as strong as woven and knit fabrics.

Multiplex Fabrics—These fabrics combine several primary and or secondary structures into one fabric piece. Examples are quilted fabrics (face fabric, fiberfill and backing), laminates (two layers of fabric adhered with an adhesive or foam).

In addition to special fibers and special ways of forming fabrics, sometimes special textiles are created by simply reversing fibers or fabrics. Fabrics can be recycled by garnetting them back to the fiber as well as actually breaking down fabrics that have been used by consumers and processing these fibers into new fabrics. This may reduce the quality of the end product because the fibers are broken into shorter and more irregular lengths, but using such fabrics reduces the amount of waste that must be disposed of.

Some man-made fiber can be made from recycled plastics. For example, plastic soda bottles can be recycled into a polymer and polyester fiber spun. Because polyester is a synthesized fiber, the polymer derived from recycled soda bottles is the same substance as polymers derived from any other source. Polymer for polyester is commonly derived from petroleum by-products. Recycled polyester is therefore no different quality than new polyester derived from petroleum by-products.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What are some special textile fibers?
A. Glass, metal, aramid, PBI, Novoloid.

Q. What are some special textile fabrications?
A. Felting, bonding (laminate), fiber web, foams, coated and poromeric coating.

Q. What did you see, hear or touch that seemed especially unusual to you? Why?

Process:
Q. Why are leather, suede and furs expensive?
A. Natural products of limited supply. Processing involves many steps, is time and labor intensive.

Q. What processes or issues seemed to occur over and over in this lesson?

Generalize:
Q. What major ideas did you hear that relate to other real world issues?
A. Recycling, environmental concerns, etc.

Apply:
Q. Discuss some of the businesses or industries that use special textile products and how they would be different if this special technology wasn’t available.
A. Examples—law enforcement and bullet proof vests, radial tires for vehicles, wet suits for water divers, etc.

GOING FURTHER:
• Have a person demonstrate tanning process.
• If available, visit industry that does one of the above processes.
• Make felt.
• Have members make a sample book of these unusual methods with explanations and samples. Allow members to research these methods in more detail.
• Have members evaluate one room in a house or business to locate any of the products discussed in this lesson.
REFERENCES:
The Textile Update '93 Ring Binder, Notebooks 1 and 2, Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

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The use of brand names in this, or any other lesson does not imply endorsement.
What Members Will Learn . . .

ABOUT THE PROJECT:
- The textile science field has many possible careers
- Some traits desired by a professional in the textile science field

ABOUT THEMSELVES:
- How to identify personal strengths and set goals for career direction
- Deciding on a career choice is a complex process because of so many possibilities

Materials Needed:
- Copies of Member Handouts and Activity Sheets
- Pencils
- Guest speaker from textile science field, if available

ACTIVITY TIME NEEDED: 30 TO 45 MINUTES

ACTIVITY:
A career choice in the field of textile science involves many activities pertaining to fibers, fabrics, dyes and textile finishing, including product development, product testing, quality control, and technical service to clients. Today, we are going to discuss some of these professions and how you may want to explore some of these as possible career choices for yourself.

Often, persons who are interested in clothing and apparel have a very limited perception of the career choices that are open to them to pursue. The traditional areas of fashion marketing and design are still viable options, however many others exist. We are going to focus on professions in the textile science area for discussion today.

As we look at a textile scientist, the obvious task of research on new textile products comes to mind. This is certainly a part of many scientists’ positions. In addition, a working knowledge of textile chemistry, physics, and processing of textile products (dyeing, printing, finishing, yarn and fabric manufacturing, and textile testing) is required.

The term “textile scientist” is a broad one and usually more specific job titles are used in the textile industry. Let us look at some of these more defined job possibilities.

Leader Notes
- Have members sit in a comfortable place.
- If members do not know each other allow time for each one to introduce themselves.
- Pass out copies of Member Handout, “Jobs for Textile Scientists,” and review with members.
These are some of the particular jobs that are needed in the area of textile science. Within each of these a person may enter the areas of textile testing, quality control, or technical services to clients. In testing and quality control, professionals will perform standard laboratory tests that determine the quality of products during and after manufacturing. Testing is done to ensure that quality meets the organization’s standards. Quality testing is also used to determine when manufacturing is out of control and needs to be corrected. In technical service to clients, major manufacturers have experts they send to textile mills and finishing plants to help them set up processes for manufacturing products. Such technical service representatives must make certain that an organization’s products are used effectively and efficiently by their customers.

In some consumer-oriented careers, in textile science, major retailers and manufacturers hire specialists to evaluate the quality of clothing and textile products for consumer use. These professionals evaluate products from the consumers’ perspective, to ensure that the textile products meet their requirements.

In addition, some positions have educational responsibilities. For instance, following research on caring for fabrics and garments, the results may need to be printed on care tags and labels. Thus, the transfer of scientific information into practical information must be done. Sometimes scientists will work with marketing teams or design teams to try a new design or marketing effort.

How do you know if this might be a career choice for you? In general, those interested in careers in textile science should obtain a foundation in chemistry, physics and mathematics, as well as some engineering. Additional courses should be taken in textile chemistry, weaving, knitting, dyeing, textile finishing, and evaluation. Also, some consumer-oriented courses are needed to learn about consumer needs and demands. Business and design is desirable as well, since art, design, drafting, and marketing are so enmeshed in the textile industry. The undergraduate degree in most cases qualifies one to enter the field of textile science.

The most important personal quality of a good textile scientist is a scientific attitude. They must enjoy working in laboratories. As computers are used in most areas, a good understanding and enjoyment of computer use should be a requirement.

DIALOGUE FOR CRITICAL THINKING:

Share:

Q. How did you feel after reviewing some of the textile science careers?
A. Overwhelmed, excited, etc.

Q. Were you surprised at the results of your personal aptitude questionnaire? Why or why not?
Process:
Q. What career choice might be good for you and why?
A. Answers will vary.

Q. What similar experiences have you had?

Generalize:
Q. Where might you go to find a job in the textile industry?
A. Most jobs are located in the southeast United States, since major textile mills are located there.

Q. What did you learn about planning and goal setting from this activity?

Apply:
Q. Where could you go to receive a degree to prepare you for this field?
A. Kansas State University, North Carolina State University

GOING FURTHER:
- Listen to a professional in this field talk about their job.
- Study different colleges that provide the textile science field.
- Write and order the resource “Marketing You” from the National 4-H Council (see reference at end of this lesson). It has additional activities about identifying personal strengths, goals, and developing a resume.
- Write to Coordinator, Academics and Career Information Center, 14, Holton Hall, Kansas State University, Manhattan, Kansas 66506, 913-532-7494, for more information on career exploration and majors. DISCOVER is a computer-based system that is available.

REFERENCES:
Exploring Career Choices
Textiles, course outline, 1996 CTID, College of Human Ecology, Kansas State University
National 4-H Council, “Marketing You,” 1995, National Center for Workforce Preparation, 7100 Connecticut Ave., Chevy Chase, Maryland 20815-4999
Academic and Career Information Center, Holton Hall, Room 14, Kansas State University, Manhattan, Kansas 66506, 913-532-7494) e-mail trafra@ksuvvm.ksu.edu

Pass out copies of the Member Handout, “Textiles, Bachelors of Science in Clothing & Textiles.” Review and discuss with members the course outline at Kansas State University.
Leader Notes

Author:
Carla Dill, Extension Assistant, and Deanna Munson, Textile Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
CAREERS IN TEXTILE SCIENCE
CLOTHING & TEXTILES, LEVEL IV, TEXTILE SCIENCE
Member Handout

Jobs for Textile Scientists

Product Development Specialist—person who is heavily involved in assessing the needs and wants of consumers and can translate those needs into workable ideas for new products. An initiator who can analyze technology and make it applicable to new textile products. Must be an analytical, practical, problem-solving person who is self-motivated and not easily discouraged. Must be creative and flexible since new ideas and people will be part of the problem-solving team. Must enjoy working alone since considerable time will be spent that way.

Research Specialist—a professional that is very knowledgeable about how to coordinate a laboratory and design a dependable research study. One that is organized, pays attention to detail, follows directions and is accountable. Will spend much time alone or working with a small group. Can handle large quantities of paperwork. May supervise others. Is analytical and a good problem solver.

Textile Laboratory Technician—a person who is employed in a lab setting that is involved in textile research. Some chemistry and textile processing knowledge is desired. An advanced degree may not be needed.

Textile Designer—a person who helps determine how to process fabrics and fibers to get the desired outcome. Needs a good understanding of all aspects of textile processing as well as understanding of consumer demands. Advanced degree needed with good understanding of the sciences of textile processing. Must be a good team member who communicates well. Also a strong understanding of aesthetics and art principles are needed.

Quality Control Specialist—professional who is a strong problem solver. This position is responsible for ensuring that the textile products come out the same each time a process is done. Must be one who pays attention to details, can avoid potential problems from happening, and communicates well. In addition to a strong science background, an understanding of engineering is desirable.

Manager of Textile Testing—a position that requires working with people who carry out textile testing. Needs to be a person who can pay attention to details as well as one who can organize and motivate others. Must be able to take results of testing and apply to ordinary situations that textiles may be subjected to. Needs to have a practical, precise outlook.

Textile Chemist—a professional who understands the interplay of chemistry in the textile field. From manufacturing, to various processing of textiles, this specialist is involved in new products, existing quality control, and relaying this to the consumers to increase satisfaction of textile purchases.

Textile Physicist—similar to the chemist position above, with the expertise being the physics field. Heavy knowledge in physics and textile processing.

Technical Service Representative—a person who understands the technical end of textile production. This representative may be contracted by various processing plants to lend his/her expertise on a specialized procedure or product and the “how” to accomplish it. Often entails travel.
“Learning by doing” is the principle on which 4-H is founded. As you have participated in 4-H, and perhaps in other activities, you have acquired knowledge and skills related to your interests. Many of these skills are transferable—you can use them to help you achieve other goals you may have, such as gaining admission to a college or other post-secondary school, getting a job, or qualifying for a scholarship program. It may take some thought to pin down and describe your skills and accomplishments, but the time you spend on this exercise will pay off in helping you to reach your larger goals.

Think of yourself as a detective solving a mystery—the mystery of who you are and what you have to offer at the moment.

**Skills Assessment Worksheet**
We have designed a worksheet to help you explore your experiences and accomplishments and to identify those skills that will be most useful to you in higher education and in the workforce. On the worksheet, these skills appear in five clusters, called Workforce Competencies. These competencies include Resources, Interpersonal, Information, Systems, and Technology.

You will find that some of these clusters and skills appeal to you more than others. This is normal and is, in fact, important to know in planning for education, training, and choosing a career. Vocational psychologists have found that the only good predictor of how successful somebody will be in a particular career is how much interest they have in the work they have chosen—in a word, their motivation. So pay close attention to your preferences!

Following the workforce competencies are three more sets of skills, called Foundational Skills. These are skills that everyone in the workforce will need to succeed, regardless of their field of work.

**Using the Self-Assessment Worksheet**
*Materials You Will Need.* Before you begin, you will need to gather some materials. If you have been keeping a portfolio, you will already have most of what you need at hand. If not, gather as many of the following items as you can:
- Project records and other records
- Awards and certificates
- Programs or materials from conferences or workshops you attended
- Scrapbooks, newspaper clippings, or other reports of accomplishments
- Report cards
- Club minutes

You will also need about a dozen sheets of scratch paper and a pen or pencil.
**Marketing You, continued**

Writing Your Stories. Begin by looking through your portfolio or other materials you have gathered, and think back over your 4-H and school career. What have been your most enjoyable and satisfying experiences or accomplishments? Jot down as many as you can think of in a sentence or two on a piece of scratch paper. Try to list at least 10. If you have trouble thinking of this many, think about your years in school one by one. What did you learn? What did you do with your family? What outside activities did you participate in? Did you win any contests or awards?

Pick the experience or accomplishment that seems most important to you now. On a fresh sheet of paper, write it out as a brief story—no more than two or three paragraphs. Focus first on the task you performed. This could be a problem you solved, a challenge you overcame, or something you mastered or produced or created. Then think about how you performed the task, and what tools or means you used. Did you get people to help you, or did you obtain important information? Did you use tools or technology, create a system, or work with resources such as time or money? Finally, what was the outcome? How did things change because you succeeded? Did you receive tangible recognition, such as an award? Did you gain confidence or a sense of achievement?

Here is an example of a story that is too short: *The time I organized my 4-H group to adopt and clean up a park and we won a prize from the mayor for beautification.* Here’s the same story in a usable form:

Last year, I organized my 4-H group to clean up our neighborhood park. There were no trees or plantings, the benches were broken, and there was a lot of trash lying around. I talked to the City Parks Department, which knew about the park’s condition but had no money to fix it. Then I went to a Citizens Association to ask for their help, and they formed a committee to work with our 4-H group.

We planned a neighborhood clean-up day. Our 4-H members made flyers to put up in local stores and hand out door to door. Thirty people showed up and worked for four hours. The Citizens Association committee chairman and I invited the local newspaper to cover the clean-up, and a reporter interviewed us. I mentioned that our 4-H group was planning a bake sale to raise money for trees and grass, and the newspaper printed a story. A big nursery called the Citizens Association to see if they could donate some plantings, and a local garden club offered to help. A hardware store heard about it and donated new benches. And our bake sale made more than $400.

Now the park is clean and inviting. More kids play there and families bring picnics. Next year, the Citizens Association will put in a softball diamond and backstop. Because of our work, the mayor gave our 4-H group a plaque and a $100 prize for neighborhood beautification, and the Citizens Association sponsored a thank-you dinner for us.

Identifying Your Skills. After you have written your first story, you are ready to identify the skills you used. Look at the worksheet on the following pages. Along the side, you will see the skills clusters called Workforce Competencies and Foundational Skills, and the individual skills that belong to each. Across the top, you will see a series of blank diagonal lines. Write a short title for your story on the first blank line, as has been done for the “Neighborhood Park Clean-Up” example.
Marketing You, continued

Read each skill and ask yourself, “Did I use this skill in my story?” If you did, color in the block or place a check mark for it in your story column. Look at the “Neighborhood Park Clean-Up” example.

When you are done, take a fresh sheet of scratch paper and write a story about another significant project or experience on your list. Enter its title on your Skills Assessment Worksheet, and identify the skills you used in the second story. Continue until you have completed at least five, but no more than seven stories.

When you have completed all your stories and filled in the worksheet, look at the skills and skill clusters listed under Workforce Competencies. Count the number of times each skill has been used (that is, count the number of times you colored in a box for that skill) and write this number next to the skill. Take a piece of scratch paper, and list the 10 skills you used most often. From that list of 10, choose the five skills you most enjoyed using and list them in order of preference, beginning with the one you liked best.

Look at the Workforce Competencies again. Do three or more of your favorite skills fall into one competency—Interpersonal, for example? If so, you may have a flair for projects and jobs that require a high degree of this competency. You may want to explore careers and majors with this in mind. If your favorite skills are spread out over most or all of the competencies, don’t worry. Your interests may not have jelled yet, or it may be that the projects or experiences you found significant required a variety of skills. If you use the skills assessment process over a number of years, you should find your interests becoming clearer.

Take one more sheet of scratch paper—this is the last!—and write down the first of your five favorite skills. Look back at the stories in which you used that skill, and write a sentence about how you used it and what you accomplished in each story. For example, let us say that the favorite skill of the writer of “Neighborhood Clean-Up” turned out to be “Exercises Leadership.” She might say, “Persuaded my 4-H group and the Board of the Citizens Association to co-sponsor a neighborhood park clean-up project. Organized the project, including a clean-up day and a bake sale.” Now think once more about your favorite skill. Now that you’ve identified it, can you find evidence of it elsewhere in your life? If so, write it down.

Write down the “evidence” for each of your five favorite skills from your stories and other recollections. (This is called demonstrating a skill.)

Your Basic Skills Check-Up. Look at the Foundational Skills you have checked. These skills don’t go on your resume, but you will need all of them in the future. Are there any that you don’t seem to be using, or feel uncomfortable about? If so, talk to your 4-H counselor, a teacher, or a parent. You may well have that skill and be unaware of it. Or you may need to learn and practice a skill such as speaking or self-management. Building your basic skills now will enhance your employability, confidence, and job and school performance in the years ahead.
## The Self-Assessment Worksheet

### WORKFORCE COMPETENCIES

<table>
<thead>
<tr>
<th>Resources: Identifies, organizes, plans, and allocates resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time-selects goal-relevant activities and ranks them, allocates time, prepares and follows schedules</td>
</tr>
<tr>
<td>Money-uses or prepares budgets, makes forecasts, keeps records, prepares and follows schedules</td>
</tr>
<tr>
<td>Material &amp; facilities—acquires, stores, allocates, uses materials or space efficiently</td>
</tr>
<tr>
<td>Human resources—assesses skills and distributes work accordingly, evaluates performance, provides feedback</td>
</tr>
</tbody>
</table>

### Interpersonal: Works with others

| Participates as a member of a team—contributes to group effort | ✓ |
| Teaches others new skills | |
| Serves clients/customers—works to satisfy customers’ expectations | |
| Exercises leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies | ✓ |
| Negotiates—works toward agreements involving exchange of resources, resolves divergent interests | ✓ |
| Works with diversity—works well with men and women from diverse backgrounds | |

### Information: Acquires and uses information

| Acquires and evaluates information | ✓ |
| Organizes and maintains information | |
| Interprets and communicates information | ✓ |
| Uses computers to process information | |

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*101-Clothing & Textiles, Level IV*
CAREERS IN FABRIC CARE AND MAINTENANCE  
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE  
Activity Sheet

The Self-Assessment Worksheet, continued

NOTE: Lay this page over the preceding page, lining up columns, so you can see the title of the story you are working on.

**WORKFORCE COMPETENCIES**

<table>
<thead>
<tr>
<th>Systems: Understands complex relationships</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understands systems—knows how social, organizational, or technological systems work; operates effectively with them</td>
<td>✔</td>
</tr>
<tr>
<td>Monitors and corrects performance—distinguishes trends, predicts impact on system operations, diagnoses deviations in systems’ performance, corrects malfunctions</td>
<td></td>
</tr>
<tr>
<td>Improves or designs systems—suggests modification to existing systems, develops new or alternative systems to improve performance</td>
<td></td>
</tr>
</tbody>
</table>

**Technology: Works with a variety of technologies**

<table>
<thead>
<tr>
<th>Selects technology—chooses procedures, tools, or equipment, including computers and related technologies</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies technology to task—understands overall intent and proper procedures for setup and operation of equipment</td>
<td></td>
</tr>
<tr>
<td>Maintains and troubleshoots equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies</td>
<td></td>
</tr>
</tbody>
</table>

**FOUNDATIONAL SKILLS**

**Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, speaks**

| Reading—locates, understands, and interprets written information in manuals, graphs, and schedules, and the like | Neighborhood Park Clean-up |
| Writing—communicates thoughts, ideas, information, and messages in writing; and creates letters, directions, manuals, reports, graphs, and flow charts, etc. | ✔ |
| Arithmetic/Mathematics—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques | ✔ |

102-Clothing & Textiles, Level IV
### The Self-Assessment Worksheet, continued

NOTE: Lay this page over the preceding pages, lining up columns, so you can see the title of the story you are working on.

<table>
<thead>
<tr>
<th>FOUNDATIONAL SKILLS</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening receives, attends to, interprets, and responds to verbal messages and other cues</td>
<td>✓</td>
</tr>
<tr>
<td>Speaking organizes ideas and communicates orally</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, reasons</strong></td>
<td></td>
</tr>
<tr>
<td>Creative Thinking generates new ideas</td>
<td>✓</td>
</tr>
<tr>
<td>Decision Making specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative</td>
<td>✓</td>
</tr>
<tr>
<td>Problem Solving recognizes problems, devises and implements plan of action</td>
<td>✓</td>
</tr>
<tr>
<td>Seeing Things in the Mind’s Eye organizes and processes symbols, pictures, graphs, objects, and other information</td>
<td></td>
</tr>
<tr>
<td>Knowing How to Learn uses efficient learning techniques to acquire and apply new knowledge and skills technologies</td>
<td></td>
</tr>
<tr>
<td>Reasoning discovers a rule or principle underlying the relationship between two or more objects, uses it to solve a problem</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, integrity and honesty</strong></td>
<td></td>
</tr>
<tr>
<td>Responsibility exerts a high level of effort and perseveres toward goal attainment</td>
<td>✓</td>
</tr>
<tr>
<td>Self-Esteem believes in own self-worth and maintains a positive view of self</td>
<td>✓</td>
</tr>
<tr>
<td>Sociability demonstrates understanding of friendliness, adaptability, empathy, and politeness in group settings</td>
<td>✓</td>
</tr>
<tr>
<td>Self-Management assesses self accurately, sets personal goals, monitors progress, and exhibits self-control</td>
<td>✓</td>
</tr>
<tr>
<td>Integrity/Honesty chooses ethical courses of action</td>
<td>✓</td>
</tr>
</tbody>
</table>
CAREERS IN TEXTILE SCIENCE

CLOTHING & TEXTILES, LEVEL IV, TEXTILE SCIENCE

Activity Sheet

Department Clothing, Textiles
and Interior Design
College of Human Ecology
Kansas State University

Name _____________________________

GENERAL EDUCATION (36-39 Hours)

Communications (8-9 Hours)
ENGL 100 (3) Expository Writing I
ENGL 200 (3) Expository Writing I
SPCH 105 (2) Public Speaking IA
OR
SPCH 106 (3) Public Speaking

Social Sciences (9 Hours)
ECON 110 (3) Prin. of Macroeconomics
PSYCH 110 (3) General Psychology
SOCIO 211 (3) Introduction to Sociology

Humanities (6 Hours)
HIST __ (3) ________________________
          History Elective
___ ___ (3) ________________________
          Humanities Elective

Biological Sciences (3-4 Hours)
BIOL ___ (3-4) _________________

Physical Sciences (4-5 Hours)
CHM 210 (4) Chemistry I
OR
CHM 220 (5) Chemical Principles I

Quantitative Studies (9-10 Hours)
MATH 100 (3) College Algebra
OR
MATH 220 (4) Analit. Geom. & Calc. I*
STAT 320 (3) Elements of Statistics
CIS 110 (3) Intro. to Pers. Computers
OR
CIS __ (3) ______________________
          CS Elective

Physical Education (1 Hours)
KIN 101 (1) Prin. of Physical Fitness

PROFESSIONAL COURSES (43-45 Hours)

Clothing & Textiles Core Courses (17-19 Hours)
CT 150 (1) Intro. to Professions in the
  Apparel & Textile Industry
CT 265 (2) Textiles
CT 266 (1) Textile Laboratory
CT 330 (3) Clothing and Society
CT 440 (3) Apparel and Textile Product
  Evaluation**
CT 545 (3) Textile & Apparel Industry
CT 630 (3) History of Costume**
CT 650 (1-2) Clo. & Tex. Study Tour
  OR
CT 770 (3) Practicum in Clo. & Tex.

Specialized Courses in Textiles (20 Hours)
CT 620 (3) Textile Yarns and Fabrics
CT 642 (3) Textile Fibers
CT 680 (4) Physical Analysis of Textiles
CT 746 (4) Textile Dyeing & Printing
CT 747 (3) Textile Finishes
CT 765 (3) Chemical and Optical Analysis
  of Textiles

Additional Supporting Courses (6 Hours)
FN 132 (3) Basic Nutrition
FISH 105 (3) Introduction to Personal
  and Family Finance

UNRESTRICTIVE ELECTIVES (8-20 Hours)

SUPPORTING COURSES (22-34 Hours)
Select Option I or II

Option I: Textile Science (22 Hours)
CHM 230 (4) Chemistry II
CHM 350 (3) Gen Organic Chem.
CHM 351 (2) Gen. Organic Chem. Lab
PHYS 115 (4) Descriptive Physics
ECON 120 (3) Prin of Microeconomics
College of Business Admin. (6 Hours)
___ ___ (3) ________________________

Option II: Textile Chemistry (24-34 Hours)
CHM 230 (4) Chemistry II
AND
CHM 371 (4) Chemical Analysis
OR
CHM 250 (5) Chemical Principles II
CHM 531 (3) Organic Chemistry I
CHM 532 (2) Organic Chemistry Lab
CHM 550 (3) Organic Chemistry II
CHM 566 (3) Instrumental Methods of Analysis
CHM 567 (1) Instrumental Methods of Analysis Lab
OR
CHM 565 (3) General Physical Chemistry
PHYS 114 (4) General Physics II

For a minor in Chemistry (7 Hours)
CHM 500 (3) Gen. Physical Chemistry
PHYS 115 (4) General Physics II

125 Hours Required for Graduation

* Required for Textile Chemistry option.
** Not required for Textile Chemistry option.

Fall 1996
Laws and Regulations of Sewing for Profit

Clothing & Textiles, Level IV, Creating with Fabrics and Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
- Some of the permits and regulations that a home-based/new business may need
- The importance of keeping records in a business

ABOUT THEMSELVES:
- Practicing good citizenship includes knowing and following regulations
- Beginning a home-based business requires thoughtful goal setting

Materials Needed:
- Copies of Member Handouts

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES

ACTIVITY:

We have talked about the possibility of beginning a home-based business in the past. Every year many Americans do this. Some have a great idea and decide to market it. Others may be tired of their present job and want more flexibility, or to be their own boss. We know that of all the businesses begun each year, about half fail. The reasons may vary from an unsellable product to a poorly organized owner. One factor that can make a difference is proper planning before making the commitment with one’s time and finances. Refer to “Creating for Profit,” Level III, to design a beginning business plan. Next, take a close look at special areas of the business. Today, we will do just that.

There are many laws and regulations that cover businesses. The type of business you begin determines the laws that apply to it. If you will be importing or exporting, then you may have to learn about international laws. It is very important that you consider these at the outset of your business. Mistakes in these areas can cost you and your business, and penalties can be steep.

The first place to check about local regulations would be your local Small Business Administration Center, Chamber of Commerce, and city and county offices. These should be the beginning points to help you know local regulations that may apply. Other regulations mandated by the state and federal government are printed in the Extension Bulletin, “Custom Sewing Laws and Regulations in Kansas,” MF1032.

Leader Notes

Welcome all members, have them sit in a comfortable place. If they do not know each other have them introduce themselves. Ask each member to tell one part of a business they would like to take charge of. You begin. Examples include creating, marketing, bookkeeping, making sales calls, clean up, selling to the public, evaluation of product or competition, etc.
Leader Notes

After doing this step, if you still have questions, it may be advisable to hire some legal help. Although the cost may seem expensive, it is cheaper in the long run than not being in compliance with the law. Don’t hesitate to pay this fee if you have questions or concerns, it is simply the cost of doing business.

The next stop on your list should be to an accountant. Even if you plan to keep most of your own records and tax information you should receive advice about an orderly way to set up your record-keeping system. Accountants can help you design a system that can give you the information you need to have, in a timely manner.

Once these steps have been taken, you can be assured that your business will be legitimate. Learn whether you are required to make any changes to your residence or business to meet regulations. Once the paperwork is done you need to think about the records you will be required to keep.

As you set up a bookkeeping system, the best rule is to keep it simple. Have all the records in one place and develop a regular schedule for recording information. If you have a partner or others in the business, decide who will be in charge of the books—that will be their responsibility. Make sure they are allowed plenty of time to do this chore. Likewise, this person is responsible for ensuring all the partners are informed about the financial status of the business. The books should be audited regularly by an independent auditor.

Ideally, at the end of each day this person should take time to record all the day’s income and expenses. There should be a system that makes it easy to place receipts, sales slips, deposits, and invoices in a respective area so that they can be totaled and kept as required.

As you keep books, it is important to briefly describe where the income came from and to where the expenses go. This provides some historical records from which you can make future business plans. Make sure dates and check numbers are included as you record your payments to creditors and monthly bills.

Your business must file for a tax number. The forms you must fill out will either be mailed to you or your accountant will make these available. Check with your state Department of Revenue to find out exactly what your state requires. If you sell on a retail level, you must collect and submit sales tax.

If you sell on the wholesale level, the invoice is your record of the terms of the sale. Note that it includes your name, address, invoice number, date, name and address of buyer and receiver, plus a specific description of the item being sold with price and quantity.

Invoices are made out in duplicate or triplicate. Note that the sample form states who gets the original and who gets the second and third copies.
Your copy can be the basis for your mailing list, if you include the customer’s name and address.

If most of your sales are directly to customers, you can use standard receipt forms from stationery stores, or have your own printed.

By keeping accurate, up-to-date records, you know what your financial standing is at any one time. You may figure a monthly balance or a running balance each day. You should yearly (at least) figure your net worth. This can be compared to your insurance policies to make sure you are adequately covered. The net worth includes your current income/expense record plus the dollar value of your equipment, supplies and unsold inventory. Be sure to carry insurance on the owners and workers because they are a vital part of your business.

Inventory is another area of record keeping. It should include supplies and equipment plus merchandise ready to ship, and any paperwork goods used to facilitate the business, and business machines, etc.

Basically, the records you need to keep can be divided into three categories:

1. Current
   - notebook(s) or computer spreadsheet for expenses and income
   - bills to be paid
   - papers to be filed

2. Ongoing
   - net worth statements
   - service contracts/operators manuals
   - bank account statements
   - insurance policy numbers and summaries
   - inventory of supplies/equipment and unsold merchandise
   - paid receipts
   - craft fair records/buyer records

3. Dead storage (needs to be safe, but not necessarily in your office)
   - tax returns and supporting records for a minimum of the past six years

If you choose not to sell directly to the public, there are some alternatives of which you should be aware. By eliminating the retail step you get more time to produce your work, allowing you to sell more pieces and increase your profits. There are several ways for you to do this.

One way is to wholesale your products. This means you sell your work to a store or other outlet, which in turn sells your items to consumers. You are paid for your product whether they are able to sell your product or not. The store marks up the price of the item and offers it to retail customers.

It takes time, effort, and initiative to locate and contact, as well as sell your line to a business. This may not be appealing to you. Wholesale
buyers may include the owner of an art gallery, owners or representatives of gift and specialty stores, interior designers, architects, buyers from department stores, and representatives from mail-order catalogs. Ways to meet buyers include: retail fairs, and wholesale fairs or trade shows specifically organized for buyers. Some handcraft producers schedule appointments with store buyers or managers, or solicit orders through direct mail or mail order ads.

Regardless of how you choose to meet wholesale buyers, you will need to develop a catalog or catalog sheets, a price list and order form. If you are making your contacts by mail, it may be important for the buyer to see your work in color with complete descriptions. If the buyer has seen your work at a fair or through an appointment, a simple catalog sheet duplicated at your local copy center may be enough for the buyer to remember your work when placing orders. Look at other catalogs, price lists and order forms when designing yours. Give every item a number and name to avoid misunderstandings. Keep the catalog sheet separate from the price list/order form to make it easier to update prices and keep the catalog in front of your customer. Combine the order form and price list to make ordering easier.

Next, we will look at some common wholesaling terms.

- **New Accounts C.O.D or Pro Forma**—Buyers placing first-time orders are often asked to pay cash on delivery (C.O.D) or when placing the order (Pro Forma). Although C.O.D. sounds like a good answer for handcraft producers, many stores will refuse C.O.D. terms. If a store does agree to purchase C.O.D., it will be helpful to call or drop a note to the retailer two weeks before a planned delivery so that the shop can plan ahead and have cash, money order, or check ready upon delivery.

- **Established Accounts, Net 30 Days From Date of Invoice**—Accounts with established credit ratings are expected to pay 30 days after receiving the bill. To speed payment, send a bill when you send the order, but put the bill in a separate envelope so that it goes to the business office, not the shipping department.

- **Minimum Orders**—Wholesale orders usually require a minimum dollar amount. This amount may vary from $50 to $200 or more. Some home-based business persons will place a minimum only on the initial order.

- **Packing and Delivery Charges**—There are several ways of dealing with these expenses. Some businesses add to the form the initials F.O.B., meaning “free on board.” F.O.B. is commonly followed by the town of the manufacturer, such as F.O.B., Wichita. This means the buyer pays the shipping charges and makes the shipping arrangements from the town listed. Another way of dealing with packing and delivery is to add a standard charge, such as $4 for shipping and handling. Others may index the charge to the amount ordered. You may only want to charge the actual amount of shipping, if so it is labeled “prepay and add.” “Freight collect” means the buyer pays the freight charges at their end.
• Interest charges—1½ percent per month charge on past due or 18 percent annually is the common charge if you are unable to collect within 30 days. This is regulated, so check with your accountant.
• Back Orders and Substitution—Include boxes on the form for buyers to check as to whether they will accept back orders or substitutions.
• Prices subject to change without notice—This statement is to protect producers from orders received on old order forms. It is standard practice to evaluate and change your price list once a year.
• Signature and Phone Number of Buyer—The signature of the buyer makes the order a written contract subject to the terms. If an order is called in, ask the buyer to send a signed purchase order to confirm or send a copy of the order as placed over the phone and ask the buyer to return it to you signed.

When buyers wish to establish an account with you, you will need to do a credit check. It is common practice to ask for one bank reference, identifying a specific bank officer, and three trade references. Check these references before you send an order. Call the reference and tell them the name of the customer and ask what their credit experience with the customer has been.

Another common way to market home-produced items is to hire a sales representative to locate buyers for your products. One representative may serve many non-competing producers, creating a broad product line. Use a sales representative when you need to reach a new market, or wish to devote more time to production and less to sales. Payment to sales representatives is based on commission, usually 15 percent of the wholesale price. This commission is a selling expense to be figured into the wholesale price when calculating costs.

The sales representative is not a customer. Representatives do not buy from the home business. They are what their title implies, a representative who takes orders. It is their job responsibility to check credit references for wholesale customers. The craftsperson should furnish price lists, descriptions, colored photos, samples, and order forms to the representative.

To find a representative—read trade magazines for your chosen market. Attend trade shows. Ask questions of other craftspeople, retail store managers, department store buyers, and craft organizations. Advertise for a representative in newspapers, trade magazines and at trade shows. Make sure you feel comfortable with this person before you let them represent you.

Discuss how the representative will be paid. Commission could be paid monthly on orders written. Some representatives are paid only after the retailer pays for the order. Most stores will expect 30 days to pay for an order. Some representatives may not want to work for you unless they are paid sooner.
Pass out sample contract for Sales Representative and Handcrafter. Let members ask questions and discuss.

Many representatives will accept and begin working without a written agreement; however, a written contract can avoid problems. Include in this written contract the territory to be covered, terms of sales, commission structure, credit policy and dissolution of relationship terms.

Another popular way of selling your products is by consignment. This means that you arrange for a shop or gallery to display and try to sell your products. For this service, they will keep 30 to 40 percent of the sales price as their commission. You do not collect any money until the product is sold.

Traditionally, this has been a way for home-based business people to make a name for themselves in a new area. It has been popular because the craftspeople retain a higher share of the retail price than they can when sold wholesale.

Recently, many merchants have started looking at consignment selling as much less than desirable. One disadvantage is the amount of paperwork needed on both sides. Also the craftsman must protect his or her interests. For example, if the store goes bankrupt, how hard will it be for you to legally prove that you own the merchandise? In the case of fire or theft, will the store’s insurance cover your consigned merchandise or is it up to you to provide the coverage? What happens if one of the store’s employees breaks or ruins one of your products? The consignment agreement should cover five major points.

1. **Product description.** This should be detailed and accompany every new delivery of goods.
2. **Terms of consignment.** This defines the time period during which the items will be in the store.
3. **Prices.** The price for each item should be recorded. The store should not be able to reduce the price without consulting you. Also, state specifically the percentage you will keep and the percentage which the store will keep.
4. **Payment method.** A monthly payment is the logical way of handling the consignment of low-priced items. For expensive products that may not sell as often, it may be better to state that payment be made immediately upon sale.
5. **Risk of loss.** The agreement should clearly state who is responsible for insuring the items while they are in the shop or being transported between the shop and the handcrafter.

Lastly, let’s talk about protecting your legal rights to your products. The 1978 revision of the Copyright Law now considers your product to be protected by federal law as soon as the work is created.

A copyright gives the creator/designer the exclusive right to control how, where, and when the creation/design is used. This includes reproducing, selling, distributing, or displaying the work, or any part of the work. These rights belong to the creator during his/her lifetime plus 50 years. During this time the creator can sell any or all of these rights to someone else.
Ideas cannot be copyrighted, but the execution of an idea can be. The regulations say “the design of a useful article is considered copyrightable only if, and only to the extent that, such design incorporates pictorial, graphic or sculptural features that can be identified separately from and are capable of existing independently of, the utilitarian aspects of the article.”

In other words, a pitcher cannot be copyrighted, but its unique shape or design can be. And a decorative design used on the pitcher can be. The key phrase is “artistic craftsmanship.”

This law gives you the copyright on all your material as soon as it is produced. To notify others that you are protected, you should include the copyright notice on your work in a visible spot. Use one of these forms:

Copyright. Dandy Duds 1996
® Dandy Duds 1996.

You may formally register your copyright with the Copyright Office. A single item or collection may be registered by submitting the proper forms and paying a $10 fee. Forms are available from:

U.S. Copyright Office
Library of Congress
Washington, D.C. 20559

Along with the application form, you must send a copy, photocopy, photograph, slide, or drawing of the material being registered.

The advantage of being registered is that if you think someone has infringed upon your copyright and you want to sue them, you must first have your copyright registered. If you do not register within three months of creating or publishing the work and find it necessary to take someone to court, you can collect only for actual damages, which may be hard to prove. You are still protected if you do not register within the three months, but cannot collect statutory damages or attorney’s fees.

Whenever someone uses your material without your permission, they are infringing on your copyright. If an unbiased person looking at the two pieces thinks that one was copied from the other, then you have a case of infringement. The copied piece may be in a different medium than the original. For example, a drawing could infringe on a photograph or a design on a piece of jewelry could infringe on the design used on your pottery. For this problem, contact an attorney.

Some rights for using copyrighted materials are implied. For example, when a store sells a copyrighted craft object, the store has the right to photograph that piece for use in advertising. However, that photograph could not be used as a book illustration without your permission.

Selling your right involves letting someone else use your material for a specific length of time, for a specific use, in a specific geographic area or in a specific language. All limitations should be written in a contract and
signed by both buyer and seller. Talk with an attorney if you have any questions about the contract. Here are some terms that apply to your rights.

- Exclusive rights—sold to one person only; specify limits of use (time, place, medium, language).
- Non-exclusive rights—sold as many times as desired.
- First rights—one person given the right to use material first and for one time only. This is an exclusive right. May be specified for a geographic area, such as first North American rights.
- One-time rights—allow buyer to use material once, but not necessarily first. May be sold to more than one person at the same time so non-exclusive.
- Reprint rights—also called second rights, or in the case of books, first/second serial rights. Allows buyer to reprint previously published material.
- Simultaneous rights—sell to several publishers at one time; usually involves publishers who are marketing their product in non-overlapping areas. They may contract and pay for one or several uses.
- All rights—means selling your whole copyright. Buyer may use material for any purpose. You have the right to terminate sale after 35 years. Make sure your selling price is high enough.
- Book rights—means contracting to have your material published in a book. Advisable to have a lawyer help you arrange for royalties and to assist you in this often complicated procedure.
- Promotional rights—allows your work to be used for promotion. Be sure to specify exactly what is allowed and charge accordingly.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. Name three ways to market your product.
A. Direct sell to the public (craft fairs, retail store, home craft parties), wholesale, consignment, through sales representative.

Q. Name the three categories of records you need to keep.
A. Current, ongoing and dead storage.

Q. What law covers your product idea and originality?
A. The 1978 revision of the Copyright Law.

**Process:**
Q. What would be the most difficult thing for you to do to start a home-based business? Why?

**Generalize:**
Q. What kind of personal qualities must a home-based business person have to be successful?

**Apply:**
Q. Name other businesses/industries regulated by local, state or national laws?
GOING FURTHER:

- Have members study a business and interview the owner on the above topics to see how they are handling their records, design protection, and selling methods. Report at next meeting.
- Invite a local representative of the Small Business Administration to talk at a project meeting.
- Take a field trip to a shop or gallery that takes items on consignment and ask owner to talk with members about the business.
- Have members list as many copyrighted designs that they can think of, or have some scrambled that they need to unscramble.

REFERENCES:

How to Price and Protect Your Work, Selling Through Sales Reps, Wholesaling, How and Where to Sell, How to Keep Records, Marketing Crafts Series, JaneAnn Stout, Art and Design Extension Specialist, and Rae Reilly, Textile and Clothing Extension, Cooperative Extension Service, Iowa State University, Ames, Iowa 50011

Custom Sewing Licences and Regulations in Kansas, MF 1032, Lucinda Schoenberger, Clothing Specialist, Kansas State University Cooperative Extension Service

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Reviewed by:
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Wholesaling
Wholesaling your work means selling your crafts to a store or some other outlet, which in turn sells your items to consumers. You are paid for your crafts by the store or outlet, whether they are able to sell your crafts or not. The store marks up the price of the item and offers it to retail customers.

Wholesaling your products can be a very profitable experience. Wholesaling eliminates the work and problems associated with retailing. It gives you more time to produce your work, allowing you to sell more pieces and increase your profits. Establishing several wholesale accounts can also result in a more regular income than relying on seasonal retail fairs.

Although wholesaling may appear to be an easy answer, it is not the right answer for everyone. It takes time, effort, and initiative to locate and contact, as well as sell your line to that business. Cash flow and scheduling can become more difficult when filling large orders. If you are already selling all you can produce and do not want to change your production methods, or if you enjoy selling directly to the end customer, wholesaling is probably not for you.

Wholesale buyers
Wholesale buyers may include the owner of an art gallery, owners or representatives of gift and specialty stores, interior designers, architects, buyers from department stores and representatives from mail-order catalogs. There are several ways to meet buyers, including retail fairs where buyers might approach you, and wholesale fairs or trade shows specifically organized for buyers. Some handcraft producers schedule appointments with store buyers to managers, or solicit orders through direct mail or mail order ads.

Regardless of how you choose to meet wholesale buyers, you will need to develop a catalog or catalog sheet(s), a price list and order form. If you are making your contacts by mail, it may be important for the buyer to see your work in color with complete descriptions. If the buyer has seen your work at a fair or through an appointment, a simple catalog sheet duplicated at your local copy center may be enough for a buyer to remember your work when placing orders. Look at other catalogs, price lists and order forms when designing yours. Give every item a number and name to avoid misunderstandings. Keep the catalog sheet separate from the price list/order form to make it easier to update prices and keep the catalog in front of your customer. Combine the order form and price list to make ordering easier. Provide a copy or the order form/price lists for the buyer for ease and accuracy. Visit with a printer about carbon or carbonless forms. An example of a standard wholesale price list/order form and catalog sheet is included in this lesson.

Buyers Terms
You must be familiar with buyers’ terms as well as your own. Pay particular attention to their requirements for delivery dates, delivery times, packing slips, and addresses for receipt of invoices. Be sure you understand and agree with those terms. Prompt payment and future orders may be dependent upon your adhering to their terms. If you make any changes from the original order, get approval from the buyer before you complete and send the order.
Credit references
When buyers wish to establish an account with you, you will need to do a credit check. It is common practice to ask for one bank reference, identifying a specific bank officer, and three trade references. An example of a trade reference might be another craft producer or vendor who sells to the buyer. Check these references before you send an order. Although none of these references will give you specific financial information, they will usually tell you what their experience has been. To check a reference, call the reference. Tell them the name of the customer who has referred you to them and ask what their credit experience with the customer has been.

For trade references ask:
1. Does the individual have a current account with you? What was the last sales date? What is their high credit limit? (If the customer is asking for a higher credit than those extended by the references, ask for additional references where a higher limit was extended, or set a limit no higher than those extended.)
2. How long have you done business with this individual?
3. What are your payment terms? Does the customer adhere to them?

For bank references ask:
1. How long has the business banked with you? What is their average balance? (The bank officer will usually respond with a “low,” “average,” or “high” figure balance. For example: “This bank has a low, four-figure balance.”)
2. Does this business have a borrowing situation with you?
3. Do you consider the banking situation satisfactory?
Sample Catalog Sheet

Dandy Duds
140 Clay Street
Clover, Kansas 66667
(316) 294-8707

All clothing comes in youth sizes, S, M, L, XL.

Accessory
Drawstring Tote bag, No. 200
100% cotton canvas
Red, blue or green

Accessory
Wrist pincushin, No. 201
Red wool with elastic band

Accessory
Travel Kit, No. 202
100% cotton terry, tan,
with 5 pockets

Youth Stocking Cap, No. 300
100% wool
Red, blue or white

Youth mittens, No. 301
100% wool
Brown or navy
Sample Price List/Order Form

In this example, youth clothing is given a 300 number. For another series in the line, such as accessories, the producer might use a 200 series. Your order form will be shortened, or longer depending on your product line.

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Name of Item</th>
<th>Color</th>
<th>Size</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Tote bag</td>
<td></td>
<td>XX</td>
<td></td>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>Wrist Pincushion</td>
<td></td>
<td>XX</td>
<td></td>
<td>$2</td>
<td></td>
</tr>
<tr>
<td>202</td>
<td>Travel Kit</td>
<td></td>
<td>XX</td>
<td></td>
<td>$3</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>Stocking Cap</td>
<td></td>
<td></td>
<td></td>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>301</td>
<td>Mittens</td>
<td></td>
<td></td>
<td></td>
<td>$5</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal
Shipping and handling $4
TOTAL

New accounts: C.O.D. or Pro Forma
Established Accounts:
net 30 days from date of invoice
Initial orders $100 minimum
$4 shipping and handling
Note: 1.5% per month charge on past due accounts. 18% annually

Signed:       Phone:

Prices are subject to change without notice.
Sample Contract for Sales Representative and Handcrafter

____ (Handcrafter) ____, a ____ (Kansas) ____ based company (C), agrees that ____ (sales representative) ____ (SR) is the exclusive sales representative for ____ (hand-made) ____ products with the states of ____________.

The terms and conditions of this sales agreement are as follows:

1. C shall pay a commission of 15 percent on all orders pertaining to C and shipped within the defined territory.
2. SR will receive a commission of 15 percent on all orders pertaining to C phoned in or mailed direct to the manufacturer that shall be shipped into SR’s defined territory.
3. SR shall receive NO commission on any orders pertaining to C written and shipped into SR’s territory by other sales representatives.
4. SR shall receive 15 percent commission on all orders pertaining to C written in SR’s territory by other sales representatives.
5. SR shall receive its commission on the 15th of the month following C receipt of payment from the customer. C shall supply SR, along with each commission payment, an itemized list of orders shipped pertaining to that particular commission statement.
6. SR shall enjoy a TOTAL TERRITORIAL EXCLUSIVE within its defined territory, with no said HOUSE ACCOUNTS being permitted.
7. SR will help in the collection of past due accounts on a regular basis, and will expect copies of Past Due Statements within their defined territory.
8. SR shall solicit orders from bona fide trade outlets in accordance with manufacturer’s normal credit procedures and price structures.
9. SR shall have the responsibility of the correct procurement of credit information concerning orders written by SR.
10. SR will not be held responsible for any product liability claims that may arise between C and customers.
11. C understands and agrees that SR is solely and primarily responsible and liable for any and all of SR’s performance of this agreement and terms herein and C shall not in any way be liable and/or responsible for such costs and expenses.
12. This agreement may be terminated by either party without reason or cause by giving 30 days prior written notice by mail.
13. In the event this agreement is terminated, C must pay commissions on any order written by SR or emanating from SR’s defined territory until and including the last day of the said 30 days notice, no matter when said order is shipped.
14. In the event of termination, SR shall receive its final commission and final commission statement 30 days from the date of the written termination notice.
15. All showroom samples provided by C are to be Memo Billed by C, less 15 percent.

Date ___________________________ Date ___________________________

_________________________________ ___________________________________
(C) (SR)

Note: This is a sample contract only. Handcrafted producers or sales representatives may choose to change the agreements as appropriate or necessary for their businesses. You may wish to consult a lawyer for advice before drawing up or signing your contract.
Sample Consignment Agreement

Date:

1. Home-based producer: Name: 
   Address: 

2. Consignee: Merchant’s Name: 
   Address: 

3. Handcrafter does hereby consign to consignee the following articles.
   Item description/quantity/price
   a. 
   b. 
   c. 

4. Consignee agrees to use its best efforts to sell such works at the prices listed above.
   This agreement is for an indefinite term, and shall terminate on ______ days written notice by either party.
   On notice of termination, consignee shall surrender all works to the handcrafter, and shall remit to
   Handcrafter all sums which shall be due under this agreement.

5. Consignee shall be entitled to a commission of ______ % of the sales price of works sold. Sales price does
   not include costs of delivery, costs of collection of accounts receivable, or taxes on such sale.

6. Handcrafter shall be entitled to payment of the sales price by consignee of such works as are sold by con-
   signee, less commission as stated above, within 30 days after any such sale.

7. Handcrafter shall deliver works to consignee at craftperson’s risk. Upon such delivery, consignee shall
   assume all risk of loss until such work has been sold and delivered, or returned unsold to producer.

8. In the event that consignee fails to timely remit such sums as are due, and owing under this agreement,
   consignee agrees to pay reasonable attorney’s fees for collection of such sums.

Handcrafter signature

Merchant signature

Note: Special circumstances may suggest additional clauses for your form.
If you're selling on a wholesale level, the invoice is your record of the terms of the sale. It’s your protection that both you and the buyer are working from the same set of facts.

Note that it includes your name and address, and invoice number, date, name and address of buyer and receiver, plus a specific description of the item being sold with price and quantity.

The section on terms spells out how and when you expect payment or returned items. The “2% 10 Net 30” is a common phrase meaning that the buyer can subtract 2 percent of the total bill if he/she pays within 10 days; he/she must pay the full amount before the end of 30 days.

In some cases, the buyer may have a system for picking up merchandise. But in most instances, you will have to add shipping costs to your bill.

If most of your sales are directly to customers, you can use standard receipt forms from stationery stores, or have your own personalized ones printed.

Invoices are made out in duplicate or triplicate. Note that the sample form states who gets the original and who gets the second and third copies.

<table>
<thead>
<tr>
<th>Invoice Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice Form</td>
</tr>
<tr>
<td>Your Name</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Telephone No.</td>
</tr>
<tr>
<td>Sold To</td>
</tr>
<tr>
<td>Name_____________________________</td>
</tr>
<tr>
<td>Address_____________________________</td>
</tr>
<tr>
<td>City_____________________________</td>
</tr>
<tr>
<td>Shipped via:</td>
</tr>
<tr>
<td>Terms: 2% 10 Net 30</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total $__________</td>
</tr>
<tr>
<td>Shipping Charges</td>
</tr>
<tr>
<td>Total Invoice</td>
</tr>
</tbody>
</table>

Original to customer
Copy for you
Copy to be used as receipt
Be Your Own Designer—Flat Pattern

What Members Will Learn . . .

ABOUT THE PROJECT:
• How to make design changes in a pattern using flat pattern method
• Customizing a favorite pattern to change special design features

ABOUT THEMSELVES:
• Gaining self-confidence by being able to finish a project that requires above-average skill

Materials Needed:
• Need to order ahead of meeting, “Design Your Own Clothes: Flat Pattern Method” (see references at end of this lesson for ordering information)
• Have members bring a pattern (that fits) that they want to make, changing one feature. Adding new collar, changing sleeves from gathered to eased, adding gathers at neckline, adding pant pleats, creating fitted facings, adding yokes, changing necklines, or adding pockets
• Tissue paper
• Tape
• Scissors
• Pencils
• See-through ruler
• Tape measure
• French curve
• Pins

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY
There are three major methods of creating patterns for garments: flat pattern designing, draping, and drafting. In flat pattern designing you begin with a pattern and make changes to create your own design. In draping, you work with a body form and drape fabric on it to create a design, and you create a drafted pattern from the measurements.

Today, we will be using flat pattern designing. You should begin with a basic pattern that fits you or a pattern designed almost as you wish. It is important that the pattern fits you well. Do any fit adjustments before the redesigning and make sure a sample garment does fit properly before redesigning. Once that step is complete, copy the pattern you began with onto tissue paper and use this copy for designing. The original pattern can then be used again and again.

Leader Notes
Welcome members, and have them sit in a comfortable place. If they do not know each other, have them introduce themselves. Have them tell the pattern change they want to make.

Have members copy on tissue the altered-for-fit pattern they will be using. Double check with the members that they are sure the fit is proper and the copy is accurate.
Flat pattern designing is not difficult, but it is a process that demands accuracy. If you are not accurate, the garment may not sew together the way it should.

**Button Closing**

Many designs use a button closing instead of placing the center front on the fold. This change requires little time. Remember, in women’s clothing, the buttonholes go on the right side of the bodice front, the buttons are placed on the center front line of the left side of the bodice front. Men’s clothing is the reverse.

To add the overlap-underlap, an extension must be added to the center front. The lap should equal at least half the diameter of the button plus \( \frac{1}{4} \) inch or up to the entire diameter of the button from the centerline to the edge of fold or seamline.

**Guidelines to keep in mind in locating buttons:**
- Buttons are usually evenly spaced, but can be arranged in groups.
- One button should be placed at or near the bustline or chest.
- The distance from the neckline to the center of the top button usually is half the diameter of the button plus \( \frac{1}{4} \) inch.
- The space between the waistline and the bottom bodice button usually is the same as the space between the other buttons. A button or belt buckle is placed at the waistline.
- Sew the buttons on the center front line. To mark the buttonhole location, remember that buttonholes usually begin \( \frac{1}{8} \) inch outside of the center front and extend back into the bodice. The length is equal to the diameter of the button plus \( \frac{1}{8} \) inch, or in case of a thick button, plus the thickness of the button. If you use a rough button, allow a little more length in the buttonhole. If you use vertical buttonholes, place them on the center front line. Vertical buttonholes begin \( \frac{1}{8} \) inch above the center of the button. To complete the change, add a seam allowance at the edge of the overlap. You’re now ready to make a facing for the garment front.

**Fitted Facings**

Fitted facings are used to finish edges of garments in many locations: armholes, button and buttonhole closings, collars, hem type area, necklines, pockets and pocket flaps, and waistlines. A fitted facing is shaped like the edge of the garment that it is facing and has the same grainline direction as that part of the garment.

To make a pattern for a fitted facing:
- Fold in any darts or tucks in the garment part you are going to face.
- Place the edge to be faced under a piece of tissue paper. The paper should be big enough so you can make a facing 2\( \frac{1}{2} \) inches wide.
- Trace the edges of the pattern you are facing. Be sure the pattern edge that you are tracing lies flat.
- Draw the inner edge of the facing. The facing generally should be at least 2 to 2\( \frac{1}{2} \) inches wide so the edge will not show or work to the
outside of the garment when it is worn. Make the inner edge a smooth line.
- Add the grainline marking so the facing is on the same grain as the garment at center.
- Add seam allowance where the facing will be joined to another facing or garment edge.

To make a pattern for a self-facing, (a good alternative whenever the edge being faced is on straight grain), make the facing as directed:
- Do not add seam allowances to the facing edge to be attached to the garment or that edge of the garment.
- Tape the facing to the main part of the garment pattern on the seamline.

Using a self-facing eliminates seam allowances and bulk in the area where the facing is attached.

**Darts**

To combine darts, decide where you want to put the combined dart. Both of the bodice front darts can be moved and combined into one large dart.
- Locate the bust point on the pattern and draw on the bust circle.
- Draw a line in the new dart location.
- Slash from the seamlines to the bust point through the center of both of the darts being moved. Slash to the bust point on the new dart line. Be careful to cut to, but not through, the bust point.
- Close the two darts by lapping the dart stitching line at the seamline. Tape in place. Tape tissue paper under the opening.
- Draw the new dart stitching lines. A combined dart such as this one should extend almost to the bust point, so that it will fit smoothly when worn. Shape the seam end of the dart.

To divide darts, decide where you want to locate the new darts. Think carefully about the effect in the complete garment. In this example, the darts will be parallel in the complete garment. You may want to move a dart and divide it into two or three new darts to create a special design.
- Locate the bust point, draw the bust circle, and draw the design lines for the new darts.
- Slash through the dart being closed. Slash along the new dart lines and to the bust point.
- Close the original dart. Tape tissue paper under the opening. Tape the new darts so that the space is divided evenly between the two darts.
- Draw the new dart stitching lines to the bust circle.
- Shape the end of the darts.

Skirt darts can be moved the same as bodice darts. However, the curves in the hip area are different than those in the bust, so there is not as obvious a point to pivot the pattern parts. When working with skirts, the pivot point for each of the darts is halfway between the end of the dart and the hipline in line with the middle of the dart. If two darts are being moved, one pivot point can be used halfway between the two darts.

To convert darts to flare, use either one or both darts. In most A-line skirts, one of the two waistline darts has been converted to flare:
- Cut through the side dart to its pivot point.
- Cut from the hem to the dart pivot point.
• Close the dart and let the skirt spread until the pattern lies flat.
• Tape dart closed. Tape tissue paper under the opening. Draw in new hem line.

To add additional flare so that an A-line skirt can be converted to a flared skirt:
• Cut and tape other dart closed.
• Slash from the hem to the waistline in several places and spread evenly on both sides of the grainline. Slash the side section to the seamline to make the side seam straight. Tape pattern to tissue paper.

The amount of flare you add depends on how full you want the skirt to be. Create a similar flare for the front and back patterns.

To release a bodice dart:
• A partially released dart is stitched part way.
• Or, fold the dart only in the seamline. The dart stitching line would not be stitched at all.
• In some designs the waist fitting dart is released or simply not sewn in.
• The patterns for all these begin by changing the bodice pattern to look like the illustration in page 10 of Design Your Own Clothes.

To release darts in skirt and pants, decide how far to stitch the dart and cross off (just don’t stitch) the rest of the dart. Open-ended darts give a pleat type of look to a pant/skirt front.

To make trouser pleats and add fullness to pants or a skirt:
• Slash the pattern through the center of the darts and to the side seam at hip and crotch level in pants, and to the hemline in a skirt as illustrated. Spread the pattern to add the amount of fullness you wish (½ to 1 inch) at the widest part of the spread. Tape to tissue paper.
• To perfect the waistline seamline, fold the pattern on the original dart lines as if the darts were stitched and pressed. Cut across the top of the pattern.
• When sewing pants/skirt to waistband, fold in the pleat, bringing original dart stitching lines together and fasten to waistband.

To make gathers from darts:
• Draw a smooth line across the wide end of the dart and cross out the dart stitching lines.
• Put a notch on the pattern where you want the gathers to stop. Remember that you will have to gather the fabric into a larger space than the dart occupied.

To add extra fullness to the gather in a bodice, decide how much fullness you want. When extra fullness is added, use the chart below as a guide to determine the amount of fullness to add. Remember that heavy or stiff fabrics require less fullness than soft or lightweight fabrics.

<table>
<thead>
<tr>
<th>Amount of fullness to use</th>
<th>Amount of fullness to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathered edge (skirt-sleeve)</td>
<td>to</td>
</tr>
<tr>
<td>Moderate</td>
<td>1½</td>
</tr>
<tr>
<td>Moderately full</td>
<td>2</td>
</tr>
<tr>
<td>Full</td>
<td>3</td>
</tr>
</tbody>
</table>

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To add extra fullness to gathers in a skirt, add the fullness to gathers above the hipline or through the entire length of the skirt. To add fullness above the hipline, slash and spread the pattern as shown. Tape to tissue paper.

To add fullness through the entire length of the skirt, slash pattern as shown and spread pattern parts evenly from the waist to the hem. The side seam in a straight skirt is curved above the hipline to shape the skirt to fit the body. The side seam can be straightened by slashing the side piece as shown. The shaping is then done by gathering the extra fabric to fit the waistline.

Reshape the waistline to a smooth curve from the center of the pattern to the side.

**Yokes**

To make a yoke pattern, analyze the design to determine where the yoke line should be located. Look carefully at where it comes in relation to other major seams and fitting points on the garment.

- Draw a line where you want the yoke seamline on the pattern. Place a notch on the line. Cut.
- Add seemlines to both parts of the pattern.
- Draw the grainlines on the yoke. You may wish to place the yoke on the bias for special effect.

To make a yoke line with dart originating at yoke, move the bust-fitting dart to the new location and draw in dart stitching lines as before.

- Fold in the dart and draw the yoke line.
- Place notches on the yoke line.
- Cut the pattern apart on the yoke line.
- The dart in the yoke will remain closed, so tape it shut.
- Open the “shoulder” dart in the bodice. This can be converted to gathers. You may also wish to convert the waist-fitting dart to gathers. Add seam allowances and notches to the two parts of the pattern.

To move darts to the yoke seamline, remember that if the yoke line crosses a pivot point in either a skirt or a bodice, the dart can be lengthened to the pivot point and moved to the yoke line. In the finished pattern, it looks as if the dart has been eliminated, but it is included in the seam.

- Lengthen the dart to the pivot point, mark a new dart line, add a notch, cut the new dart line from the side seam and fold the original dart closed. Tape.
- Draw the new yoke line and add notches.
- Cut the pattern apart on the yoke line.
- Add seam allowances and markings.

**Necklines**

If you cut a new neckline, remember that you also need to cut a new facing for it.

To lower a neckline, draw the new neckline shape on the pattern. If needed, make changes on both front and back. Be sure to keep the front and back shoulder seam in proportion. Remember that there may be ease
in the back shoulder seam. Cut off the unneeded part of the pattern. Add seam allowance to new neckline.

To prevent gaping neckline, tighten the neckline by removing ¼ inch length from the neck-shoulder point. Another way to remove some of the looseness at the neckline is to move that looseness to the dart area.

- Hold the pattern up to your body. Pinch out the excess fullness in the neckline. Measure this amount.
- Slash pattern from lower neckline curve to the bust point and through both fitting darts to the bustpoint.
- Lap pattern at the neckline the amount you pinched out of the pattern neckline. Let the pattern spread at both dart lines.
- Reshape darts and neckline as needed. Add seam allowance to the neckline.
- Make appropriate changes in the neck facing.

Collars and Sleeves

These can be designed but you may prefer to use patterns for collars and sleeves which you have from purchased patterns. Generally, collar and sleeve patterns can be interchanged between garment patterns as long as you are working with a basic neckline and armhole. Be sure to use patterns that are the same size, and when possible, from the same pattern company. If the pattern necklines or armholes are not the same, use the neckline (or armhole) that goes with the collar (or sleeve) that you are using.

Collar basics:

- The neckline seam on a collar should be ¼ inch shorter than the bodice neckline seam from center front to center front. To check the length of the neckline seam, stand your tape measure on its edge as you measure.
- A flat collar has a neckline seam similar in shape to the bodice neckline.
- The straighter the neckline seam, the more roll the collar will have.
- The flatter the collar, the wider it can be and the more you can vary the shape of the outer edge.

To design a flat collar, place the bodice front and back patterns together at the shoulder seam, overlapping the outer end of the shoulder seam ¾ inch.

- Trace the neckline and mark the shoulder seam location.
- Draw the outer edge of the collar in a smooth curve. The width of the collar may vary with your design. An adult flat collar is often 3 inches wide.
- Add seam allowances and label collar.

Sleeves:

To add fullness at the sleeve bottom,

- Begin with a short sleeve pattern.
- Slash the pattern from the lower edge to the sleeve cap seamline. Clip in on seam allowance to seamline so the pattern will be flat.
• Spread the pattern the same amount on both sides of the center of the sleeve. Refer to the previous guide for suggestions on the amount of fullness to add.
• Sketch a smooth curve for the bottom of the sleeve, adding a little length at the center.

To gather at the top:
• Begin with short sleeve pattern.
• Slash through the sleeve cap to the lower edge.
• Spread the sleeve cap the same amount on both sides of the sleeve.
Refer to the chart for suggestions on the amount of fullness to add.
• Add length to the sleeve cap as shown to allow it to puff.
• Face or bind the lower edge of the sleeve.

To design a drop shoulder (or cap sleeve), design it either beginning with a kimono sleeve bodice or a basic armhole. This sleeve is actually a very short version of the kimono sleeve.

When working with a basic armhole, tape tissue paper under the armhole, extend the shoulder seamline to the length you want in the new sleeve. Lower the armhole about 1 inch. If you are a fuller figure, you may need to lower it more. Connect the shoulder line to the lowered armhole with a straight or slightly curved line.

When working with a kimono sleeve, shorten the sleeve to the length you want.

Pockets
Pockets are an easy design to add to garments. In designing patch pockets, be sure that the size and placement are becoming to your figure. To ensure use, a pocket should be deeper than it is wide.

To make slanted skirt or pants pockets, you need a pattern for the pants/skirt front, the pocket, and the pocket facing. Make all three patterns at once by using two layers of paper under the pant/skirt pattern as the pocket is designed.
• Pin 2 layers of paper under the pocket area of the pant/skirt pattern.
• Design the top line of the pocket and the line for the shape and depth of the pocket. Trace these lines onto all 3 layers with a tracing wheel. Draw the grainline in the pocket areas the same as the pant/skirt grainline.
• Cut the pants/skirt pattern and one layer of paper on the top line of the pocket. Cut the two bottom layers of paper on the line indicating the bottom of the pocket. Complete pattern pieces by adding seam allowances.

Help members with design changes. Have members cut out fabric and begin sewing at home. Return next meeting with projects.
DIALOGUE FOR CRITICAL THINKING:
Share:
Q. What are the three methods of pattern design?
A. Flat pattern design, draping and drafting.

Q. Tell what was the hardest part of the design change you made today.
A. Answers will vary.

Process:
Q. Why would you want to redesign your own pattern?
A. Allows for personal creativity, economy (reuses patterns), may achieve better fit, can combine features desired into one garment.

Q. What problems seemed to occur over and over?

Q. What similar experiences have you had?

Generalize:
Q. What life skills did you practice in this activity?
A. Goal setting, patience, using resources, self-confidence, etc.

Apply:
Q. What would you do differently next time?

GOING FURTHER:
• Have members study the draping and drafting methods of pattern design, using college textbooks on this subject.
• Encourage members to try one pattern design change on each project attempted this year.
• Have members host a “Pattern Clinic” where members of the community can bring in patterns to have members make alterations and design changes to update the patterns.
• Have a designer day fashion show where members model garments that were designed by themselves.
• Have members tour a pattern company or have a speaker visit that does custom pattern adjustment or design.
REFERENCES:
*Design Your Own Clothes*, Lois Goering, Extension Specialist, Agricultural Extension Service, University of Minnesota, North Central Regional Extension Publication, University of Minnesota, St. Paul, Minnesota 55108. (Available from Iowa State University Publications for $1—phone 515-294-5247)


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Reviewed by:
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Advanced Fit and Alterations
Clothing & Textiles, Level IV, Creating with Fabrics & Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• Types of alterations that are required on ready-made clothing to enhance fit
• Techniques to accomplish these alterations

ABOUT THEMSELVES:
• Practicing new skills can save money and enhance a better fit
• Increased self-confidence by taking personal responsibility for their appearance

Materials Needed:
• Sample trousers to use for alterations. Have members bring old ones or go to local used clothing store to get enough men’s trousers to practice on—one per each/two member(s)
• Sewing machine
• Thread
• Needles
• Alteration Guides
• Marking chalk
• Seam ripper
• Pins
• Tissue paper
• French curve
• See-through ruler or straight edge
• Interfacing
• Copies of Member Handouts

ACTIVITY TIME NEEDED: 60 TO 90 MINUTES

ACTIVITY
As you gain skills in sewing ability and pattern adjustment, you can achieve the perfect fit in the items you create. In today’s lifestyle, however, there are very few people who sew all of their own garments. As investment buying becomes more popular, we see more persons purchasing clothing that they intend to wear for many years. With proper care and upkeep, finely made garments should offer many serviceable years of wear. One drawback to investment dressing is that fashion is never constant. It is constantly changing, and because of this, some of those investment purchases may become dated. In addition, some persons may find that after a few years their body shape changes enough that the fit is not the same and garments may need alterations. Whatever the reason, it is important to know how to do some of these more advanced alterations.

Leader Notes
Welcome members, have them sit in a comfortable place. If they do not know each other, allow time for them to introduce themselves. Have each member tell one item they own that they do not wear because of poor fit and describe the fit problem. You begin.
You will then be prepared to help yourself and others. Some seamstresses find that a very good living can be made by doing alterations for others. This is usually quicker than creating garments for others, thus, pays better per hour.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
- Q. What alteration did you make?
- Q. What was the hardest part of your alteration?
  - A. Answers will vary.

**Process:**
- Q. Why would doing alterations be a wise thing to learn?
  - A. Altering saves you money by doing it yourself, you get a better fit in ready-to-wear clothing, and it can be an income producer if done for others.
- Q. What is the last alteration to complete? Why do you think this would be?
  - A. Hem.
- Q. What is the first alteration to do if the garment calls for multiple alterations?
  - A. The one nearest the top of the body.

**Generalize:**
- Q. How does the idea of “making changes” relate to other issues going on in your life or community?

**Apply:**
- Q. Will you feel more confident in the future to alter your own clothes? Why or Why not?

**GOING FURTHER:**
- Visit a person who does alterations for income, or invite them to come talk with project members.
- Have members, if they feel confident, offer to do alterations for elderly persons or nursing home patients in need of clothing changes.
- Have members list other things that sometimes require alterations.
- If available, visit a local retail store that offers alterations. Compare prices and alterations available.
REFERENCES:
Alterations for Good Fit and Narrowing Lapels and Collars, Betty Feather, Clothing and Textile Specialist, Cooperative Extension Service, University of Missouri/Lincoln University, Columbia, Missouri 65211

Altering Menswear, Barbara J. Schmidt, Extension Textiles and Clothing Specialist, Cooperative Extension Service, Extension Distribution Center, 119 Printing and Publications Building, Iowa State University, Ames, Iowa 50011-3171


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ADVANCED FIT AND ALTERATIONS
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

Alteration Tips

To know what alterations are needed, you must first judge the fit of the item. To do this, the wearer must try on the item. Here are some guidelines when fitting:

- Garments should always be fitted beginning from the right side to ensure accurate fit. Some persons may have one shoulder or hip higher or lower. By always fitting right to left you will not forget any area.
- All garment openings should be fastened before checking the fit.
- Add any accessories that will be worn with the garment.
- Garment should be worn with the undergarments that will be routinely worn upon completion of the garment.
- Adjust the neckline and shoulders so they are placed properly. Be sure to alter to the preference of the wearer.
- Wearer should try on the garment (when fitting) with the shoes the garment shall be worn with.

Fittings to avoid:

- Garments that are more than two sizes too large or one size too small.
- Permanent press fabrics that retain the original creases and cannot be removed or reset.
- Problem fabrics, such as: velvet, corduroy and suede, satin or moire, leather, vinyl or plastic finish, and sequin or beaded trims.
- Soiled or spotted garments.

Next, you need to mark the amount to be altered. Pinning is often done. Pins are placed where the garment is to be adjusted. They may be used to position the garment for hard to adjust areas such as the inseam, crotch, sway back or short bodice front. Here are some tips:

- Pin vertical seams with the points toward the hem.
- Pin shoulder seam with the points toward the shoulder armhole, not toward the neckline.
- Pins may not stay in position in sheer or silky fabrics. Cut a strip of tissue paper and pin through the tissue and fabric.

Marking may be done on some items. Men’s wear is often marked with chalk instead of pinning. A universal marking code for waist and seat alterations is two vertical lines. The distance between the lines is the amount to be taken in. If the vertical lines have a slash, then the seam is to be let out the amount measured between the lines. Another code is a single pin or chalk mark placed a distance away from the center seam that is the total amount to be taken in on each side.

Next, the alterations will begin. One alteration may affect another alteration, and the order in which alterations are made is very important. The rule is to start at the top of the garment and work progressively down to the hem. Start with the neckline, then shoulder before the waistline and hips, saving the hem for last.

The goal of alterations is to retain the original garment lines. Alterations are different from constructing a new garment. With alterations you are starting a finished product and working backwards. There is an advantage, because you can observe how it was originally put together. You can either repeat the procedure or can reassemble it by your own method. Different skills are needed for alterations. If it works and is time efficient, then use it.
ADVANCED FIT AND ALTERATIONS
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

**Alteration Tips, continued**

More tips include:
- Stitch new seamline before ripping out the original seams whether taking in or releasing seams. The original seam will hold the garment in place while you restitch, which avoids puckers and provides a stitching guide.
- When taking seams in, leave a more generous seam allowance than the original 5/8 inch.
- Stitch new seams outside of the fitting line so the final fit of the garment is not tighter than planned.
- Mark the new seamline on one side of the seam, preferably the side that will be stitched.
- Place pins at right angles to the new seamline, then the seams will not shift as you stitch.
- Avoid basting when pinning will do. Avoid pinning if pressing will be effective.
- When changing only part of a seam, always overstitch the original seam at the beginning and end. That procedure will prevent a gap when the original stitch line is removed.
- Use 8 to 10 stitches to the inch for most machine stitching. Larger stitches are easier to remove and take less time to remove than shorter stitches. Use shorter stitches for narrow seam or places that have been clipped or slashed close to the seamline.
- Stitch the garment from the top toward the bottom; this procedure makes it easier to follow body contours.
- When possible, work inside the circles of a garment section. Armholes, sleeves, waistlines, pant legs and hems are all in a series of circles. As you stitch around these circles, keep the open part of the circle above the part you are stitching rather than underneath. The work is easier.

**Waistline does not fit.**

If too tight, the possible alteration depends upon adequate seam allowance to be released and extend the waistband.

1. Try the trousers on—right side out, pin the amount to be taken in or amount that can be released. Take special notice of back pockets or darts in the taking in process. Taking the back seam in more than 1 inch on each seam may require the pockets or darts be moved if possible. The pockets should not be closer than 2 inches on each side of the center back seam after the alterations are completed.
2. Turn the trousers inside out and chalk the pin marks.
3. In men’s trousers, the pants and waistband are sewn in one continuous seam, therefore, the waistband does not need to be ripped from the trousers.
4. In women’s trousers, the waistline seam is usually sewn after the center back seam is stitched. Open the waistline seam almost to the side seams.
5. If the trousers have a fly front, make a new seam at the center back of the waistband. Make sure the center back seam of the trousers and waistband match when the band is stitched to the trousers.
6. For trousers with a side zipper placket, the waistband can be moved toward the placket, providing it is concealed by the front waistband.
7. If the waistband seam was opened, pin in place and stitch from the waistband side along the original seamline.
8. Stitch-in-the-ditch to fasten the back waistband seam allowance. Press.

Markings mean “let the waist and seat out this much.”

Measure the amount of gap.
**ADVANCED FIT AND ALTERATIONS**
**CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS**
Member Handout

**Alteration Tips, continued**

**The seat of the trousers is too baggy.**
Take in the back inseam seam allowance; if the leg is full, provide a greater taper.
1. Try on the trousers right side out. Pin a tuck crosswise to lift the trousers in the crotch (stride) area.
2. Turn the trousers inside out. Chalk the pin marks and measure between them to determine the amount to be removed from the crotch area.
3. Rip the inseam because the fullness comes from only the back part of the inseam.
4. The amount to be removed has been determined, but the amount of taper on the inseam will be determined by the fullness in the trouser leg. If the trouser leg fits well, the taper will be shorter. If the trouser leg is too full, extend the taper toward the knee. For exceptionally wide trouser legs, see the next alteration.
5. Once the amount to be removed and the taper has been determined, only the back seam allowance should be taken in. The front inseam allowance should remain the same.

**Trouser legs are too wide through the hip area.**
Keep in mind that the back trouser leg should never be narrower than the front trouser leg. Take some fullness out of the front leg rather than too much from the back leg if you develop this problem as you begin to narrow.
1. Try the trousers on right side out; pin vertical tucks through the hip area and upper thigh area.
2. Turn the trousers wrong side out, chalk the pin marks. Measure the amount in the tuck and take that amount from each back and inseam. Rip original inseam 4 inches past the last marking.
3. Blend all markings into smooth curves.
4. Stitch center back seam on new line.
5. Shift the back seam allowance forward until the new seam allowance coincides with the original front inseam. Stitch, blending into original seam lines at ends.
6. Trim the seam allowance to the same width as original seam. Overcast edges together and press to one side.
Crotch seam is too tight. (“Smile” wrinkles in the trousers crotch front or back while person is standing.) Increase the rise if possible, but there is usually very little seam allowance to use this technique. Another approach is to insert a gusset. The amount of ease that can be provided by a gusset is usually in a width range of 1½ to 3 inches.

1. Turn the trousers inside out and open the center front, center back and the two inseam seams approximately 3 inches on each seam.
2. Fabric for the gusset can come from scraps cut from previously shortening the trouser. Otherwise try to match fabric as closely as possible. As this area is not easily seen, an exact match is not essential.
3. Cut double triangles (gussets) of matching fabric the width needed between the center front and center back and the length plus seam allowance to ease them in.
4. Pin one corner of the triangle (gusset) to the center front seam at the crotch point, pin the other corner of the gusset to the center back seam at the crotch point. Pin gusset into inseams evenly, so there are not puckers.
5. All three seams, each gusset seam and the original leg seam must meet if the gusset is to lie flat with no bulge.
   Repeat on the other leg and then restitch crotch seam.
6. Press, turn right side out.

Trousers need to be shortened or lengthened.
1. Release the hem and press out the crease.
2. Try on the trousers and mark the desired length on one leg using pins at the back and front crease. Usually the back is ¼ inch longer than the front.
3. Unless the person has one leg shorter than the other leg, measure only one leg.
4. Place the pants on a flat surface, match all four seams and creases. Draw the hem allowance 1½ to 2 inches below the pins. Cut off excess fabric.
5. Finish raw edges using zigzag or overedge stitch. Press hem up along the pinned marks.
7. To lengthen, pin and stitch hem tape on the raw edge of the lower trouser edge.
ADVANCED FIT AND ALTERATIONS
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

Alteration Tips, continued

Next, we will look at jacket fit problems.

**Jacket is too large through the body.** No more than two sizes too large.
1. Try the jacket on over the garment it is to be worn with. Button the jacket.
2. Pin the amount needed to adjust the fit of the jacket.
3. Open the sleeve lining in one sleeve midway between the wrist and elbow. Turn the jacket inside out through the sleeve lining.
4. Chalk the inside seams as they were pinned in fitting. A French curve may be useful to draw accurate curved lines. Stitch new seams before ripping original seams.
5. If the lower edge of the jacket needs to be reduced, the hem will need to be released and the seam extended through the hemline.
6. If the jacket is fitted and is taken in more than 1 inch, make identical changes in garment lining.
7. Rip out original stitching and press the seams open.
8. Turn garment inside out and repress.

**The front jacket lapel stands away from the chest.** It should lay flat.
1. To make the jacket lay flat against the chest, pinch the amount needed under the collar.
2. Pin, chalk, and measure the amount to be removed from the front shoulder area.
3. If the jacket is lined and attached at the hem, rip the sleeve lining at midseam and pull the jacket through.
4. The maximum amount that should be removed is approximately 1 inch.
5. Rip open the shoulder seam area and collar.
6. Raise the front shoulder seam the amount to be removed from the front. Taper the front shoulder to nothing; stitch to the original back seam allowance.
7. Lower the collar at the center back to compensate for the amount removed from the front shoulder seam.
8. Stitch collar to the jacket back; adjust lining if necessary.
9. Press and turn jacket right side out.
Wrinkles show across the back shoulders directly underneath the collar.
1. Pinch the extra fabric into a crosswise tuck at the center back seam to determine the amount of fabric to be removed. Pin.
2. The most that should be removed is 1 inch for women’s jackets and 1 1⁄2 inches for men’s jackets; chalk the pinned tuck and measure the distance between the pins.
3. Rip the center back collar 2 inches past the shoulder seam (into the jacket front).
4. Rip open the shoulder seam in the jacket and lining for about 2 to 3 inches.
5. Measure down the amount to be altered in the center back and gradually taper to each edge.

How to shorten a jacket sleeve without a vent.
1. Take a tuck to raise the sleeves to the desired length. Chalk the pins and measure the amount to be removed from the sleeve.
2. Remove the buttons on one sleeve only.
3. Turn the jacket sleeve inside out. Open the lining seam midway between the wrist and the elbow. Pull the jacket sleeve through the opening in the lining. Leave the lining attached at the hem for shortening.
4. On the inside, measure the amount to be shortened from the stitching line of the jacket sleeve and lining fabrics; mark with tailor’s chalk. Machine stitch along the marked line and trim.
5. Add new interfacing to the jacket sleeve. If the interfacing has been trimmed away, use the old interfacing to cut the new interfacing.
6. Tuck the sleeve back through the opening in the lining.
7. Turn the jacket sleeve right side out and press along the marked hemline.
8. To hold the hem in place, stitch-in-the-ditch at the sleeve seams.
9. Replace the buttons using the other sleeve as a guide for placement. Repeat this procedure for the other sleeve.

Sleeves are too short on the jacket, no sleeve vents.
1. Try on the jacket and determine the amount to lengthen the sleeves. The new length will be taken from the sleeve hem, so the alteration can be no longer than the hem depth. Mark the new length on the sleeve hem.
2. Remove the buttons on one sleeve only.
3. Turn the jacket sleeve inside out. Open the lining seam midway between the wrist and the elbow. Pull the jacket sleeve through the opening in the lining.
4. Cut across the lining 2 to 3 inches below the elbow; press out the hem crease in the jacket and lining.
5. Cut a piece on the straight of the fabric, the width to be lengthened plus seam allowance (on both the fabric and lining seams).
6. Insert the fabric strip into the sleeve lining to accommodate the added length in the jacket sleeve. Press seams open.
ADVANCED FIT AND ALTERATIONS
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

Alteration Tips, continued

7. Add new interfacing to the jacket sleeve. If the interfacing has been trimmed away, use the old interfacing to cut the new interfacing.
8. Tuck the sleeve back through the opening in the lining.
9. Turn the jacket sleeve right side out and press along the marked hemline.
10. To hold the hem in place, stitch-in-the-ditch at the sleeve seams.
11. Replace the buttons using the other sleeve as a guide for placement.
12. Repeat this procedure for the other sleeve.

Jacket sleeves are too long, sleeves have a vent.
1. To shorten a sleeve with a vent is more time consuming and limiting than one without a vent.
2. Try on the jacket and determine the amount to shorten the sleeves. Mark the new length on the outside of the sleeve.
3. Remove the buttons on one sleeve only.
4. Determine if the vent can be shortened. If the vent has been cut out or mitered and trimmed, eliminate the vent by stitching it closed. Then, follow the directions for shortening a sleeve without a vent. If the vent has not been cut or mitered, continue with step 5.
5. Open the vent seam and press out creases in jacket and lining fabrics.
6. Turn the jacket sleeve inside out and open the lining seam midway between the wrist and the elbow. Pull the jacket sleeve through the opening in the lining.
7. Leave the lining attached to the hem for shortening.
8. Mark the amount to be shortened.
9. Stitch the new seamline and trim off excess fabric. The corners that form the vent are shortened the same amount that the seam is.
10. Move or add new interfacing to the new seam of the sleeve hem.
11. Pull the sleeve lining into the sleeve. Note the shape of the vent.
12. Fold the corners that form the vent and stitch those the same amount as was used to shorten the sleeve. There will be a short area where the vent and lining fabric is not machine stitched, this will be done later by hand.
13. Replace the interfacing. Stitch it to the new seam allowance or the new sleeve seam.
14. Turn the sleeve right side out. Hand hem lining to coat in the vent area.
15. To hold hem in place, stitch-in-the-ditch at the sleeve seams.
16. As the vent has been shortened, it may give a better proportion to use fewer buttons in the vent. Give a final press.
The jacket is too long.
You may shorten the jacket, providing the new hemline does not interfere with the pockets. Some pockets can be raised or removed. The most difficult part is retaining the original curved front edge.

1. Try on the jacket and mark the new length. The jacket length should cover the buttocks. Make a paper pattern of the curve of the front jacket curve.
2. Remove the top stitching on the curved edge of the jacket.
3. Turn the jacket inside out. Press the hem and facing seams flat.
4. Lay pattern for new curve even with the new hemline. The front edge of the pattern should lay along the front seam of the jacket.
5. Draw new curve around the edge of the pattern for your new stitching line on both jacket front sections.
6. Stitch along markings. Check to be sure both fronts are stitched to exactly the same length.
7. Starting ½ inch from the inside edge of the facing, trim seam to ¼ inch.
8. Turn right side out, smooth all layers, and press facing seam carefully on the facing side.
9. For jackets with a back vent, the lining will need to be repositioned along the vertical seams and hand stitched in place.
10. Trim excess fabric, retaining the same hem depth as the original one.
11. Replace the hem with a tailor’s stitch.
12. Slip-stitch lining back in place.

Jacket lapels too wide.
There are two methods to use—the easiest and the one we will discuss is the hand stitched method.

1. Remove the topstitching only from the area being restyled.
2. On the right side of jacket, mark the new lapel and collar width in contrasting thread, using a small basting stitch. Baste through the right side of the fabric only, not through the facing or undercollar.
3. Remove stitching from the area being restyled.
4. If garment was topstitched, bring ends of topstitching thread to inside and secure.
5. Using the mark for the new lapel and collar width as a guideline, turn under excess fabric on right side of garment only.
6. Pin seam allowances under on the right side only.
8. Baste seam allowances close to turned edge on right side only.
10. Allowing ¼ inch for seam allowance, trim off excess fabric. To eliminate bulk at corners, trim to ¼ inch.
11. Place lapel and collar on tailor’s ham. Pin right and wrong side of lapel and collar together. Allowing ⅛ inch for seam allowance on underlapel and undercollar, trim off excess fabric.
11. Place lapel and collar on tailor’s ham. Pin right and wrong side of lapel and collar together. Allowing $\frac{3}{16}$ inch for seam allowance on underlapel and undercollar, trim off excess fabric.

12. Turn in seam allowance on underlapel and collar. To prevent underlapel and undercollar from showing on the right side, allow $\frac{1}{4}$ inch for a slightly wider seam allowance. Pin in place.

13. With matching thread and small stitches, slipstitch underlapel and undercollar to upperlapel and uppercollar. Miter corners, adjust seam allowances as necessary. The underlapel and undercollar should not show from the right side.

14. Topstitch lapel and collar edges and remove basting threads.

15. With steam iron and press cloth, place restyled area over a tailor’s ham and press.

**OTHER ALTERATIONS:**

**Waistband of jeans is too loose.**
Create darts in the back of the pants. Dart ends can be concealed behind the patch pockets if the pants have patch pockets.

**Waistband is too tight on skirt or pants.**
Matching fabric will be necessary to piece the waistband. Look within the garment for fabric that can be used, such as a facing, hem allowance or pocket.

1. Measure the individual’s waistline and garment waistband to determine the size of piece to be cut. Ideally, there should be 1 inch of ease in the waistband.

2. The skirt may need to be increased at the upper edge. Alterations include stretching the upper edge, releasing gathers or darts, or reducing the seam allowances.

3. Piece the waistband at an inconspicuous location, such as at the side seam or at an under extension.
Alteration Tips, continued

Pant legs too wide.
This alteration is done to update out-of-style pants, or to scale down pant legs so they are more in proportion with the customer’s body. Take the measurement from a pair of pants the customer likes, because it is too hard to judge the width by pinning on the body.

1. Measure across the very bottom of the pant leg to determine the old and new widths.
2. Subtract the desired width from the old width. In this case it would be 11 inches - 9 inches = 2 inches.
3. Divide this amount by 2 and remove that much from each sideseam: 2 inches ÷ 2 = 1 inch.
4. Remove the hem and draw the new sewing line, tapering to nothing about 3 inches above the knee.
5. Rip out the old seamline and trim the seams. Press the seams open.
6. Resew the hem and press. The pant creases remain the same.

The most frequent alteration is changing the hem length of a garment.
Here are a few guidelines:
- Hems should be the final adjustment of a garment. If others are done, a second fitting may be necessary to mark the hem.
- Have the wearer look straight ahead and stand straight when marking hem.
- If the original hemline is even, it is not necessary to mark the complete hemline.
- If the hem is uneven, it will be necessary to mark the entire hemline.
- Ask the wearer to stand still while you go around them, pinning the new hemline.
- Some fabrics are difficult to pin or will leave pinhole marks. Use translucent tape to mark hem length for those fabrics. Some hems may be glued or fused in place rather than sewn by needle and thread.
- Luxury fabrics may retain pin and needle holes, so only the finest quality pins should be used. Paper clips or clothespins may be used to temporarily hold the hem in place.
- Learn to quickly remove the stitching of commercially hemmed garments. To remove a machine blind stitch, hold the hem in your left hand and with a good ripper, break the tip loop and the thread under it. If done correctly, with one pull the entire hem can be quickly released.
- Release both the garment and lining hems at the same time. They can be pressed, measured, cut (if needed) and pinned all at once.
- Use a hem gauge for marking.
- Follow hem depths used in better ready-to-wear as your guide.
- Gather and steam out fullness at the top of the hem before sewing to create a smooth hem.
- For rehemming a narrow garment, pull and stretch the top of the too narrow hem before sewing.
- Begin and end all machine and hand stitching at a side or back seam. For pants, begin and end the hems at the inseam.
- Use garment vertical seams to anchor the hem. Do not sew through the seams to the fabric. Whip the hem stitches to the vertical seam allowance for additional hem support.
- Lining hems should be slightly shorter, ½ to 1 inch than the garment. For sheer fabrics, the linings should be only ¼ inch shorter.
Alteration Tips, continued

- Press woven fabric hems before stitching. Knit fabrics should be pressed after hand stitching, because a
looser hem stitch is used which allows it to shift. For evening and cocktail dress hems, only steam press on
the wrong side above the hem fold, so that the hem will not have a sharp edge crease.

Tips for measuring hems:
- Check the hemline to determine if it is even. Place the yardstick or hem marker alongside the skirt at the side
seams, center back or center front. If the measurement is the same at these points, the hemline is even.
- To alter an even hemline, place a line of pins around the hem using 3 to 4 inches for straight skirts and
2 inches for full skirts.
- To alter an uneven hemline, establish the amount to be lengthened. Measure and pin as close to the bottom of
the hem as possible. Be sure to note that this hem is to be lengthened. The pin marks will provide an even
line to establish the new longer length.
- Garments with linings can be measured together if the lining is the same width as the outer garment. If the
lining is to be measured separately, then the outer garment should be pinned out of the way until the lining is
measured.
- Coats should be fitted with the type of garments they are worn over, such as blazers, bulky sweaters, etc.
Coat linings do not need separate measurement.
- Hemlines with special treatments such as scallops, ruffles, pleating or borders will need to be shortened at the
waist, above the treatment or perhaps not at all.
- Pants usually come just to the top of the shoe in front with a ½ inch drop in the back. Start at the center front
crease and turn under the extra length. Insert pins vertically with the points down and enough pins to hold the
new hem in place.
- Pants with cuffs can be shortened by using a crosswise tuck to determine the correct length. Follow the
procedure used in the original construction of the cuff to restore it.
- Pants can be lengthened if there is sufficient hem allowance for the face fabric. Piecing or hem tape can be
used for the new hem allowance.
- Floor length garments should be measured to the floor with the shoes the wearer will use with it.
- Bridal gowns with an attached train should be treated as floor length garments. Measure across the front of
the gown. Do not pin all the way to the side seams. The side seam should be half the amount shortened in the
front and then tapered to the train in a gradual curve. If the line across the front has been pinned at 2 inches
above the floor, the side seam should be 1 inch above the floor. Turn the hem up inside the gown and pin
vertically. It is sufficient to pin half the gown, providing there are no body irregularities.

We have talked before about hem finishes. One special hem we have not discussed before is the Hong Kong
finish. This finish is used for bulky fabrics that tend to fray. This finish was first used on elegant silk dresses made
in Hong Kong. This is a good method for use on unlined garments. Cut ¾ inch wide bias strips of lightweight
lining fabric to use for the binding. Stitch the bias strip to the hem edge with a ¼ inch seam, right sides together.
Turn the strip over the hem edge to the wrong side. Secure the bias strip by hand stitches or stitching-in-the-ditch.
What Members Will Learn . . .

ABOUT THE PROJECT:
- Three methods of tailoring
- Differences between the three methods of tailoring
- Various tailoring techniques
- Various couture techniques

ABOUT THEMSELVES:
- To become independent life-long learners using community resources
- To become selective consumers using evaluation skills before purchasing

Materials Needed:
- Purchase or obtain a reference book such as Singer Sewing Reference Library: Tailoring or Easy, Easier, Easiest Tailoring, to be used as reference for tailoring techniques (see reference at end of this lesson for details)
- Handout material and supplies used to demonstrate tailoring techniques
- Appropriate pressing equipment

ACTIVITY TIME NEEDED: DUE TO THE AMOUNT OF INFORMATION PRESENTED IN THIS LESSON, IT WILL BE NECESSARY TO SELECT CERTAIN SECTIONS OR TO BREAK IT DOWN INTO SECTIONS OF 60 TO 90 MINUTES. MEMBERS CAN PRACTICE DOING TECHNIQUES ON SAMPLES OR CAN MAKE A COUTURE (TAILORED GARMENT).

ACTIVITY:

Tailoring is a method of garment construction. The basic difference between sewing and tailoring is that tailoring goes beyond sewing to upgrade the appearance and quality of the garment. Tailoring adds structure to the garment by combining all layers of fabric in such a way that they act as one and by molding and shaping the several layers to create the desired effect on the body. Structure may be added through the use of tape, shoulder shapes, sleeve heads, special buttonhole treatments, interfacing and underlining. Tailored garments are crisper and have more stability than sewn garments.

To understand tailoring, you must first understand how it differs from sewing. Here are the differences tailoring makes.

Leader Notes

Welcome all members. Have them sit in a comfortable place. If they do not know each other allow time for them to introduce themselves. Ask each member to tell what they think of when they hear the words tailoring and couture. You begin.

Because of advanced skills required for this lesson, it is essential that at least one of the references listed above be purchased to supplement this lesson.
Leader Notes

- Garment styles are limited to suits, jackets and coats. They are usually lined and may be underlined.

- Fabric should be relatively stiff and firm, capable of being shaped. If loosely constructed fabric is used, it must be supported by an underlining that can be shaped.

- The shape of a tailored garment is determined by its structure and does not closely follow the shape of the wearer.

- Fit may be slim or somewhat loose, but the garment always has shape.

- Workmanship is critical. Exactness and attention to detail are necessary for a good appearance.

- Interfacing is attached to the lapels and collar with pad stitches, machine stitches, or fusing in such a way as to shape the pieces. Hems are interfaced for support.

- Support structures, such as shoulder shapes, taping, sleeve heads, interfacing, chest pieces, underlining or back reinforcements are used.

- Collars are rolled, with or without a notch, or they may be a shawl style. They are always shaped with interfacing and steam pressing. Rarely will a tailored style be collarless.

- Sleeves are usually set-in sleeves with or without a vent. Sleeve heads are usually used. Less traditionally, raglan sleeves may be used in a tailored garment.

- Seams are plain if the garment is to be lined. If unlined, seams are finished by binding, Hong Kong finish, or clean finish.

- Pockets may be welt or patch. Patch pockets are interfaced and are often lined. Welts are always interfaced.

- Buttons always have a shank, either as a part of the button or made from thread.

- Buttonholes are cored if made by hand or machine, often keyhole shape, or are bound or piped.

- Hems are either crisp (hard tailored) or soft (soft tailored), but edges are always well defined.

- Pressing with steam is used to help achieve permanent shape in the garment. After shape is achieved, the garment is never pressed flat.

Three types of tailoring are used today. Here are the advantages and disadvantages of each. You may use any one of the methods or you may
use a combination of techniques that will work best for you and the project you have chosen.

*Custom Tailoring* is the traditional method. Throughout the garment, careful handstitching, taping of seams, invisible tacking, interfacing, padding, and continuous pressing are used to stabilize and to build shape. Hand pad-stitching is used to create a permanent roll in the collar and lapel. There is much handwork in comparison to machine work. Accuracy and time are required to give good results. This type of garment is usually expensive in ready-to-wear.

*Dressmaker or Soft-tailoring* is a faster method. More work is done by machine than by hand. Many speed techniques are used. Pad-stitching is done by machine. The garment constructed by this method has less shape than the custom-tailored garment. However, careful stitching, pressing, and attention to detail are just as important.

*Contemporary Tailoring* makes use of fusible interfacing. Most hand sewing is eliminated. Machine sewing techniques are similar to those in dressmaker tailoring.

Some patterns offer the above techniques, most do not. If you are very interested in doing tailoring, you may want to invest in a good reference (*Singer Sewing Reference Library: Tailoring* or *Easy, Easier, Easiest Tailoring*). As you select a pattern, look for one with few seams and simple details. Good tailoring shows best when made with such a pattern.

Fabric selection is just as important as pattern selection. Buy the best quality fabric you can afford. Select easy-to-handle fabrics with little to no matching, if you are a beginner. Fabric should be tightly constructed, either woven or knit, and have a firm hand. Avoid tight fabrics that will not ease well. Keep in mind that several thicknesses will be added during construction so a thick fabric will add bulk.

Next, select the backing or underlining. The purpose of this fabric is to achieve the firmness of shape that is characteristic of a tailored garment. If the outside fabric is soft or loosely woven, it is an absolute must. Otherwise, this fabric is optional. If you choose to purchase it, make it firm but lightweight. Lightweight muslin, cheaper than regular backing fabrics, can be used if it is washed or preshrunk.

Lining will be chosen next. Lining is used on the inside of a coat or jacket or other places where a finished look is desired. Select a smooth, pliable fabric, light enough in weight so as not to interfere with the hand of the garment. If you choose to line the inside with a fleece-type fabric for warmth, you will still want to choose a smooth, slick fabric for the sleeve lining. Look for a lining that is compatible with the garment fabric in color, weight, and care requirements. Polyester linings tend to wear longer than acetate or rayon lining fabrics.
Interfacing for tailoring should be firm and of good quality. Interfacing fabrics are available in several types and weights. Depending upon your discretion the interfacing may be sewn in or fused on. One garment will probably need more than one weight and type of interfacing to get the desired effects in the collar and lapels, back reinforcement and hems. Pick interfacrings lighter in weight than the fashion fabric. Because of the give required in shaping a tailored garment, look for a woven or knit interfacing. Make sure the color and care requirements match those of the garment fabric. Hair canvas is the traditional tailoring interfacing and is available in many weights and in both fusible and sew-in types.

As you complete your shopping, the last items to look for are the notions. Depending upon the construction techniques you decide to attempt, you may be purchasing and using some notions you have not used before.

Stay tape of cotton, linen, or polyester twill will be needed. This prevents stretching and reduces bulk along edges. Always shrink the tape before using. Use a ¼ inch or ⅜ inch width.

Thread of silk is often used in sewing wool because its strength and elasticity are similar to wool. Cotton and polyester combinations or 100 percent polyester are less expensive and work well. Soft cotton or silk thread is used for basting.

Needles that are short and fine are best choices for hand sewing.

Hook and eyes and snaps are usually made of metal. Fabric covered snaps are available. You may also cover snaps yourself.

Weights are made of metal and can be used in the hem area of a jacket or coat to make them hang nicely.

Buttons should be purchased with the fabric, keeping in mind the overall look you want from the garment. A size is usually suggested on the pattern envelope. Buy good quality buttons that can be cared for as the final garment will require.

Shoulder pads maintain the natural shoulder line. They may be purchased or you may make them using polyester fleece.

If you have not acquired these tools before, you may want to add a tailor’s ham, seam roll, and point presser/clapper to your sewing/pressing equipment.

**Preshrinking:** Always preshrink your fabric. Use a reliable dry cleaner that can professionally steam press it or use the “London Shrink” method. If the care requires dry cleaning, then use the dry cleaners. The “London Shrink” method is for worsted fabrics to obtain definite shrinkage percentages. All worsteds should be afforded this treatment. It will relax stresses and strains left in the fabric after manufacturing. It provides a supple and mellow hand and gives a smart appearance to the goods.
A modified version of the London Shrink method has been created and used safely by many seamstresses in the home. Here is the procedure.

Completely wet a cotton sheet. Spread it out on a flat surface folded lengthwise in half. Open one-half of the sheet and place the folded fabric on the sheet lengthwise. Lay the top half of the sheet over the fabric. The wet sheet now surrounds both sides of the fabric. Next, begin to lap the folded sheet and fabric into 10-inch laps, over and over, in jelly roll fashion. If the sheet is made of cotton and polyester, which dries fast, place a plastic wrapper around the roll.

Place the roll over a portable drying rack or across the backs of two chairs. This should allow air circulation completely around the lapped fabric. Twenty-four hours later, the fabric should feel dry as you place a hand inside the laps. With careful lapping, there should be no need for pressing afterward. Light pressing may be done if wrinkles persist.

For knit and woven fabrics which are normally washed, choose a similar lining fabric and preshrink by washing all items.

**Fitting Shell:** Since custom tailoring requires much time, money and energy, it is wise to make a muslin shell. This inexpensive way of testing for fit and making alterations can give you peace of mind about cutting into your expensive fabric.

**Cutting:** When cutting, keep these things in mind:
- Cut small notches to keep bulk to a minimum.
- Cut interfacing for front bodice with an extension of 3 inches below the armhole. This gives more support and firmness to the front of the jacket.
- Cut lining jacket back with a 1-inch pleat on the fold.

**Marking:**
- The most accepted method of marking in custom tailoring is with tailor’s tacks. This protects woven and knitted fabrics from damage from various marking instruments.
- To make a tailor tack, use a hand needle and basting thread 36 inches long threaded double to make an 18-inch length to use. Push the needle through the round dot markings for darts, buttonholes, zipper endings, and other needed marks. Push it through again in the same holes forming a loop. Place your forefinger in the loop to be sure you leave a 1-inch diameter loop. Clip thread 1 inch from fabric.
- Finish one area, such as one dart. Ease fabric apart and carefully clip threads between fabric, leaving some threads on each side of the fabric.
- A tracing wheel and tracing paper may be used for firmly woven fabrics, such as hair canvas and muslin or for nonwoven interfacing. When using a tracing wheel, be sure to use a cork board or old magazine underneath to prevent marring furniture.
Construction techniques in tailoring require absolute accuracy. This avoids disappointment later. Be willing to spend the time required to do this. Much of the handwork cannot be seen after the garment is completed; however, the quality achieved is worth it. There may be other ways to do the same operation. You may combine the three types of tailoring discussed earlier after evaluating the fabric, cost, care and use of the final garment.

**Hand stitches used in tailoring.**

- **Pad-stitch**—the stitch goes into the fabric and comes out at a slight angle. Usually you are going away from you as you stitch; however, you may find it more comfortable to work toward yourself.

- **Tailor basting**—is diagonal basting used when attaching entire areas of fabric together. It is worked in up and down rows with the fabric flat on the table.

- **Fell stitch**—this stitch is used to ensure a flat seam. It can be used over a cut or folded edge. Stitches should slant between the layers of fabric and make right angles to the seam edge.

- **Catch (Cross) stitch**—work this stitch from left to right inserting the needle from right to left. It appears to cross the threads. Do not pull tight. Secure thread on the under side of fabric.

- **Featherstitch**—this embroidery stitch developed by working from side to side and over the previous stitch.

- **Bar tack**—to bar tack by hand take three or four stitches the size of the bar tack. Cover these stitches over and over with short stitches in the vertical direction. Secure thread on the under side of lining.

**To make shoulder pads.**

Set the front and back coat or jacket bodice patterns together overlapping the shoulder line. Pencil in the shape needed allowing more in the front if your body has a shallow spot.

With tissue paper, tracing wheel and paper, draw the pattern. Mark the shoulder line. Place the pattern on each of the following and cut shapes:

- 2 Interfacing (hair canvas)
- 2 Crinoline
- Polyester Padding (e.g., Thermolam fleece by Stacy)
- 4 Muslin should be prewashed and pressed while damp when used in shoulder pads, interfacing strips, etc.

Next, trim off a small edge from the crinoline and padding making them slightly graded from the interfacing and muslin.

Be sure to plan for a right and a left pad. Mark them on the outer layer of muslin.

Build the shoulder pad in this manner:

- 1 layer of muslin
- Interfacing, wrong side up
- Crinoline
• Padding (more layers of padding may be added to build up a shoulder shape)
• Second piece of muslin
(An uneven shoulder line for either a man or a woman may be built up with the use of the handmade shoulder shape. Just pad a little more for one than the other.)

Roll shoulder pad over hand. With thread and needle, make small pad-stitches in a continuous fashion from one end to the other.

Place the shoulder pads around the pointed shape of a tailoring ham; pin and press with lots of steam. Leave on the ham to dry thoroughly.

Joining interfacing.
Seams on interfacing, need to give a soft effect with less bulk. Cut strips of muslin 1 inch wide. Trim off the center back seam allowance of the interfacing collar. Butt the center back seam together. Place muslin strip underneath. Run a single row of machine stitching down each side. Go back and stitch large wide diagonal lines to join these two edges. Press.

Darts in interfacing may be cut out, a strip of bias muslin placed underneath and stitched. The diagonal stitching lines will hold the dart sufficiently.

Padding the undercollar
The undercollar is cut on the bias and should have a seam down the center back. The center back seam is stitched, pressed open, and trimmed to ¼ inch. Prepare the center back seam of the interfacing for the collar. Cut off the seam allowance on the outside and the neck edge of the interfacing. Place the interfacing collar against the wrong side of undercollar and line up center back seams. Establish the roll line from the muslin shell undercollar. Basting thread or tracing carbon paper may be used to mark the roll line. Machine or hand stitch the roll line from seamline to seamline, using small stitches. Do not go into the seam allowance. From the roll line to the outside edge of the collar is called the fall. The fall is longer than the stand at the center back.

Mark the undercollar for pad-stitching as follows:
• on the interfacing, mark the stand using a pencil with parallel crescent rows ¼ inch apart
• mark the fall the same but ½ inch apart; there will be some short rows as you mark near the points of the collar
• pad-stitch the stand first, then the fall; use short ¼ inch pad-stitches which slightly catch the wool fabric
• start from the center each time; keep the undercollar rolled over your finger as you work, using a single thread and no knot
• when finished pad-stitching the collar, pin it onto a tailor’s ham and steam press it; let stand overnight until dry
Leader Notes

**Attaching front interfacing or women’s wear.**
Place marked interfacing on the wrong side of the fabric. Match the front seam lines and the roll line (established from the muslin shell). Pin in place. Tailor-baste in place starting at center front and working to armhole area. Do not tailor-baste over buttonhole area on right front of garment or lapel area. These stitches will be removed just before final pressing. Hand baste along the armhole and shoulder seam line through all layers of fabric.

**Chest piece for menswear.**
Working on menswear jackets is the same up to this point. An additional chest piece is used for men’s jackets. This is simply more layers of muslin and interfacing. It provides additional crispness needed for the man’s chest.
Keep the lapel rolled over your finger as you work. Always work parallel to the roll line.

Make a chest piece by cutting:
- a chest piece layer
- an armhole reinforcement piece
- a shoulder pad pocket

Stitch the three together by machine zigzag. This fits over the front interfacing already attached. (References: Reader’s Digest Complete Guide to Sewing, pp. 386-387; or Singer Sewing Reference Library: Tailoring, pp. 57 and 68-73.)

**Pad-stitching the lapel**
On the interfacing side of lapel, mark lines for pad-stitching ½ inch apart, parallel to the roll line. One line of pad-stitching is placed inside or just over the roll line but ends 3 inches above point of first buttonhole.

Start pad-stitching this line using a single thread, no knot, and small pad-stitches. Do not pad the roll line. Keep the lapel rolled over your finger as you work. Always work parallel to the roll line.

**Taping the front edge and roll line.**
Preshrink cotton twill tape. Remove tape from card and place in pan of boiling hot water for 20 minutes. Take out and let dry.

Using ¼ inch cotton twill tape, measure amount needed for front edge. Start from shoulder seam on front neckline, continue around neckline, down lapel and front edge to hemline. Twice that amount will be needed. In addition, enough is needed for the two lapel roll lines, the two armholes, and the two shoulder seams.

For a man’s coat, the tape is extended from one front roll line over onto the roll line of the collar. It is easy to forget to leave one side long in order to do this.

Trim seam allowance from interfacing. Place edge of tape right on seam line. The tape falls back of the seam line into the garment.

Begin placing tape on at front edge from the top and continue to the hem.
Do not clip seam line edge of tape but ease it around the curve. Some clipping may be necessary on the outer edge to make tape lie flat.

The tape at the neckline corner should be cut at a diagonal. Fit the tape and pin it to the neckline as far as the shoulder. With single thread, use a small fell stitch to attach both sides of the tape—first to the seam line in the wool and then to the interfacing.

Cut tape the same length as the roll line. Pin the tape on the roll line at the neckline first. Pull the tape with a little tug so that it shortens about \(\frac{1}{8}\) inch. Fell stitch tape on both sides starting at the neckline and working toward the buttonhole.

For contemporary tailoring the same procedures are followed for the interfacing with these exceptions:

- twill tape, preshrunk, is machine-stitched to the front interfacing edge and only the outside edge is stitched by hand into the seam.
- all darts are cut out of the iron-on fusible interfacing before fusing. This eliminates bulk and with accuracy is much easier to do than stitching over the iron-on.
- a smoother, more even interfacing is acquired if the entire front bodice pattern is used rather than a part of it for the shaping.
- a muslin reinforcement back piece is still used rather than an iron-on interfacing for the back.

**Buttonholes.**

Buttonholes should be sturdily constructed, evenly spaced on the garment and identical to each other. A buttonhole is as long as the button is wide and thick, but check the length of a practice buttonhole. It should let the button slip through easily, but not be loose.

**Machine made buttonholes** are always used on menswear, an attachment or a built-in on various machines, make this type of buttonhole. The buttonhole is placed in the left side front after the front part of the garment is completed. Be sure to make a sample from scraps of the fabric and interfacing being used to test the width of the stitch, etc.

**Bound buttonholes** give a professional look to any garment. As usual, the buttonholes should begin and end in line with each other and all should be the same width. In addition, both folds of the binding for bound buttonholes should be the same width and should meet in the center; corners should be square and firmly held.

To mark the buttonhole channel, machine baste (or hand-baste if fabric will show machine stitch marks even after they are removed) the center front line on both front pieces after you have attached the interfacing and tape. On the buttonhole side, baste a line parallel to the center line and \(\frac{1}{8}\) inch from it toward the front edge of the garment. After determining the length of the buttonholes baste another line parallel to the first two and a buttonhole length from the second parallel line.
Cross these parallel lines with buttonhole lines. Use contrasting thread so that the position of the buttonholes is plainly marked. Be certain that all lines are stitched on the grain line of the fabric and the interfacing. These lines are used for any type of bound buttonhole.

Window Method of Bound Buttonholes
This method is especially suitable for fabrics that ravel easily or are bulky. Interfacing may be cut out of the front interfacing in a rectangle shape about ⅛ inch wide and the length of the intended buttonhole.

For the patch itself, use a crisp, sheer fabric such as organza. It should be cut 1 inch wider and 1 inch longer than the buttonhole. Center the patch over the buttonhole marking on the right side of the garment and pin. Emphasize front markings with tailor’s chalk.

Machine-stitch ⅛ inch from each side of the buttonhole lines using small stitches (20 per inch). Start at the middle of the marking and pivot at the corners, carefully counting the stitches at each end to be sure each line is the same length. Overlap stitches where you began. Slash down the center to within ¼ inch of the end, then out to the corners, forming triangles on each end. Be careful not to cut the stitching.

Turn the patch through the slash to the wrong side of the garment and press seam allowances away from the opening. You now have a neatly finished opening for your garment.

Cut two strips of your garment fabric 1½ inches longer and wider than the buttonhole. Baste the two strips right sides together along the center, forming a seam. Press the seam open.

Working from the right side, place the strips on the wrong side of the buttonhole opening so that the basted seam is at the center of the opening; this forms the two even lips of the buttonhole. Pin the strips in place close to each end.

Turn the garment to the wrong side. Pin the long seam allowances of the opening to the strips to hold the lips in place, then stitch on the garment (outside the buttonhole) alongside the previous stitching so that the organza does not show on the outside.

Extend the stitching lines about ½ inch on both ends of the seam through the organza and strips.

If desired, cord the buttonhole by drawing yarn through lips just made.

Secure the ends. Trim the excess fabric from the patch and strips and press.

Making bound buttonholes requires that you finish the back of the buttonholes in the facing. You can do this in one of two ways:
1. Slit the garment facing exactly behind the buttonhole. Fold the cut edges under and slipstitch them into position around the back of the buttonhole. This is most successful on lightweight fabrics.

2. For heavier fabrics, cut a rectangular piece of firmly woven fabric; either the lining fabric or some fabric lighter in weight than the garment fabric. Put this piece on the facing, right sides together, over the buttonhole. Stitch a rectangle as long and as wide as the finished buttonhole.

2a. Cut through the center of the stitched rectangle and clip into the corners as you did with the buttonhole. Pull through to the wrong side of the facing, press and slipstitch in place around the back of the buttonhole.

**Attaching back reinforcement**

Seldom is a back reinforcement piece suggested in a commercial pattern. It provides support and comfort across the back.

Using the back pattern piece placed on muslin folded on straight grain, cut a piece 7 1/2 inches long at center back and shaped out to 3 inches under the armhole.

Prepare garment back, stitching and pressing seams, darts, and vents. Position back stay on garment, baste neckline, armhole, and side seams. Catch back stay in seam stitching on neckline, armhole, and side seams during rest of construction.

Place twill tape on neckline seam line extending into garment. Fell down both sides starting on side on seam line and then side on muslin. (In this case, do not trim away muslin but fell-stitch through muslin and wool)

At this point, the shoulder and side seams should be machine basted together, shoulder pads pinned in and a general fitting done. Any changes need to be made now. When garment fits perfectly, stitch seams permanently and press them open.

When shoulder seams are stitched permanently together and pressed open, place a piece of twill tape over the seam extending from armseye to neckline on the wrong side. Catch-stitch tape in place along both sides.

**Taping the armhole**

Before the sleeve is set in, the armhole should be taped to add extra shaping. A man’s jacket should be taped in a complete circle. A woman’s jacket may be taped in a complete circle or taped only in the underarm section and halfway up each side.

Fell-stitch the tape on both sides.

When the sleeve is stitched into the armhole it may be double stitched 1/8 inch apart at the underarm from notch to notch. Trim away seam allowance to stitching only from notch to notch.
Attaching undercollar

Finish neckline edge of undercollar by trimming interfacing to seam line, if not already done. Trim seam allowance to ½ inch. Turn up neckline edge, press and baste in place. Catch-stitch to interfacing using small stitches.

Pin undercollar to back neck edge with right sides together. Starting from center back hand stitch with tiny, strong, weaving stitches. Weaving stitches are simply going from one side to the other in the fold each time. Pull slightly after each stitch to ensure strength of the stitching. Stop stitching at end of neckline seam line on undercollar. Do not go into seam allowance. (Repeat for other half of undercollar.)

The hand-set collar provides a soft roll that machine setting is unable to achieve.

The undercollar is always hand-set for both men’s and women’s coats. A man’s upper collar may also be hand-set with proper preparation of the upper collar. All the outside edges are turned in and pressed flat. A blanket stitch is used to attach the upper collar which is slightly larger than the undercollar.

Applying front facing and upper collar

Machine stitch back neck facing to front facings and upper collar to front facing and neck facing. An alternate method is to machine stitch the front facings to the neck facing at shoulder seams only. Machine-stitch upper collar to undercollar along the three outer edges and hand-set the upper collar to the front facing and back neck facing. This makes for a softer, smoother fit.

Machine stitch front facing to front edge leaving a bubble of fabric at the lapel point. This bubble allows more fabric to be turned on the lapel point and thus the seam does not show to the right side.

After stitching, press seams open. Trim point and grade seams. Remember to leave the longest graded edge toward the outside edge.

Reverse grade from end of roll line and just above buttonhole. Reduce bulk by trimming seams to ¼ inch and ⅛ inch. Do this carefully, but don’t be afraid to trim. Removing bulk helps to give the professional look to finished garments.

Turn collar right side out. When the upper collar is in place with seam lines on facings, exactly matching seam lines on garment, the upper collar will be larger from front to back than the undercollar. There may be as much as ⅝ inch difference. That is good because it provides the roll needed for the collar to set on the shoulder and continue to roll properly. Fasten lightly at center back under neck facing to back seam allowance.
Press and pound the collar and front edge to a satisfactory sharp edge. Steam, with persistence will accomplish the look of perfection. Do not press the lapel roll line as you want a soft roll.

Setting in sleeves
Construct the sleeve and press. The finished length should be known from the muslin shell. Go ahead and finish the lower edge using a bias muslin strip 2 inches wide as interfacing. Secure the bias in the crease line of the hemline with a small running stitch. Then cross-stitch the top edge of the hem to the muslin, being careful not to go through onto the sleeve. Construct the button vents and sew on buttons.

To prepare sleeve for setting into armhole, machine baste on the seam allowance from notch to notch over the top of sleeve. Pull the bobbin thread of the basting stitch to the amount of fullness needed so sleeve will just fit into armhole. It should not be very full.

Shrink out fullness with steam and shape the cap of the sleeve over the fingertips.

Set in the sleeve. Turn the bodice wrong side out. Place the sleeve in the armhole, with right sides of the bodice and sleeve together. Pin together, matching underarm seams, shoulder seams, notches, and other markings. Place more pins between the pins you just used, divide the area in half and pin, then in half again, etc. Use as any pins as necessary to hold these in place for stitching.

Stitch the sleeve in. Place the garment under your machine needle, sleeve side up. Beginning at one of the notches, stitch toward the underarm seam and continue around the armhole. For extra strength, restitch the seam between notches in the underarm area, ¼ to ⅜ inch from first stitching into the seam allowance.

Trim the underarm seam from notch to notch to ⅛ inch.

A soft roll on the sleeve is more desirable than flat seam line. Place the garment wrong side out on the sleeve board and press lightly along the seam on the sleeve side. To avoid flattening the sleeve cap, press into it no deeper than ⅜ to ⅝ inch.

When both sleeves are completed, check the workmanship. Each sleeve should have a smooth, rounded cap with no pleats or gathers. There should be a little ease in the underarm areas as well as the sleeve cap area.

Each sleeve should have a good armhole line; that is, the armhole curve should be stitched exactly on the seam line, and the seams of the garment and sleeve should match at the underarm.

The grain of the garment and sleeves should be correct; the crosswise grain should be parallel with the floor, and the lengthwise grain should be perpendicular to the floor.
Elbow darts should be located correctly. If there are three darts, the center one should be in line with the elbow; if two, there should be one on each side of the elbow.

The lower edge of the sleeve should be neatly and appropriately finished with hem, cuff or facing.

**Applying sleeve head**

To make sure the roll at the cap of the sleeve stays rounded, make a sleeve head. Cut a bias strip of garment fabric 6 inches long and \( \frac{3}{4} \) inch wide. Fold over \( \frac{1}{2} \) inch and press. This small sleeve head is placed in the sleeve cap to protect the sleeve from the seam allowance.

Place the folded edge \( \frac{1}{16} \) inch above the seam allowance. Stitch by hand using a small hemming stitch along the seam line.

**Attaching shoulder pads**

Try the garment on; place pads as they feel and look comfortable. Pin from the outside through the pad to hold it in place. Turn to inside and catch-stitch the pad along shoulder seam line.

Stab-stitch through all layers of sleeve seam and shoulder pad using matching thread. Work from the sleeve-seam side back and forth.

**Weights**

Weights are often placed at hems to enhance the hang or drape of a garment. Be sure the weight you select can be laundered or dry cleaned.

Round lead weights resemble coins and come in different sizes and weights. They should be sewn permanently within the layers of a garment, be covered with lining fabric and held in place with small stitches. Chain weights are used specifically in jacket hems; they come in various weights and are sold by the yard or in prepackaged lengths. Tack the chain along the bottom of the garment, \( 1\frac{1}{2} \) inches from the lower edge (or just below the lining hem fold); tuck the chain ends behind the facings.

Useful places for weights are at front facing hems, sides seams, back vent pleat, or wherever the garment dictates on the individual. Posture and body build may cause the weight to be placed differently on one person than it might be for another.

**Hems, vents and pleats**

If buttonholes are to be finished in the facing by using the window method, it must be done at this point, before the hem is put in the jacket.

For hemming a jacket or coat, trim seam allowances within the hem to \( \frac{3}{8} \) inch. Use the same method for hemming as with the sleeve. Bias muslin is cut \( \frac{1}{2} \) inch wider than the depth of the hem. It will then extend higher than the hem edge. If there is fullness in the hem edge, it must be shrunk out before hemming is started. A row of ease-stitching will help ease and
shrink out this fullness. Self fabric or brown paper may be used within the hemline to avoid impressions on the right side.

Place the bias muslin in the pressed creased line. Gently turn the jacket body back and lining into the muslin hem, catch-stitch the muslin to the body of the jacket.

The front edge of a jacket is trimmed within the hem to eliminate bulk. This edge is not trimmed away in a coat, because lengthening for another season may be desirable.

With facing back in place, catch-stitch the facing to the hem on the front edge with tiny stitches.

Jacket or coat vents or pleats may be of different lengths but are similar to that of the sleeve vent. Use muslin interfacing extended over the outside fold line. Support the outside fold line with twill tape attached in the same manner as the shoulder seam tape.

Be sure the vent or pleat is turned the correct way—so the left flap is over the right side. This is the same for both men and women on a center back vent or pleat.

Inside edges of facings all around should be tailor-basted 5/8 inch from the edge.

*Topstitching*
Topstitching may be done at this point, before more weight is added to the jacket or coat by a lining. Topstitching on heavy garments is done the easy way with a large 16 (90) or 18 (100) needle or a specific topstitching or leather needle. The indentation at the eye of the needle helps carry the heavy thread through during the stitching.

Two strands of matching thread may be carried from the top of the machine to give just the right effect. This also saves the cost of other thread and may be a better matching color than might be available otherwise.

Silk and polyester buttonhole twist is available for topstitching. Silk needs to be dry cleaned or may shrink and fade if used in a washable dressmaker tailoring type garment.

The design of topstitching can be creative. One, two or three rows may be used. In western wear a double row ¼ inch apart is appropriate.

It is important to decide upon a suitable topstitching design in balance with the cut of the collar and lapel. Avoid making it look as if the machine broke down or you couldn’t decide where to go with the topstitching.

*Cutting and stitching lining*  
The lining is cut using the altered lining pattern or the altered jacket or coat pattern. Remember to allow for a 1 inch pleat in the back. The pleat
should extend all the way for a full coat or jacket, but may be tapered to
the waist when there is a vent. It would then end just above the vent.

Baste the center back pleat and press to the right. From the right side this
makes the pleat fold to the left side of the body.

Use a fastening stitch to hold the lining pleat in place. These stitches
should be placed parallel to the hem, 3 inches down from the lining
neckline and at the waistline on a coat. On a jacket, a third area to be
captured in place is 3 inches above the hemline.
The featherstitch or cross-stitch or a bar tack may be used. They provide a
decorative feature as well as a stabilizing fastener. It should be no longer
or wider than 5⁄8 inch.

Stitch a line 5⁄8 inch from the edge all the way around the lining, including
the hem.

Applying lining
When lining is ready to be placed into the garment, it is best to spread the
cloth or jacket on a large table. Open it flat and use the following steps,
completing one side before working with the other.

1. With wrong sides of the lining and jacket together, match side seams
at the notches and baste one side of the lining seam allowance to one
side of the garment seam allowance, using catch-stitch. This basting
will be left in to help hold the lining in place permanently.
2. Match the front lining piece to notches at the front armhole and at the
shoulder seam. Baste into position at the armhole seam line and
across the shoulder. Match the back lining piece to the back of the
armhole, turning under the seam allowance at the shoulder seam.
Baste the back of the lining into place around the armhole and across
the shoulder, leaving shoulder line free to turn seam allowance under
near neckline.
3. Turn under the seam allowances of the front edges and of the back
neckline of the lining. You will have to clip the seam allowance of
the back neckline to make it lie flat. The back neck lining will come
to the neckline seam of the collar or to the edge of the back neck
facing if there is one. Hand-baste. Stab-stitch the edges of the lining
to the garment at the front edges, the back neckline and across the
shoulder seams. A tiny stab-stitch done one at a time holds the lining
and sleeve lining in place with little chance of it coming out. The
needle is stabbed straight into the lining, drawn back to pick up one
or two threads and advanced forward 1⁄8 inch. Repeat. A single thread
and a stitch at a time gives a secure as well as beautiful stitch. Leave
the front edges of the lining open about 4 inches from the hemline of
the jacket; this will make hemming the lining to the jacket easier. Be
sure to keep the crosswise and lengthwise grainline of both the lining
and the garment straight.
4. To hem the lower edge of the lining, first pin the lining to the jacket 5
inches from the finished jacket hemline. Hang it on a hanger as you
pin so you will not pull the lining too taut. Trim the lining so that it
hanging \( \frac{1}{2} \) inch below the finished hemline of the jacket (unless pattern directs otherwise). Turn under \( \frac{1}{4} \) inch of the lining, pin this fold \( \frac{1}{4} \) inch above the jacket hemline, and stab-stitch in place. When the pins are removed, a pleat or tuck will fall into place at the hem, allowing some ease in the lining.

5. The hem of the jacket facing should already be finished. After you attach the lining, turn under the edge of the facing between the hem and the lining and catch-stitch in place. Hem the remaining lower front edges of the lining to the facing.

6. Finish the sleeve lining around the armholes by this method: Turn the sleeve lining wrong side out and match it to the wrong side of the sleeve at the underarm seam. Baste one side of the sleeve lining seam allowance to one side of the garment sleeve seam allowance. Run your hand through the sleeve lining and grasp the lower edge of the sleeve. Turn the lining over the sleeve, easing fullness at the cap of the sleeve. Turn under a slightly more than \( \frac{5}{8} \) inch for a seam allowance (around the cap only) and lap the sleeve lining over the garment lining around the jacket armhole. If the cap of the sleeve lining has a great deal of fullness, lap it about \( \frac{1}{4} \) inch beyond the armhole seam line (around the cap only). Pin and baste if necessary; stab-stitch the sleeve lining to the garment around the armhole.

7. Remove any basting stitches from the center back pleat.

8. Give the lining a final press.

**Couture Finishing Techniques**

**Machine topstitching**
When decorating with machine topstitching, stitch length is important. Test several different stitch lengths on a scrap of fabric until you are pleased with one. Emphasize topstitching with heavy thread—silk buttonhole twist is good in the top needle with regular thread in the bobbin. Use a size 16 needle. Adjust the machine tension by loosening it. Loosen the pressure and lengthen the stitch.

**Hand topstitching**
Topstitching can also be done by hand and you can get different effects from different stitches. To help make the topstitching line straight, place a strip of cellophane or marking tape along the seam line and use the other edge as a guide for the topstitching seam.

**Covered snaps**
Sometimes an extra touch in applying fasteners can give a garment a special look.

If snaps must be located where they will be conspicuous when the garment is worn, you can make the garment more attractive by covering the snaps with a lightweight fabric. Use lining or other lightweight fabric in a matching color. One of the following methods is suggested.

Method I—the complete snap is covered. Cut small circles of fabric so they will extend about \( \frac{1}{2} \) inch beyond the edges of the snap. Hold one
circle over the top section of the snap and position the section on the garment. Hand-stitch the snap, tucking in the raw edges with the needle. Repeat for the lower section of the snap. If raw edges slip out around the edge of the snap, make a few blind stitches into the snap covering and through one fabric thickness directly underneath the snap.

Method II—the ball of the snap extends beyond the cover. To cover snaps $\frac{1}{2}$ inch in diameter, cut circles of fabric approximately 1 inch in diameter. With the point of your scissors, punch a small hole in the center of one circle of fabric. Place this circle over the top (ball) section of the snap. Sew a running stitch by hand around the edge of the circle. Draw up the thread and fasten neatly on the underside. Place the second circle over the bottom (socket) section of the snap and close the snap. While the snap is closed, stitch around the edge of the second circle. Draw up the thread and fasten neatly on the underside. Pull the snap open and place the sections in the correct position on the garment. Stitch in place, feeling with the needle for the holes in each snap section.

*Thread covered hooks and eyes*
To help camouflage large hooks and eyes, cover them completely with thread or buttonhole twist that matches the garment. Sew them onto the garment with overhand stitches, then work around the entire hook or eye with a continuous blanket stitch. Be careful not to sew the part of the eye where the hook will be attached to the garment.

*Hidden hooks*
If you sew a hook on a front closing, try hiding the hook. On the facing, mark the point where you want the hook and eye to meet. Make a small opening in the weave of the fabric at this mark. With the blunt end of a needle, gently force the threads apart but try not to break them. If the fabric is closely woven and the weave cannot be separated, use the extreme tips of your scissors to make a tiny slit.

Insert one loop of the hook into the small opening, or slit, in the facing. Work the other loop into the opening and slip the hook into position underneath with only the bill end of the hook exposed. Sew the hidden loops into place against the facing, making the stitches as invisible as possible. Fasten the bill end of the hook and, if a slit was made in the fabric, sew up the ends to prevent ripping.

*Thread eyes*
In better made garments, thread eyes (for hooks) are often used instead of metal ones. Stitch with thread that matches the garment, they may be worked on the very edge of an opening or placed just inside the edge. Make several overlapping bar stitches, then cover the strands with buttonhole stitches. Another technique is to crochet a chainstitch with four strands of thread for the thread eyes.

*Use this lesson to assist members attempting some tailoring techniques on their sewing project or use it to make samples of some of the above methods discussed. Use one of the suggested reference books for pictures and more complete instructions for these techniques.*
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What are the three types of tailoring?
A. Custom, dressmaker, and contemporary.

Q. What tailoring technique did you learn or practice?

Q. What was the most difficult? Easiest?

Process:
Q. Which of the three types of tailoring is most appealing to you? Why?

Generalize:
Q. How could you apply what you learned when purchasing investment clothing?

Apply:
Q. What have you learned in this lesson that will be helpful to you in the future?

GOING FURTHER:
• Visit someone who does custom tailoring for others. Have members bring prewritten questions about methods, speed methods, charge for labor, and time needed to complete garments.
• Have members attempt two to three new tailoring methods each year in their project work.
• Visit a shop that sells high quality items and allow members to evaluate quality of construction.
• Visit local dry cleaners to watch the steaming process.
• Have members try contemporary method of tailoring as explained in the Singer Sewing Reference Library: Tailoring.

Use of brandnames in this or any other lesson in this notebook does not imply endorsement of that particular product.
REFERENCES:

*Custom and Couture*, Mildred A. Crawford, Extension Assistant Professor, Textiles and Clothing, Colorado State University, Fort Collins, Colorado

*Tailoring*, Ernestine Porter, Textiles and Clothing Specialist, University of Idaho, Moscow, Idaho 83843

*Skill Level Four, Clothing and Textiles*, Lyla Walker, Cherry Cowan, Gayle Muggli and Lillian Larwood, County Extension Agents, Montana Cooperative Extension Service, Montana State University, Bozeman, Montana 59717

*Clothing Leader Guide*, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

*Singer Sewing Reference Library: Tailoring*, (1988), Minnetonka, Minnesota: CyDeCosser Incorporated


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Careers in Creating
Clothing & Textiles, Level IV, Creating with Fabrics & Fibers

What Members Will Learn . . .

ABOUT THE PROJECT:
• Careers and jobs in the textile and clothing creating field
• Skills needed by some of these jobs and vocations

ABOUT THEMSELVES:
• Interest in possible exploration of a textile or clothing career field
• How to identify and use career interest resources

Materials Needed:
• Copies of Member Handout
• Pencils—one per member
• Paper for members to write on—at least one sheet per member

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

The field of creating with fibers and fabrics is a large one with many career opportunities. Today, we will be discussing some of them and the requirements that these jobs demand. You may find an interest you never had before or you may find you will decide on a job you definitely would not want. Either way, this will be valuable time as you begin to look to a future for yourself that is satisfying and rewarding.

If you are the type who likes to work with the fabrication of fibers and fabrics, then pursuing a job in that field may allow you to combine a favorite pastime with a job that you will love. If this sounds good to you, you may want to examine occupations that allow you to find some jobs that include skills and characteristics that appeal to your personality style and the lifestyle you would like to live.

Owning your own business may sound like something you would like to do. Perhaps you would like to travel to many places, you may or may not like the idea of working with various people or staying alone to work by yourself. Whatever your personal list, there is an occupation that will fit the characteristics that are attractive to you.

Leader Notes

Welcome all members. Have them sit in a comfortable place. If they do not know each other, allow time for each member to introduce themselves. Ask them to tell one characteristic about the job they would like to hold. You begin.

Have members pick two jobs. Help them write the job description that would appeal to them. Make sure they list the items, such as general description outlook now and in the future (consider social, political, economic and technological influences on the occupation).

Pass out copies of Member Handout, “Textiles or Clothing Careers” and go over them with members.
Leader Notes

Considerations for future careers:
- Uses of products or services produced
- Types of consumers using the service or products
- Education and training needed
- Personal skills, knowledge and attitude needed
- Machines, tools, materials used in the job
- Working conditions
- Geographic location of the occupation
- Promotion and opportunity to advance or enter other occupations
- Salary range per year
- Additional information

If you want to gather concrete information about the jobs, try these methods:
- Interview people in the occupation in which you are interested, also those who are closely affiliated with it.
- Check library reference books:
  - Dictionary of Occupational Titles, U.S. Department of Labor
  - Occupational Outlook Handbook, U.S. Department of Labor
  - Vocational and Educational Organizations, U.S. Department of Education
- Check library periodicals:
  - American Fabrics
  - Apparel Manufacturer
  - Bobbin
  - Clothes Magazine
  - Daily News Record
  - Dry Cleaning World
  - Fabricare News
  - Fashion Calendar
  - Handbags and Accessories
  - Modern Textiles
  - Store Magazine
  - Women’s Wear Daily
- Review library book
- Review job training programs
- Talk with local private and public employment agency personnel
- Write to trade association headquarters and union offices. See addresses below:

As the traits and skill are accumulated, help members look at the drawbacks to the occupation. Sometimes, the drawbacks outweigh the positives and a person will be unhappy with a particular job. This is when being able to switch fields with little extra education comes in handy.

Amalgamated Clothing Workers of America
15 Union Square
New York NY 10003

United Garment Workers of America
31 Union Square
New York NY 10003

International Ladies Garment Workers’ Union
1710 Broadway
New York NY 10019
DIALOGUE FOR CRITICAL THINKING:

Share:
Q. What occupation sounded interesting and why?
A. Answers will vary.

Q. What are the negative aspects to that job?
A. Answers will vary.

Process:
Q. Where would you have to live to hold that job?
A. Answers will vary.

Q. How much education would be needed to hold that job?
A. Answers will vary.

Generalize:
Q. What personal strengths or limitations did you discover about yourself?

Q. What resources proved most useful?

Apply:
Q. As a group, jointly develop what you think would be the job description for the perfect career in the textile and clothing construction industry.

GOING FURTHER:
- Invite a panel of experts in the clothing and textile creating fields to a meeting, and allow members to ask questions about their jobs.
- Begin a book of the occupations researched for future use or have members present at a local high school on career day.
- Look at various courses of study for how they can be integrated into the creating with textiles field. Example includes—business, law, journalism, education, etc.
- Arrange for members to “shadow” a professional in their chosen field, if possible.
- Plan a field trip to a university, college, or trade school during their career open house.

REFERENCES:
Create Your Own... Exploration in Textiles and Clothing... and New Horizon, Mildred A. Crawford, Extension Specialist, Cooperative Extension Service, Colorado State University, Fort Collins, COMJ 0540

If members desire, they should continue gathering information to present at the next project meeting.
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CAREERS IN CREATING
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

Textile or Clothing Careers

Here’s a list of occupations in the creating field. It is just a beginning and there are many more that are not listed here.

Apparel Production:
- Sketcher
- Fitter and Alterationist
- Cutter
- Spreader
- Examiner
- Machine Mechanic
- Plant Manager
- Designer
- Sample Maker
- Advertising and Promotion Manager
- Production Supervisor
- Fashion Coordinator
- Sewing Instructor
- Marker
- Presser
- Production Inspector
- Plant Engineer
- Personnel Director
- Pattern Maker
- Weaver
- Sales Representative
- Finisher
- Draper
- Machine Operator

Home Sewing Industry—sewing machine companies:
- Demonstrator
- Advertising and Promotion Manager
- Sales Personnel
- Machine Mechanic
- Educational Representative
- Market Researcher

Pattern Companies:
- Designer
- Pattern Drafter
- Educational Consultant
- Pattern Layout and Measuring Specialist
- Promotion Director and Assistant
- Artist
- Pattern Grader
- Pattern Direction Editor
- Catalog Editor
- Sample Maker
- Draper
- Catalog Photographer
- Market Researcher and Reporter

Notion Suppliers:
- Production Consultant
- Machine Operator
- Plant Manager
- Sales Representative
- Production Supervisor
- Education Consultant
- Machine Mechanic

Accessories Trade:
- Designer
- Production Consultant

Construction Trade Publications:
- Editor
- Public Relations Representative
- Researcher
- Consultant
- Writer
## Textile or Clothing Careers, continued

### TV and Radio Production:
- Researcher
- Reporter and Writer (Fashion)
- Broadcaster

### Teaching:
- Youth, school or private
  - Adult, School or Private
  - Cooperative Extension Service

### Museums:
- Care and Preservation Specialist
- Repair Specialist

### Fine Arts and Theater:
- Costume Designer
  - Costume Seamstress
  - Costume Alterationist

### Toy Manufacturing:
- Stuffed Animal Designer
- Doll Clothing Designer
- Sample Maker
- Cutter (Pattern Maker)
- Marker (Pattern Layout)
- Production Worker

### Interior Decoration:
- Furniture and Upholstery Designer
- Upholsterer
- Draper/Seamstress
- Carpet Specialist

### Transportation Industry:
- Automobile
- Truck
- Bus
- Train
- Airlines
- Subway Interior
- Upholstery Designer
- Upholsterer

### Handicraft, Art Object and Recreational:
- Designer
  - Materials Production
  - Instruction Writer
- Display Specialist
  - Demonstrator
  - Materials Tester
- Market Research
  - Manufacturing Supervisor
  - Sample Maker
- Sales Representative
  - Distributor

### Free Lance:
- Lecturer
  - Demonstrator
  - Designer
- Custom Clothing Construction
  - Writer
  - Consultant
- Seamstress

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*170-Clothing & Textiles, Level IV*
What Members Will Learn . . .

ABOUT THE PROJECT:
- What circumstances might require adaptive clothing for people
- Some clothing available for these special needs
- Techniques for doing minor alterations to facilitate easier dressing

ABOUT THEMSELVES:
- Appreciation of diversity and respect for each unique individual
- Self-dressing is an important part of a person’s self concept

MATERIALS NEEDED:
- “Clothing for People with Special Needs” Video and Packet available for checkout from the Department of Communications Media Center, Kansas State University, Umberger Hall
- Television
- VHS Video player
- Depending on activity, you may want to have unused items on hand for members to use in attempting some alterations to facilitate dressing (in that case, have all supplies ready—Wavelock Velcro, zipper, sewing machine, rippers, scissors, and any other supplies needed)

ACTIVITY TIME NEEDED: 45 TO 60 MINUTES—PLUS MORE IF DOING PROJECT

ACTIVITY:
Have you ever had a hard time getting dressed? Do you know of someone who has? Many of us take for granted the ability to get up in the morning and put on any item in the closet. However, there are many people who do not have the ability to do this task each day. For them, dressing is painful or inconvenient. Once dressed, the clothing they are wearing can become a menace or even dangerous. Today, we will take a look at how clothing, as we normally think of it, can be modified to be easier to put on and more functional for special groups of people.

For anyone with a special need there are four areas that we must consider when we begin styling clothing to meet their needs. Some persons will need to consider all categories and others only one. As we consider the special clothing we must consider the person we are trying to assist and what they really want.

Leader Notes
Welcome all members. Have them sit in a comfortable place where all can see the television. If they do not know each other, allow time for them to introduce themselves. Ask them to tell of a circumstance where dressing might be difficult for someone. You begin.
**Leader Notes**

**Fabrics:** Some fabrics are perfectly suited for different situations. Think about comfort—should it be warm or cool, is that important in this situation? Will slick fabrics help or hinder? What about bulky ones? Would a knit with stretch solve this problem or a more stable woven? How dirty will this garment become and how will it be cleaned?

**Fastener Systems:** Does this person need special adjustments for the fastening of the garment? Are buttons difficult? Can zipper pulls be grasped? Are cuffs too binding? Velcro is a wonderful addition to the self-dresser who needs easy-closing, secure fasteners.

**Functional features:** These are features that will vary according to the needs, activities and lifestyle of the particular individual. If the child uses crutches or a walker—big pockets that can carry what the busy hands would have—are needed. Individuals using wheelchairs need clothing that will cover them; yet not bunch up or catch in the wheels. For senior or disabled citizens with a restricted range of motion—roomy sleeves that can easily be pulled on are ideal. Persons with artificial limbs need clothing that can be wrapped around in a manner that makes them easily secured either with only one hand, or sitting—when balance is poor. The list in this category goes on and on.

**Preferences:** All of us know that we feel better when we are happy with our appearance. This is true of persons with physical challenges as well. It may be even more important to them to find clothing that meets their preferences. Special attention should be paid to the personal preference of the person for which the article will be made or purchased.

Be sure members have thought about many different times that special-need clothing may be required—pregnancy, being in a cast, using crutches, wheelchair or a walker/brace, arthritis sufferers, weakness in the hand, arm, leg, or foot, visually impaired, figure irregularities, and nursing home residents.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**
Q. What are the four categories to consider when adapting clothing for persons with special needs?
A. Fabric, fastener systems, function and preference.

Q. What did you see or hear in the video (or in this lesson) that was most significant to you?

**Process:**
Q. Why was it important to you?

Q. Name some times that clothing may need to be altered for special needs?
A. Answers will vary—pregnancy, limited range of motion, persons in casts.
Q. What can be done to change fasteners to make them easier to fasten?
A. Change them to Velcro, cut a larger opening so none are needed, attach zipper pulls, use large back openings that have traditional front appearances.

Generalize:
Q. Were you aware of the special clothing needs of some people before this activity? What did you learn about yourself from this lesson?

Apply:
Q. How will you act differently in the future as a result of this information?

GOING FURTHER:
• Members may want to contact a local nursing home and offer to alter garments for residents. (or local senior center—could be used for fund raiser for project group)
• Visit local specialty store that carries clothing for special needs or have special catalog available for members to study.
• Have members pick their favorite outfit and write it down. Assign a disability to each member and have them plan what alterations they could perform so they could still continue to wear it.
• Have members interview someone with a special need and ask about the challenges they have with dressing and how, if any, this has changed their shopping habits or wearing habits.
• You might want members to try making the “Cold Weather Cocoon,” PM-1240, for people using wheelchairs. Order from Extension Distribution Center, 119 Printing and Publications Building, Iowa State University, Ames, Iowa, 50011-3171.

REFERENCES:
Clothing for People With Physical Handicaps, Marjorie Mead, Associate Professor of Clothing Extension, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801
Clothing for the Handicapped, the Aged, and Other People With Special Needs, by Adeline M. Hoffman, University of Iowa, published by Charles C. Thomas Publishers, Springfield Illinois, 1979
Cold Weather Cocoon, Janis Stone, Extension Specialist in Textiles and Clothing, Iowa State University, Ames, Iowa, 50011-3171, 515-294-5247
Author:
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Contemporary Tailoring Construction Techniques

*Clothing & Textiles, Level IV, Creating with Fabrics & Fibers*

What Members Will Learn . . .

ABOUT THE PROJECT:

- Three methods of tailoring
- Differences between the three methods of tailoring
- Various contemporary tailoring techniques

ABOUT THEMSELVES:

- Being flexible, accepting change, continuing to learn through the life cycle is an important life skill

Materials Needed:

- Handout material and supplies used to demonstrate the following techniques
- Copies of Member Handouts

ACTIVITY TIME NEEDED: CONTENT IN THIS UNIT IS VERY EXTENSIVE; IT WILL BE NECESSARY FOR YOU TO DIVIDE IT INTO SEVERAL 60-90 MINUTE LESSONS.

ACTIVITY:

Tailoring is a method of garment construction. The basic difference between sewing and tailoring is that tailoring goes beyond sewing to upgrade the appearance and quality of the garment. Tailoring adds structure to the garment by combining all layers of fabric in such a way that they act as one and by molding and shaping the several layers to create the desired effect on the body. Structure may be added through the use of tape, shoulder shapes, sleeve heads, special buttonhole treatments, interfacing and underlining. Tailored garments are crisper and have more stability than sewn garments.

To understand tailoring, you must first understand how it differs from sewing. Here are the differences tailoring makes.

Pressing with steam is used to help achieve permanent shape in the garment. After shape is achieved, the garment is never pressed flat. Tailoring requires the use of special pressing equipment to shape and mold the garment.

Three types of tailoring are used today. Here are the advantages and disadvantages of each. You may use any one of the methods or you may use a combination of techniques that will work best for you and the project you have chosen.

Leader Notes

Welcome all members. Have them sit in a comfortable place. If they do not know each other, allow time for them to introduce themselves. Ask each member to tell what they think of when they hear the words tailoring and couture. You begin.

Hand out copies of the Member Handout, “This is Tailoring” and go over the differences.

Pass out the handout “Pressing Equipment” and go over the equipment. You could make all or some of the equipment.
**Leader Notes**

*Custom Tailoring* is the traditional method. Throughout the garment, careful handstitching, taping of seams, invisible tacking, interfacing, padding, and continuous pressing are used to stabilize and to build shape. Hand pad-stitching is used to create a permanent roll in the collar and lapel. There is much handwork in comparison to machine work. Accuracy and time are required to give good results. This type of garment is usually expensive in ready-to-wear.

*Dressmaker or Soft-tailoring* is a faster method. More work is done by machine than by hand. Many speed techniques are used. Pad-stitching is done by machine. The garment constructed by this method has less shape than the custom-tailored garment. However, careful stitching, pressing, and attention to detail is just as important.

*Contemporary tailoring* makes use of fusible interfacing. Most hand sewing is eliminated. Machine sewing techniques are similar to those in dressmaker tailoring.

Some patterns offer the above techniques, most do not. If you are very interested in doing tailoring you may want to invest in a good reference book. As you select a pattern, look for one with few seams and simple details. Good tailoring shows best when made with such a pattern.

As you complete your shopping, the last items to look for are the notions. Depending upon the construction techniques you decide to attempt, you may be purchasing and using some notions you have not used before.

Stay tape of cotton, linen, or polyester twill will be needed if you can’t find the natural fiber tape. This prevents stretching and reduces bulk along edges. Always shrink the tape before using. Use a ¼ inch or ⅜ inch width.

Thread of silk is often used in sewing wool because its strength and elasticity are similar to wool. Cotton and polyester combinations or 100 percent polyester are less expensive and work well. Soft cotton or silk thread is used for basting.

Needles that are short and fine are best choices for hand sewing.

Hook and eyes and snaps are usually made of metal. Fabric covered snaps are available. You may also cover snaps yourself.

Weights are made of metal and can be used in the hem area of a jacket or coat to make them hang nicely.

Buttons should be purchased with the fabric, keeping in mind the overall look you want from the garment. A size is usually suggested on the pattern envelope. Buy good quality buttons that can be cared for as the final garment will require.

Shoulder pads maintain the natural shoulder line. They may be purchased or you may make them using polyester fleece.

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If you have not acquired these tools before, you may want to add a tailor’s ham, seam roll, and point presser/clapper to your sewing/pressing equipment. Instructions for making them are included in this lesson as handouts.

Always preshrink your fabric. Use a reliable dry cleaner that can professionally steam press it or use the “London Shrink” method. If the care requires dry cleaning then use the dry cleaners. The “London Shrink” method is for worsted fabrics to obtain definite shrinkage percentages. All worsteds should be afforded this treatment. It will relax stresses and strains left in the fabric after manufacturing. It provides a supple and mellow hand and gives a smart appearance to the goods.

A modified version of the London Shrink method has been created and used safely by many seamstresses in the home. Here is the procedure. Completely wet a cotton sheet. Spread it out on a flat surface folded lengthwise in half. Open one-half of the sheet and place the folded fabric on the sheet lengthwise. Lay the top half of the sheet over the fabric. The wet sheet now surrounds both sides of the fabric. Next, begin to lap the folded sheet and fabric into 10-inch laps, over and over, in jelly roll fashion. If the sheet is made of cotton and polyester, which dries fast, place a plastic wrapper around the roll. Place the roll over a portable drying rack or across the back of two chairs. This should allow air circulation completely around the lapped fabric. Twenty-four hours later the fabric should feel dry as you place a hand inside the laps. With careful lapping there should be no need for pressing afterward. Light pressing may be done if wrinkles persist.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What are the three types of tailoring?

A. Custom, dressmaker and contemporary.

Q. What was the most difficult technique you tried? the easiest?

**Process:**

Q. Why would you prefer to use contemporary tailoring compared to custom tailoring?

**Generalize:**

Q. How does the issue of saving time from this lesson relate to other real life situations?

**Apply:**

Q. What would you do differently next time you tried this activity?

Q. The serger has revolutionized home sewing constructions. What other new technology has changed the way our society acts?
GOING FURTHER:

- Visit someone that does custom tailoring for others. Have members bring written questions about methods, speed methods, charge for labor, and time needed to complete garments.
- Have members attempt two to three new tailoring methods each year in their project work.
- Visit a shop that sells high quality items and allow members to evaluate quality of construction.
- Visit local dry cleaners to watch the steaming process.

REFERENCES:

*Custom and Couture*, Mildred A. Crawford, Extension Assistant Professor, Textiles and Clothing, Colorado State University, Fort Collins, Colorado M40530A

*Tailoring*, Ernestine Porter, Textiles and Clothing Specialist, University of Idaho, Moscow, Idaho 83843

*Skill Level Four, Clothing and Textiles*, Lyla Walker and Cherry Cowan and Gayle Muggli and Lillian Larwood, County Extension Agents, Montana Cooperative Extension Service, Montana State University, Bozeman, Montana 59717

*Clothing Leader Guide*, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

*Singer Sewing Reference Library: Tailoring*, (1988), Minnetonka, Minnesota: CyDeCosser Incorporated

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Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
This is Tailoring

Tailoring is a method of garment construction. The basic difference between sewing and tailoring is that tailoring goes beyond sewing to upgrade the appearance and quality of the garment. Tailoring adds structure to the garment by combining all layers of fabric in such a way that they act as one and by molding and shaping the several layers to create the desired effect on the body. Structure may be added through the use of tape, shoulder shapes, sleeve heads, special buttonhole treatments, interfacing, and underlining. Tailored garments are crisper and have more stability than sewn garments.

By comparing sewing to tailoring, you can see that in sewing you have a wide variety of choices for garment styles and sewing techniques. Some tailoring techniques may even be used in a sewn garment. In tailoring, however, you have a limited variety of garments and techniques from which to choose.

**Sewing**
- Garment *styles* include everything from dresses, T-shirts, and slacks to coats and suits. They may or may not be lined.
- *Fabric* of any type may be used, from soft and supple to crisp and even bulky.
- The *shape* of a sewn garment adjusts to the wearer and the wearer helps determine the shape of the garment.
- The *fit* of sewn garments may be loose and flowing or closely fitted.
- *Workmanship* is not critical. Small variations or inaccuracies in workmanship may not affect the finished appearance very much.
- *Interfacing* may be used to reinforce openings and details, but is not often used to shape the garment.
- *Support structures*, such as taping and pad stitching or layering of fusible interfacing are not often found in sewn garments.
- *Collars* may be of any style—flat, rolled shirt, stand, etc. They may or may not be interfaced.
- *Sleeves* may be any style—kimono, shirt, puffed, and set in. Sleeve heads may be used, particularly in puffed or pleated sleeves, or they may be unsupported.
- *Seams* may be plain, narrow and overcast, French, welt, or any other type. They may be stayed with tape, if necessary, but usually are not.

**Tailoring**
- Garment *styles* are limited to suits, jackets, and coats. They are usually lined and may be underlined.
- *Fabric* should be relatively stiff and firm, capable of being shaped. Loosely constructed fabric must be supported by an underlining that can be shaped.
- The *shape* of a tailored garment is determined by its structure and does not closely follow the shape of wearer.
- *Fit* may be slim or somewhat loose but the garment always has shape.
- *Workmanship* is critical. Exactness and attention to detail are necessary for a good appearance.
- *Interfacing* is attached to the lapels and collar with pad stitches, machine stitches, or fusing in such a way as to shape the pieces. Hems are interfaced for support.
- *Support structures* such as shoulder shapes, taping, sleeve heads, interfacing, chest pieces, underlining, or back reinforcements are used.
- *Collars* are rolled, with or without a notch, or a shawl style. They are always shaped with interfacing and steam pressing. Rarely, a tailored style will be collarless.
- *Sleeves* are usually set in sleeves with or without a vent. Sleeves heads are usually used. Less traditionally, raglan sleeves may be used in a tailored garment.
- *Seams* are plain if garment is to be lined. If garment is unlined, seams are finished by binding, Hong Kong finish, or clean finish.
CONTEMPORARY TAILORING CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

This is Tailoring, continued

- **Pockets** may be lined or unlined and may be fully interfaced, partially interfaced, or not interfaced at all.
- **Buttons** may be sewed on flat or with shanks, depending on the thickness of the fabric.
- **Buttonholes** may be made by any method.
- **Hems** and edges may be crisp and well defined or soft and fluid.
- **Pressing** is used to achieve a smooth appearance.

- **Pockets** may be welt or patch. Patch pockets are interfaced and often lined. Welts are always interfaced.
- **Buttons** always have a shank, either as a part of the button or made from thread.
- **Buttonholes** are corded if made by hand or machine, often keyhole shape, or are bound or piped.
- **Hems** are either crisp (hard tailored) or soft (soft tailored), but edges are always well defined.
- **Pressing** with steam helps achieve permanent shape. After shape is achieved, garment is never pressed flat.
CONTEMPORARY TAILORING CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

Pressing Equipment

Tailoring requires the use of special pressing equipment to shape and mold the garment. The tailor’s ham is used to press areas shaped by darts, to mold the curve of collars and lapels, and to shrink excess fullness from sleeve caps. The seam roll is designed to prevent imprints from seam allowance when pressing seams open. A pressing mitt can be used in place of tailor’s ham for caps of sleeves and other small curved areas.

All three pieces of pressing equipment can be made easily. Select a tightly woven cotton fabric with a smooth surface, such as muslin, ticking, or drill, in a natural or white color. If muslin is chosen, use a double thickness to keep the stuffing from sifting out and to provide a smooth surface. One side of the ham and the mitt are covered with wool fabric for pressing wool or other soft-surfaced fabrics. Use white wool felt or any tightly woven light colored wool fabric. Underline the wool with the same fabric you are using for the cotton side. Preshrink all fabrics by washing and drying them. Unbleached muslin may need several launderings to remove sizing and complete the shrinkage. Wool fabrics will need to be handwashed and line dried. Iron the fabrics before use.

Seam Roll

½ yard cotton or wool fabric
One thick or several thin magazines or one wooden rolling pin

Roll magazines tightly so that they make a roll about 2 inches in diameter. Tie the roll together in several places with heavy thread or several strands of sewing thread. Be sure the roll is tight and solid. It should not flatten when mashed with the fingers. A rolling pin can be used in place of magazines.

Wrap several thicknesses of fabric around the roll. Turn under raw edge if necessary and slipstitch in place. Fold fabric neatly over the ends of the roll and stitch in place.

Tailor’s Ham

½ yard each cotton and wool fabrics (double for muslin)
stuffing—hardwood sawdust, clean sand, shredded wool scraps or shredded nylon hosiery scraps

Cut two pieces of cotton and one piece of wool fabric according to the measurements given below. Place right sides of fabric together with wool in the center and stitch a ¼ inch seam, leaving about 4 inches open at the large end.

Turn right side out and stuff until firm. Slipstitch the opening.
Pressing Equipment

Pressing Mitt
½ yard each cotton and wool fabrics (double for muslin)

Cut two oblong pieces of cotton and one piece of wool 8 × 9 inches and round one of the ends as shown for Section A. Cut one oblong of each fabric 8 × 12 inches as shown for section B and fold in half with wrong sides together. Round the cut ends of section B to match section A.

Place right sides of section A together with section B inside, curved edges matching. Be sure the wool section B is next to the wool section A. Stitch a ¼-inch seam, leaving 4 inches open in the straight edge. Turn right side out and stuff until firm. Slip stitch the opening.
Contemporary Tailoring Blazers

Time-saving tailoring techniques for blazers can cut your sewing time in half or less, while improving the professionally finished look. By learning quick-sewing techniques, you’ll be able to make blazers that you can’t afford to buy. It has been estimated that materials to make a blazer cost approximately one-seventh of a comparable ready-to-wear garment.

These quick-tailoring techniques can be used for other garments as well. With a little practice you’ll find that all of your sewing will improve.

The illustration (1) includes terms you’ll need to know when constructing a blazer. Follow the pattern guide sheet closely, incorporating these techniques where appropriate in the construction process.

Selecting Pattern, Fabrics, and Notions

Pattern: When selecting a quick-sewing blazer pattern, choose one with a pattern for a lining (if lining is desired); with a two-piece collar and roll-line marked; and with patch pockets instead of welt pockets.

For faster construction, choose a pattern with: a one-piece sleeve without vents; back without vents; minimum number of seams.

If sleeve, bustline, or hip area adjustments are more than 1 to 1 1/2 inches, choose a pattern that has two pieces for the front. When there are several seams it is easier to adjust patterns without distorting style lines.

Clothing design lines always affect apparent height and figure size. Choose a jacket style that can help you create a pleasing illusion or diversion and help you establish balance and good proportion for your figure.

To appear shorter, choose a jacket with a double-breasted front, wider lapels, straight bottom hem, or a short, boxy style with a short neck opening. To look taller, choose a single-breasted front, narrow lapels, rounded or cutaway bottom, a deep V lapel with one or two buttons, or a longer jacket with princess seams or two-piece front. For a larger bust, look for a two- or three-button style with a moderate V opening. Fitting darts—one at arm hole and one from bust to hem—are helpful for fitting a large bust.

If there is more than a 12-inch difference between bust and waist measurements, you will need front and back darts or seams and darts for a good fit.

Choose a style that suits your figure in line, length, and style. Almost any style will be slenderizing if the jacket and skirt (or pants) are in the same color and fabric, especially if there is little pattern in the fabric.

Tall or thin people may prefer patterned fabric or horizontal lines. Short individuals may prefer one-color ensembles. Even skirt, trousers or pants style can give a visual effect of height and width. For example, a center seam or pleat can create apparent height.
Contemporary Tailoring Blazers, continued

Fabric: When selecting fashion fabric, look for...
- Fabrics that don’t require matching; avoid plaids and stripes.
- Fabrics with some surface interest, such as a tweed, that will help hide inside edges of fusible interfacing.
- Fabrics without nap.
- Firmly woven or knit medium-weight fabrics.

Lining: When selecting lining choose...
- Fabric that is lightweight but not too sheer (so inner construction doesn’t show through).
- Fabric that doesn’t rustle.
- A matching or contrasting color (print, stripe, geometric).
- A colorful fabric that will add an attractive fashion accent.
- Fabric that is compatible in care requirements and life cycle of the garment fabric.

Interfacing: Select...
- Fusible knit interfacing with same care as fashion fabric.
- Make a sample to test the compatibility of fashion fabric and interfacing of both tricot and weft insertion and combinations of double fused of the same, and one of each type.

Preshrinking Fabric and Notions
If the finished garment is going to be laundered, preshrink fashion and lining fabrics, and notions such as twill tape, before cutting. Use the same procedure that will be used when laundering the finished garment.

If the garment is going to be dry-cleaned, a drycleaner can preshrink the fabric and notions for you.

Always preshrink fusible interfacing. Choose one of the following methods:
Before cutting, fold or roll up loosely and place in hot water for 10 minutes. Roll in towel to absorb excess moisture. Lay flat to dry. DO NOT dry in a dryer.
OR
Place cut interfacing on fabric where it will be fused. Hold steam iron 1 inch above interfacing. Steam for 5 seconds. Then fuse interfacing to fabric following manufacturer’s directions.

Body Measurements and Pattern Fitting
It’s a must to be honest when taking body measurements. For accuracy, ask a friend to take your measurements. Wear the undergarments and shoes you’ll be wearing with the finished garment. Make sure the tape measure is held snug but not tight against your body. Keep the tape parallel to the floor for circumference measurements.

Refer to the chart and the illustration (2) for a guide in taking accurate body measurements. Record measurements in the first column of the chart. Add required ease from the second column and record the total in third column.

Fitting Methods
There are two methods for fitting a pattern. First, press all pattern pieces with a warm, dry iron. Measure pattern pieces in the same places your body was measured (don’t include darts or seam allowances). Record measurements in fourth column. Make all adjustments on pattern pieces, including interfacing and lining patterns.

Trying on the pattern is another fitting method. To do this, cut off excess tissue paper (except at side seams) from the back, fronts, and sleeve pieces. Clip into armhole and neckline seam allowances. Pin sleeve pieces together.
Contemporary Tailoring Blazers, *continued*

Pin in the darts and pin back and fronts together at shoulder and underarm seams. Pin the center front and back of pattern to your clothes.

Be sure to wear the same type of clothes you’ll be wearing under the finished jacket. Working from top down, check the following points:

Shoulder seam—at center of shoulder. Sometimes shoulder seams in women’s jackets angle toward the back as in men’s jackets. If so, check the line drawing to see if this angle was intended.

Shoulder width—\(\frac{3}{4}\) to \(\frac{1}{2}\) inch beyond shoulder pivot bone.

Grainline—perpendicular to floor at center front and back.

Side seams—hang straight, not towards front or back.

Bust darts—point to bust, ending 1 inch from point.

Armhole—fits smoothly. If armhole gaps in front, you probably need to alter the pattern to accommodate a larger bust.

Waist—at natural waistline.

Length—Hemline should hit just below the fullest part of your hip (unless jacket is designed to be short).

Sleeve—After checking the above, slip sleeve on, matching the large dot at top of sleeve to large dot of shoulder jacket. Also pin underarm seam in place. Check sleeve width by pinching pattern at upper arm across from underarm. Sleeve length should hit the middle of the wrist bone when arm is slightly bent.

Pocket—Fold under seam allowances and pin on garment. Check size and placement.

Reminders:

When cutting pattern pieces, cut 1-inch seam allowances on sleeves and jacket seams.

Before setting in sleeves, use the points above to check fit. Make any pattern adjustments on facings and interfacings also.

Illustration (2)
**Contemporary Tailoring Blazers, continued**

(see illustration 2)

<table>
<thead>
<tr>
<th>Measurements</th>
<th>Your Measurements</th>
<th>Ease Needed</th>
<th>Total Needed</th>
<th>Pattern Measurement</th>
<th>Adjustment Needed (+ or -)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Chest/Bust: Over fullest part of chest/bust and straight across back.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3–4 inch</td>
</tr>
<tr>
<td>B. Waist: Tie string around body at smallest part to find waistline. Measure at string. (Leave string in place.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3–4 inch</td>
</tr>
<tr>
<td>C. Hip: At fullest part of hips; usually 7–9 inch from waist. To establish hipline, mark the tape position with pins on your undergarment and measure down from waist.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3–4 inch</td>
</tr>
<tr>
<td>D. Back neck to waist: From neck bone down center back to string at waist.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>E. Back width: From neck bone measure 6 inches down center back; mark. Measure at this point from arm crease to arm crease.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1–1½ inch</td>
</tr>
<tr>
<td>F. Shoulder: From base of neck to shoulder bone.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>G. Arm circumference: Around fullest part of arm (about 1 inch below armpit).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3–4 inch</td>
</tr>
<tr>
<td>H. Arm length: From shoulder bone to elbow and on to wrist bone with arm slightly bent.</td>
<td>Shoulder to wrist</td>
<td>1 inch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shoulder to elbow</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Finished length of jacket: From neck bone down center back to desired length.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contemporary Tailoring Blazers, continued

Placement of Fusible Interfacing
Here are some general guidelines to follow when using fusible interfacing:
- Extend fusible interfacing into entire ½ inch seam allowance of jacket front sleeve edges.
- Extend fusible interfacing ⅛ inch into all seam allowances that are not topstitched.
- Cut fusible interfacing to the ⅝ inch seaml ine in areas that will be topstitched.
- When interfacing hemlines, use the lighter weight tricot fusible.
- To make interfacing pattern pieces, use waxed paper and a tracing wheel.
- Transfer all grainlines from the original pattern to the new interfacing piece.
- Always pink inside edges of interfacing—helps camouflage interfacing cut edges on outside.

The amount of interfacing used in jackets varies. Many people prefer a moderately interfaced garment. Others prefer a more structured or firmly interfaced garment. Decide how much interfacing you want in your garment.

Jacket Front: For a moderately interfaced jacket front (3), include interfacing in ⅝ inch seam allowance of sleeve edge. It extends ⅛ inch into seam allowances that are not topstitched, but does not extend into areas that will be topstitched. Always eliminate interfacing from darts. Interface the entire jacket front.

For a firmly interfaced jacket front (4), doublefuse the lapel from roll line to ⅝ inch seamline (5). Draw a new grainline that follows roll line. Before fusing wedge of interfacing to wedge of lapel, mark rows of lines ⅛ inch apart parallel to roll line over entire piece of interfacing, starting from roll line edge. As you work toward the outer edge of the lapel, make your rows a little closer. Fuse in place over the edge of a tailor board, from the roll line out, placing the marked lines on interfacing parallel to roll line, pressing only about ⅛ inch at a time. After each row is pressed into place, curve lapel and press the next ⅛ inch until you have attached the entire wedge. This pressing technique fuses only a row of interfacing at a time, and sets the curve of the lapel (5a).

Jacket side: Moderately interface in hem area only (6). Extend ⅝ inch below hem edge. Pink side edges. Firmly interface in the underarm and hem area (7). This underarm area receives considerable wear.

Jacket back: Moderately interface through the shoulders to give support to an area that has the most stress (8). It’s usually better to use non-fusible interfacing for the back stay. Unbleached muslin that has been thoroughly preshrunk is suggested.

Front facing: Sometimes the front facing is interfaced to give a firm look to a garment or to match look of interfaced front of garment (9). Suggest using a tricot here.

Upper and under collars: Under collar (10) should be cut on the bias and moderately interfaced. Double-fuse from break-line to neck edge (11). Interfacing is cut in one piece and on the straight grain. Sew center back collar seam first. If break-line is not marked on pattern, find the halfway point of the center back seam. Measure ¼ inch down from this point toward the neck edge. Connect this point to the notches along the neck edge.
Grainlines of the two layers of interfacing are opposite, causing the fabric to roll.
For a firmly interfaced collar, interface both upper and under collar (12).
Tricot on the upper collar is usually preferred.

**Sleeves:** Moderately interface the vent and hem areas (13). To add firmness in the cap, fuse tricot to the cap down to notches (13a). Place the most stretch going with lengthwise grain of sleeve.

**Pockets:** Firmly interface to pocket. When topstitched, cut interfacing to the finished size of the patch pocket (14).

**Taping the Lapel Roll Line**

Taping prevents stretch in garments that receive heavy wear, such as coats and jackets. Applying twill tape to the bias roll line of a blazer lapel prevents stretching, improves fit, and forces the lapel to roll in the proper place.

a. Mark the roll line using a chalk pencil and ruler. If a roll line is marked on the pattern tissue, you can try the pattern on and crease the tissue at the proper place.

b. Place ¼ inch twill tape (preshrunk) next to the roll line on the side closest to the body of the jacket.

c. You can go one step further and pull the tape tighter to prevent gaping of the neckline and force the lapel to roll. Pull the tape: ½ inch tighter for a small bust; ¾ inch tighter for a medium bust; ½ inch tighter for a full bust.

d. Pin the tape flat. Make a pencil mark on the tape and mark on the interfacing the appropriate distance away. Pull tape until the marks line up and pin in place (15).

e. Stitch in place, easing fullness evenly along the roll line. For stitching, use any of these methods:
   • Fell stitch—A ⅜ inch long stitch that can be used to hold tape tightly in place (16).
   • Catch stitch—Stitches are worked from left to right with needle pointing left. Take a very small stitch in the interfacing next to the twill tape and about ¼ to ⅜ inch to the right. Take the next stitch ⅛ to ⅜ inch to the right on other side of twill tape (17). Continue to alternate stitches, spacing them evenly.
   • Machine stitch—NOTE: When machine-stitching the tape to the roll line, stitch the last 3 inches at the bottom by hand so machine stitches won’t show on the outside (18).

f. Shape lapel by rolling it over a rolled-up washcloth and steaming. Allow it to cool and dry before removing from the ironing board.
Contemporary Tailoring Blazers, continued

Construction Techniques
To assemble the collar, facing, and garment sections, follow these steps so lining can be sewn in mostly by machine.

- Sew front to back at shoulder and side seams.

**Collar**
1. Staystitch jacket neck edge. Clip. Sew front facings to back neck facing at shoulder. Staystitch and clip neck edge the same as jacket.
2. Sew undercollar at center back seam and trim seam to \( \frac{3}{8} \) inch. Double fuse the stand area of undercollar.
3. Sew upper collar to undercollar along top edge only (19). Grade seam allowance and understitch on this seam. A technique that will cause the upper collar and lapel to roll to the underside, giving a neat, finished look to the garment is called a “Tailor’s Blister.” The tailor’s blister gives excess fabric in the upper collar and upper lapel points. Remember, the side you want to be larger is the side where you make the blisters. To make a tailor’s blister: pin a small tuck about \( \frac{1}{2} \) inch from each collar point (19a). After outer seams have been stitched, remove pins.
4. Sew collar ends. Upper collar automatically “rolls” because of understitching and the tailor’s blisters. Grade seams to \( \frac{1}{4} \) inch and less. Clip corners (19b).
5. Fold collar on the roll line and trim the neck edge of the undercollar so it is even with the upper collar while it is folded.
6. Sew undercollar to neck edge of the jacket, being sure to match the center back and notches. Sew uppercollar to the facing neck edge matching center back and notches. Start and stop stitching \( \frac{1}{4} \) inch from the ends of the collar on both sides. (20)
7. Starting at bottom of seam, sew front facing seam (20). Trim the seams to \( \frac{1}{2} \) inch and grade the seam. Clip the seam at the bottom of the roll line. Understitch the seam, stopping about 1 inch above the bottom of the roll line and then start 1 inch below the roll line and change sides.
8. On the inside of the jacket with collar turned downward (right side out), sew across the top edge of the lapel, sewing \( \frac{1}{2} \) to \( \frac{3}{4} \) inch over the collar ends (which have upper collar edges rolled to the undercollar). Clip seam allowance through all thicknesses at this stopping point. Press open the rest of the collar and facing seams from stopping point to stopping point. (21)
9. Sew the bottom neckline seams together along the back neck edge from shoulder seam to shoulder seam; leave the area from the shoulder seam to the clip unsewn. (22) This can be by hand or machine, whichever you are most comfortable with.
10. Turn the facings right side out and press the edges. Try on the jacket and pin the facing to the lapel as it lays, then fold back the facing and loosely catchstitch the facing to the roll line tape.
Contemporary Tailoring Blazers, continued

### Sleeves

There are two recommended methods for setting in sleeves.

**Traditional Method:** The traditional method, in which you make two rows of machine basting from notch to notch over the sleeve cap. To use the traditional method, put one row of basting at $\frac{1}{2}$ inch from the edge and the other at $\frac{5}{8}$ inch. To ease, pull up bobbin threads. Distribute ease evenly, keeping an area $\frac{1}{2}$ inch either side of the shoulder seam free of ease.

**Incorporating method:** The second is the incorporating sleeve head method.

- Use $2 \times 12$-inch bias strip of hair canvas or lambs wool for the incorporating sleeve head method.
  - a. Stitch to top of sleeve from notch with wrong side of sleeve up (23). DO NOT DOUBLE. Stretch bias to fullest while stitching.
  - b. Pull on interfacing as you stitch. Sew on seamline with machine-basting stitch with cut edge of interfacing to sleeve cut edge.
  - c. The sleeve will cup in. Do not trim away excess interfacing (the sleeve seam goes out into the sleeve). Sleeve is now ready to sew into the armhole (24).

### To Topstitch

Topstitching adds a finished look to a blazer. Prevent “nervous” stitching by using a topstitch tape designed especially for perfect topstitching.

Use a longer stitch, heavier weight thread, and a larger needle for nicer looking results when topstitching. Always stitch from the right side. This means that a turn-back lapel is topstitched on the facing side above the roll line and the garment side below the roll line (25). To hide thread ends at the point where stitching ends, thread a hand needle and pull threads in between the garment and facing layers. Usually topstitching is done very close to the edge (less than $\frac{1}{8}$ inch) or $\frac{1}{4}$ from the edge. When topstitching $\frac{3}{4}$ inch from the edge, stitch in the well of the seam to keep the gorge lines nice and flat at the lapel and collar edges (26).

### Buttons and Buttonholes

Sew shanks on buttons. The thicker the fabric, the longer the shank. If you’re worried about bound buttonholes, don’t be! They are practically unheard of and much too time consuming for a quick, easy blazer. If possible, use a keyhole buttonhole—some machines make them.

### Pockets

These instructions are for a lined pocket with lining and interfacing as one. It is best if the fashion fabric has some surface interest. Make a sample first to check the finished appearance of the pocket.

- a. Cut pocket lining from a lightweight tricot knit interfacing such as Fuse-a-Knit.
- b. With right sides together, stitch lining to pocket hem, leaving a $2\frac{1}{2}$ inch opening in the center for turning (27). Trim seam.
- c. Fold top edge of pocket over toward right side of pocket at the marked fold line of top of pocket. Stitch all the way around the pocket seam allowance sewing pocket and interfacing together. (28) Trim off seam interfacing allowances and trim pocket seams with pinking shears.
- d. Turn right side out.
- e. Press outside edges of pocket first. As you do this, you will be fusing the lining to the back of the pocket. Press carefully as you continue fusing entire lining to pocket back.

190-Clothing & Textiles, Level IV
Contemporary Tailoring Blazers, continued

Quick lightweight shoulder pads:
- a. Cut two 8-inch squares of Easy-Knit or Fuse-a-Knit interfacing (29).
- b. Cut two sets of three graduated layers of polyester fleece in triangular shape.
- c. Place each set of three graduated layers in center of 8-inch square.
- d. Fold Easy-Knit interfacing over the three layers of fleece. Fuse interfacing to fleece (30). Cut off excess and zigzag around all edges.

Machine-sewing Lining to Jacket

Lining: At this point, all jacket details need to be complete except for topstitching, buttonholes, and hems.
- a. Sew lining together including setting in sleeves. Leave a 4- or 5-inch long opening in the right arm sleeve seam (at about elbow level) (31).
- b. Turn garment wrong side out. With right sides together, pin lining to garment at lower edge (top raw edge of hem), matching seams and cut edges. Beginning and ending 3 inches from each end of hem machine stitch with a \( \frac{1}{4} \)-inch seam allowance (32).
- c. Turn up hem and hand stitch in place with a catch stitch.
- d. With garment and lining wrong side out, place each sleeve and sleeve lining right sides together at wrist, matching seams and cut edges. Pin and stitch around wrist edge with a \( \frac{1}{4} \)-inch seam allowance (33). This is awkward and you must somewhat push part of lining sleeve into end of garment sleeve to sew the seam.
- e. Still with both lining and garment inside out, place right side of lining and facing edges together. Pin matching notches and shoulder lining to facing edges, seams, and all markings. Start 3 inches above bottom edge of lapel facing and stitch up and completely around facing to 3 inches from end of lapel facing on other side with a \( \frac{1}{4} \) seam allowance.
- f. Turn garment right side out through opening in sleeve lining.
- g. Pull one sleeve at a time through opening in sleeve lining and turn up sleeve hem and tack at seam lines. Then pull other sleeve through and repeat.
- h. Tuck the seam allowances to inside at sleeve lining opening and machine edgestitch on lining to close, or handstitch if you prefer. (34)
- i. A fold of lining material will have formed at lower edge of sleeves and garment for greater wearing ease. Hand stitch lining to front facing and top edge of hem along unstitched edges (35).
Pressing
Careful pressing during construction helps to give your work a smooth, professional look. Appropriate pressing equipment is essential. The following equipment is recommended:

- Strips of brown paper
- Point presser
- Pounding block
- Tailor's ham
- Press mitt
- Seam roll
- Press cloth
- Steam iron

Always use a press cloth to protect fabric from heat. You also should use moisture so the fabric doesn’t dry out. Moisture can be supplied by a steam iron or by dampening the press cloth. Don’t press the fabric completely dry. Some moisture must be left in the fabric to retain its hand. Wool will lose its resilience and become stiff if it is pressed dry.

Before pressing a seam open, press the seam in the direction it was stitched. This helps the stitching settle into the fabric, and makes it easier to press the seam open.

As you press seams, lay strips of brown paper under the seam allowance between seam and garment material to prevent the seams from leaving marks on the front. Lay the seam on top of the seam roll for pressing, and use a tailor’s ham when pressing curved seams and darts. Remember, as with all fabrics, press by lifting and lowering the iron with the grain. Allow pressed fabrics to dry thoroughly before handling. The pounding block will help flatten seams for a firmer press.

Final pressing of the lining must be done with a very light weight on the iron to avoid flattening the edges. Use a dry iron at low setting to prevent spotting or distortion from too much heat or moisture. The seam where front facing joins lining should be pressed only lightly to avoid a sharp crease. Sleeve lining hems are left unpressed to roll softly.
What Members Will Learn . . .

ABOUT THE PROJECT:
- How to calculate cost per wearing
- Economic decisions related to buying ready-to-wear instead of sewing
- Understanding clothing investment buying

ABOUT THEMSELVES:
- The importance of self-set goals and self-evaluation when making major decisions
- The importance of planning for major clothing investments

Material Needed:
- Copies of Activity Sheets

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY:

The availability of personal resources, including skills, time, and money influence your clothing choices. Few people have the time and energy to make their whole wardrobe. Skill levels vary as do values. Each of these factors helps us decide what is the right answer to the question, “Do I make or buy my apparel items?”

When you think about making instead of buying garments, you need to consider your skill level first. If the construction on your homemade garment is poorer than that of a ready-to-wear garment which costs less, you probably should consider buying most of your clothes. Today, the professional look is important. Wearers are seldom proud of clothes with the homemade look.

Budgets can be stretched surprisingly far by surveying all available resources. Between 50 and 75 percent can be saved by successful sewing. Don’t tackle a job beyond your skills. Finish what you start. Too many clothing dollars are hanging unworn in closets because of incorrectly selected fabric, pattern and notions. Improper fitting and incorrect construction techniques add to dissatisfaction.

Fitting can also be a good reason to do home sewing. For some people, ready-to-wear clothing does not fit them properly. If the skill of fitting patterns is learned, home sewing can give these people the look they cannot get otherwise.
If you have great skill in sewing, you may choose to sew. This activity will give your wardrobe a designer look. Or you may home sew to allow you to wear one-of-a-kind garments that will never be seen on others. To purchase couture dresses, suits, or coats in ready-to-wear would be out of reach for most of us, unless we are wealthy.

Only you can decide whether you should buy or make a garment. Some people like to make the inexpensive items and buy the expensive ones. Others believe it is wiser to make the expensive ones and buy the less costly ones. Some like to make garments that are to be worn only once or twice—such as formals. Others like to make the ones that are worn frequently. It depends upon your goals. Each person will have their own goals and so each person’s decision will be different.

Home sewing has changed from a few years ago. Many more time-saving ideas have been incorporated into the home sewing field. Pattern companies are offering more easy and quick-to-sew patterns. They are also providing patterns for several different items in one envelope—such as skirt, jacket, pants and blouse. Sewing equipment has improved.

An entire season’s wardrobe can be made by using one or two patterns. The same pattern is almost unrecognizable when made up in different fabrics. Using the pattern more than once is a great savings in both purchase price and pattern fitting time. Also, most patterns come in more than one size. This allows for you to alter the pattern to fit your shape better or to sew different size separates if you require more than one size to fit your body shape.

As you consider sewing, you are asked to consider a modified cost per wearing formula that has been developed to calculate how a home-sewn garment would compare to a ready-made one.

The cost of your garment includes the price of all supplies (fabric, notions, and patterns), the value you place on your time, plus the cost of care.

**EXAMPLE:**

Supplies: fabric 1 1/2 yd fabric $16/yd
notions, elastic, thread $3.50
pattern $4.75
time (4 hours at $5 per hour) $20
care (.25 per washing - one washing per week × 52 weeks) $13

Total cost = $65.25
Total wearings = 52 (once a week for one year)

TOTAL COST PER WEARING = $1.25 (Cost divided by wearings)

Let’s assume this is a leotard tights outfit for aerobics. You are comparing this garment to one you will purchase that is on sale for a total of $40.50. The tights are $20.25 and the leotard is also $20.25. They are not made of
as high quality fabric as the fabric you would sew with. They would be worn once a week for probably 10 months. Which would you choose to purchase?

\[
\text{Cost per wear} = \frac{\$40.50 \text{ plus cost of care} (40 \times .25 = \$10.00)}{40} - \$50.50 = \frac{\$50.50}{\text{divided by number of wearings}} = \$1.26
\]

**TOTAL COST PER WEAR = $1.26**

Your skill level and the value you place on your time are important factors in deciding whether sewing can save money for you. For some, the dollar value of the time involved is less important. A productive use of the time involved may be the most important. Many consider sewing a hobby or tension relieving activity.

The best clothing plan is a balancing act between value and cost. Use the cost per wearing formula and your wardrobe plan to keep your wardrobe versatile and efficient. In the future, you may be asked by the clothing and fashion revue judge what the cost per wearing is for the article/outfit you made or purchased.

This brings us to the term “investment dressing.” You may have heard this before. This is used to refer to the process of investing more resources towards a particular item or items that you think will last for a long time.

To do a successful job of this you need to have a good understanding of fashion styles, trends, personalities, your own feelings about each of these and a good wardrobe plan. A good plan means you know your needs, wants and the best design principles for your unique body shape, coloring, personality, and lifestyle. Once you understand all the above, then you are ready to do some investment dressing. One reason this lesson is placed in the advanced level is because if you are going to buy clothing as an investment, you want to be able to use it for a long period of time. When your body stops growing is a very individual thing. For most teenagers, it is in the mid- to later teen years (boys may not stop growing taller until early twenties). If you have attained your adult height and stabilized weight, you will be able to wear your clothing for many years.

Consider what you know about classic styles—it makes sense that a good share of your investment dollars will probably go towards high quality, classic style garments. Things like a seasonless blazer for men and women are good items to compare for the best quality at the best price. A well made blazer can be used for many occasions and can yield years of service. Other items can be classic styles of dress slacks, skirts, shirt/blouses, and outerwear. Things like shoes, belts, handbags and other high-quality pieces may seem expensive, but are worth the “investment” when considering the years of service and the versatility they yield when you take care of them.

*Leader Notes*

Have members consider that they will have to replace the item sooner. No one decision is the best for everyone. Why would you decide the way you did?
Have members discuss one item they feel would be a “good investment” and have them tell why. Ask them to plan the color and style and list quality details they would consider a “must” in this item. Question them about seasonless colors and their personal scheme of color. Ask about fiber and fabric qualities. Have them estimate the length of service they will get from this item. Discuss if they could make this item. Would they have the skill? The time? The desire?

Some of these items may be included on your sewing list. As you shop for fabric, keep in mind the same quality checks you have for ready-to-wear items. Begin with high-quality fabrics and be sure to plan notions that will extend the wear life of the garment. Things like proper interfacing, linings, substantial closures, and reinforcing stress areas will give you a garment equivalent to one you would purchase in a store. Your time investment may be great so be sure your skill level and time will measure up to your expectations before you commit your money to fabric and notions.

**DIALOGUE FOR CRITICAL THINKING:**

**Share:**

Q. What was the most difficult part of figuring cost per wear? What was the easiest?

**Process:**

Q. Why is it important for you to be able to calculate cost per wear?

Q. What are some things you need to know before you can do “investment dressing?”

A. Your lifestyle and activities, your personal coloring, your most becoming styles (based on the design elements), your monetary resources, your wardrobe plan, your clothing personality, your anticipated future needs, your sewing skill level, time and desire to follow plans.

Q. Why would someone think of a major clothing purchase as an “investment?”

A. Because the purchase is a large amount that can pay off over a period of years if the item wears well and saves you resources during the long term.

**Generalize:**

Q. How do you know what to buy and what to make?

A. It varies for each person and each person will have to decide as they look at the garment they need to acquire. Comparison shopping is a must and impulsive decisions should not be a factor here. Skill level, time and desire are big factors in this decision.

Q. Why is it important for you to be able to set goals and evaluate your progress towards reaching those goals, or deciding if those goals are appropriate for you?

**Apply:**

Q. How might the concept of “cost per wearing” transfer to other economic decisions you or your family might need to make?

A. Examples: buying a used versus a new car; length of a mortgage; constructing a yard fence versus having one installed, etc.
GOING FURTHER:

• Have members discuss the pros and cons of sewing versus buying of a particular type of article. Examples include—active wear, coats and jackets, undergarments, swim wear, formal wear. They can make a poster to display in a local sewing store or retail outlet. Or they may wish to present this to a local group.

• Have members plan for the next several investment purchases they need to make.

• Have members figure the cost per wear of the last garment they made or someone else made. Tell how this total cost compares with a similar ready-made and decide if sewing saves you money.

• Have members interview their parent or other adult for the best investment purchase they have made. Ask about cost, quality, and use, bring this to the next meeting and discuss.

REFERENCES:

Active Sportswear, Orena Haynes and Norma Pitts and Joyce Smith, Extension Clothing Specialists, Cooperative Extension Service, The Ohio State University

Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

Actionwear: Clothing for Fitness, Susan M. Watkins and Jean McLean, Cornell Cooperative Extension, New York State College of Human Ecology, New York State University at Cornell University

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### WHAT TO BUY OR MAKE—COST PER WEARING
CLOTHING & TEXTILES, LEVEL IV, WARDROBE PLANNING
Activity Sheet

#### Figuring Cost Per Wearing
Self-constructed Garment

**Example**

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<table>
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<tr>
<td>4 hours</td>
<td></td>
<td>$5.00</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care</th>
<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0.25</td>
<td>once a week</td>
<td>$13.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(52 weeks in a year)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Cost** $62.25

Total Wearings 52 (once a week)

**Total Cost per Wearing** $62.25 = $1.25 per wearing

#### Your Garment

<table>
<thead>
<tr>
<th>Supplies</th>
<th>Price per Unit</th>
<th>Quantity</th>
<th>Total Supply Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Elastic</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Buttons</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Thread</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td>Pattern</td>
<td></td>
<td></td>
<td>$</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Total Hours</th>
<th>Price per Hour</th>
<th>Total Cost of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care</th>
<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

**Total Cost** $_______

Total Wearings $_______

**Total Cost per Wearing** $_______ = $_______ per wearing
WHAT TO BUY OR MAKE—COST PER WEARING
CLOTHING & TEXTILES, LEVEL IV, WARDROBE PLANNING
Activity Sheet

Figuring Cost Per Wearing, *continued*

Store Bought Garment

Example

<table>
<thead>
<tr>
<th>Garment</th>
<th>Price</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tights</td>
<td>$20.25</td>
<td>once a week</td>
<td>$10.00</td>
</tr>
<tr>
<td>Leotard</td>
<td>$20.25</td>
<td>(for 10 months)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost of Garment</strong></td>
<td><strong>$40.50</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care</th>
<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ .25</td>
<td>once a week</td>
<td></td>
<td>$10.00</td>
</tr>
</tbody>
</table>

**Total Cost**

$50.50

**Total Wearings**

40 (cheaper fabric—shorter garment life)

**Total Cost per Wearing**

$50.50 = $1.26 per wearing

Your Garment

<table>
<thead>
<tr>
<th>Garment</th>
<th>Price</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost of Garment</strong></td>
<td><strong>$</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost</th>
<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

**Total Cost**

$

**Total Wearings**

$__________

**Total Cost per Wearing**

$_____ = $_______ per wearing
What Members Will Learn . . .

ABOUT THE PROJECT:
- Career possibilities related to fashion and wardrobe planning
- Personality traits and educational requirements needed for careers in these areas

ABOUT THEMSELVES:
- To identify personal strengths and weaknesses through self-evaluation skills
- Using community resources for goal setting and decision-making

Materials Needed:
- Copies of Activity Sheets

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

What is the career for you? You are the only one who can answer this question. You can get help in answering it from a number of sources including schools, libraries, guidance centers and, most importantly, from those working in a career similar to the one you think you might be interested in.

Plan for a career rather than for a specific job. A career can include a variety of jobs that build from the one currently held. A flexible goal will permit you to seek a variety of experiences and take advantage of opportunities as they arise. Every part-time, summer, temporary job or volunteer work will help you build knowledge and background, and may help you decide what to do.

Most people do not describe the same job in the same way. All jobs have advantages and disadvantages. By knowing yourself, you can determine which job traits are more or less important to you. What are your abilities and interests? Can you work under pressure? These and many more traits are worth exploring about yourself as you consider the career that is right for you.

The ability to get along with people is essential for any job. In addition, the ability to communicate effectively is essential to the success of any worker.
Job satisfaction is not always related to salary. Starting salaries may be lower for certain jobs, but advancement opportunities are greater. Consider the long range potential. Certain job benefits may make lower salaried jobs more financially beneficial.

Next, you need to consider what is important to you. You must determine this by knowing yourself as completely as possible. A job is what you make it. A career is a combination of related jobs that communicate who you are and what you do during a major part of each day, week or year.

The jobs included in wardrobe planning, grooming and fitness are almost limitless. To help you begin thinking about the possibilities we will discuss some obvious ones.

**Retailing**—Retailing of clothing can be an exciting career to the person interested in fashion changes and the distribution of goods and services to consumers. If you are college-bound, consider that a person with a degree in human ecology, with a specialization in clothing, may work with the promotion, buying, or service functions related to the sale of ready-to-wear or fabrics. In addition, majors in business marketing may also find clothing retailing exciting. If you are not college-bound, an entry level job could be that of a salesclerk and job advancement to the duties just mentioned could be possible over time. Some of the major retailing jobs are described below:

- **Buyers**—select clothes or fabrics from manufacturers and wholesalers.
- **Training supervisors**—keep employees up-to-date on fashions in ready-to-wear or piece goods departments. They also train new employees in those departments.
- **Fashion coordinators**—establish fashion policy for their stores, plan special programs for schools and other groups, produce style shows, and occasionally work with sales personnel to keep them up-to-date on fashion trends.
- **Shopping consultants**—or personal shoppers aid customers in the selection of wardrobes, accessories, or gifts.
- **Comparison shoppers**—compare the value, price, and quality of their store’s merchandise with that of competitors.
- **Copy writers**—compose ads, prepare material to promote sales through newspapers, catalogs, leaflets, and direct mail.
- **Salesclerks**—answer questions about merchandise and sell the clothes and accessories.

Education requirements include:
- High school diploma.
- For some positions a bachelor’s degree in human ecology or business.
- Courses in fashion and design, economics, retailing or merchandising, mathematics, advertising, psychology, speech, and multi-cultural appreciation are helpful. Some colleges and trade schools offer apprentice experience in merchandising.
- A training program in a reputable department store leads to advanced positions.

Pass out the “Job Trait Comparison” Activity Sheet. Give the members time to reflect on this and choose the traits that are important to them. Stress that each person should be unique in their answers.
Employment opportunities are good because:

- Large turnover of personnel through promotions and mobility creates many openings in many department stores, high fashion shops, specialty stores, and other retail firms in the United States.
- Customer services are on the increase in retailing, especially in large department stores competing with suburban shopping centers.

Freelance Business Career Opportunities
The market for professional wardrobe planning can be different for each location and for every customer. Activities range from advertising, promotion, publicity, and printing of charts and other items you will use when working with customers, to actual customer contact.

Wardrobe planners might provide a color profile in written form, a lifestyle analysis complete with written results, or a list of wardrobe basics on the first visit. They may offer classes in wardrobe investment, additional planning services, or coordinate with makeup and hair care experts in the community, health spas and beauty salons. They may offer services to groups of women and/or men including:

- Color consultation
- Lifestyle identification
- Fashion trend classes and forecasts
- Wardrobe planning classes
- Total wardrobe planning
- Buying accessories
- Special wardrobes: evening, travel, physically challenged, senior citizens, special occupation needs
- Budgeting
- Fashion classes
- Teach closet organization and do wardrobe inventories

Wardrobe planners study fashion trends and research new products to give the customer up-to-date information. Courses in fashion and design, merchandising, education, public speaking and marketing are helpful.

Special qualifications include:

- Flair for fashion
- Ability to analyze body shapes and use fashions and fabrics that flatter figure types
- Ability to understand and use color to build wardrobe excitement and versatility
- Business minded and organized

Employment opportunities are:

- Home-based business
- Consultant for women’s/men’s magazines, print media, and mail-order companies
- Contract with department stores, high-fashion shops, and specialty stores
Leader Notes

Have members take a blank piece of paper and write a resume. Ask them to write these items as you tell them.

- Name
- Address
- Telephone
- Work Experience—jobs—most recent listed first
- Extracurricular Activities
- Achievements
- Interests—hobbies
- Skills
- References—list three unrelated persons who know you well

Next, have members fill out the “Career Study Guide.” Have them select a career to study for next meeting. It may be necessary to allow more time for members to receive information if they write to trade organizations. Help them to identify a person or place with which they can investigate this career. Have them return the guide for discussion next project meeting. Remind them to write a thank you to the person interviewed.

Other jobs include the areas of: self improvement/modeling, fashion reporter and writer, fashion researcher, broadcaster, trade association publicity director/researcher/convention director, teacher, cooperative Extension service agent/educator, costume planner for theater/movie/media, interior designer, hair care specialist, skin care specialist, nail specialist, fitness instructor, physical therapist, nutritionist, owner/operator of fitness center or spa. In addition, each of these careers have a facet that deals with planning, business records, customer service, promotion, media interface, evaluation and training and supervising of others. So the possibilities are endless. Each of the above can further be targeted towards a single audience; for instance senior citizens, physically challenged or youth.

Places to assist include:

- Library
- Job training programs
- “Shadow” a person in the occupation for a few hours
- Local employment agency personnel
- Trade association headquarter and union offices

Offices include:

American Apparel Manufacturers Association, 1611 N. Kent St.,
Arlington, Virginia 22209
American Textile Manufacturers Institute, 1101 Connecticut Ave., NW,
Suite 300, Washington, D.C. 20036
California Fashion Creators, 110 E. 9th St., Los Angeles, CA 90015.
Clothing Manufacturers Association, 135 W. 50th ST., New York, New
York 10020
Men’s Fashion Guild, 353 Fifth Ave., New York, New York 10019
National Retail Merchants’ Association, 100 W. 31st St., New York,
New York 10001
New York Couture Business Council, 141 W. 41st ST., New York, New
York 10036
The Fashion Group, 9 Rockefeller Plaza, New York New York 10020

DIALOGUE FOR CRITICAL THINKING:

Share:

Q. How did you feel when you completed the job trait comparison sheet?

Q. Why did you feel that way?

Q. What is the difference between a job and a career?

A. A career can include a variety of jobs that strengthen your background preparation for the one currently held. A flexible goal will permit you to seek a variety of experiences and take advantage of opportunities as they arise. A career is a process of building upon jobs and skills to allow you to achieve a level of expertise in a particular field.
Leader Notes

Process:
Q. What aspects of a job appeal to you? Why?
   A. Answers will vary.

Q. What are two things you do not want in your job? Why?
   A. Answers will vary.

Generalize:
Q. What are resources in your community that can help you with career choices?

Q. What life skills were you able to demonstrate through this activity?

Apply:
Q. What did you learn from this lesson that will be helpful in other areas of your life?

GOING FURTHER:
- Have members share a presentation about careers with the club or community.
- Have members begin to identify a list of careers in which they are interested.
- Have members write a want ad describing themselves and the job they would fill perfectly.
- Help members compile a list of colleges, vo-tech schools, trade schools, and other places that have courses in the career they find most appealing.
- Outside of the meeting, interview two people already in this field. Ask questions and report next meeting.
- Select a job or career goal. Help members make a step-by-step plan to reach that goal. Emphasize that goals are both long and short term and it may take years to fulfill.
- Have members volunteer to help with a career day at their high school to explain careers in the fashion industry that they have researched.

REFERENCES:

*4-H Clothing... Focus on Careers*, Nancy Brown, Clothing Specialist, Texas Agriculture Extension Service, Texas A&M, College Station, Texas

*Clothing Leader Guide*, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M, College Station, Texas

*Create Your Own...Exploration in Textiles and Clothing... and New Horizon*, Mildred A Crawford, Extension Specialist, Cooperative Extension Service, Colorado State University, Fort Collins, Colorado
Leader Notes

**Author:**
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

**Reviewed by:**
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team
OCCUPATIONS IN WARDROBE PLANNING, GROOMING AND FITNESS
CLOTHING & TEXTILES, LEVEL IV, WARDROBE PLANNING
Activity Sheet

Job Trait Comparison

Check it Out
Place a check in one column to show how you feel about each job trait.

<table>
<thead>
<tr>
<th>JOB TRAIT COMPARISON</th>
<th>Would definitely want</th>
<th>Would like to have if possible</th>
<th>Would rather not have</th>
<th>Would not want</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can live anywhere desired</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Must live in specific city/state</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can wear anything</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific professional improvement required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No additional professional improvement required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long hours and weekend work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal working hours and more time for family and leisure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibilities for managing work of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work under someone’s direction and follow instructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requires own initiative and imagination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearly defined work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High salary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium range salary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always changing work schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predictable work schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-level position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in office alone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in office or studio with other people</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combination of working alone and with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in a factory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in an office</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No travel required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strict deadlines demanded</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work at self-directed pace</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compare the job traits you strongly prefer or do not want with the requirements of jobs that interest you. Which jobs are best for you? What other job traits do you prefer?

Adapted from Texas Agricultural Extension Service, The Texas A&M University System, College Station, Texas
OCCUPATIONS IN WARDROBE PLANNING, GROOMING AND FITNESS
CLOTHING & TEXTILES, LEVEL IV, WARDROBE PLANNING
Activity Sheet

Career Study Guide

Selected for Exploring (name and occupation) ________________________________
Obtain the following information plus any other information you desire.

Does this job offer opportunities for the following, and which are important considerations to you? Explain.
   _____ Is a service to people: ____________________________________________________
   _____ Allows you to do things with hands: __________________________________________
   _____ Allows you to write: _______________________________________________________
   _____ Provides opportunity to travel: ______________________________________________
   _____ Allows you to work with people: ____________________________________________
   _____ Can do detailed work: _____________________________________________________
   _____ Allows you to work with numbers: __________________________________________
   _____ Gives you opportunity to read and/or study: _________________________________
   _____ Provides a way to explore, investigate, or discover: __________________________

Job Opportunities
How easy is it to find a job in such a career (when you have the necessary qualifications)?
   Easy _____ Difficult _____ Very difficult _____

In the future, will the need for people in this job be:
   More _____ Less _____ Same _____

What are the opportunities for advancing from this job to a better one?

What incomes are people receiving in this occupation per year?
   Highest $_______ Lowest $_______ Average $_______

Geographically, where are these jobs located?

In this occupation would you work:
   _____ by the hour?
   _____ for commission?
   _____ by piece work?
   _____ for fees?
   _____ for a salary?
   _____ in business for yourself?

Qualifications
Type of education or training needed: _____________________________________________
Amount of education or training needed: ___________________________________________
Cost and place of this education or training: _______________________________________
Personal traits needed, such as neatness, patience, etc.: ____________________________
Other (special advantages or disadvantages). For example, responsibility, regularity and length of working day, special benefits, etc.: _________________________________
What Members Will Learn . . .

ABOUT THE PROJECT:

• Become aware of and learn how to use accessories
• Analyze what look they want to create through the use of accessories
• Demonstrate how to create a desired look
• Identify ways to use accessories
• Analyze and improve their use of accessories

ABOUT THEMSELVES:

• Confidence in selecting and using accessories successfully
• Encouraging personal creativity when making or selecting accessories

Materials Needed:

• Video, “The Magic of Accessories” and Instructor’s Guide (available for checkout at area Extension office or Department of Communications Media Center, Umberger Hall, or it may be purchased from McCall’s Pattern Company. Call 1-800-255-2762 for ordering information) Leaders need to order ahead of meeting to prepare for lesson.
• TV and VCR
• 2 to 3 pictures from magazines/advertisements of teenagers dressed in varying outfits

ACTIVITY TIME NEEDED: 30 MINUTES WITH DISCUSSION AND NO OPTIONAL ACTIVITIES; COULD EASILY BE EXPANDED FROM 2 TO 4 MEETINGS DEPENDING ON THE GROUP AND THEIR INTEREST IN THE SUBJECT, SEE OPTIONAL ACTIVITIES IN THE INSTRUCTOR’S GUIDE

ACTIVITY

An accessory, in terms of clothing and dress, may be defined as an object that adds beauty or effectiveness to complete one’s outfit. Accessories have been described as those items that add the finishing touches to one’s wardrobe—those added details that make a difference.

Leader Notes

View “Magic of Accessories.” The 11-minute video can be viewed in its entirety, or it can be viewed in parts incorporating the optional group activities.
This video focuses on three basic concepts:
- defines accessories and their importance
- provides guidelines for use
- challenges to think about where to get inspiration for using accessories

To introduce the video lesson, place the two to three mounted pictures for all youth to view. Have them identify the accessories these youth are wearing. (See if they associate certain items like shoes and socks as accessories!) Brainstorm and list any accessories not portrayed in the pictures.

Let youth brainstorm a list of reasons and later compare to master list in video.

**DO:** Each lesson topic identifies the activity or series of activities to DO involving youth in a common EXPERIENCE.

**REFLECT:** At the conclusion of the activity, allow time to REFLECT (share and process) what has been learned from the experience. Each lesson guide outlines some key questions to assist you in this process.

**APPLY:** Help youth to APPLY their new knowledge and skill to real life situations. You can do this by helping them to identify key principles that are important for future decisions or personal action. Again, each lesson has outlined a few questions to direct this process.

The optional activities for each “video part or lesson” strive to involve young people in the experiences that require them to interact, analyze, question, reflect, and transfer what they have learned to personal application. The activity comes first. The “learning” comes from the “discovery” of new knowledge and skills as a result of the experience. This creates an active “learn by doing” process. However, to end with the experience without building upon it...
DIALOGUE FOR CRITICAL THINKING
Use the Instructor’s Guide that comes with the video and complete the “Do, Reflect and Apply” in place of the Dialogue for Critical Thinking. It is the same process.

GOING FURTHER:
• Accessorize your outfits. Budget your accessories. Discuss fads versus classics.
• Go on a field trip to a store and have store personnel in the accessory department tell how the accessory items for the store are selected and how accessory costs have changed in the last five years.
• Have members conduct a “create a hat or belt” contest. Award a prize to the most imaginative winner.
• Have members organize an accessory garage sale as a money raiser; they could make accessories to sell as part of the function.

REFERENCES:
Clothing Leader Guide, Texas Agriculture Extension Service, Alma Fonseca and Ann Beard, Clothing and Textile Specialists, Texas A&M University, College Station, Texas
The Magic of Accessories, video and curriculum guide, Nadine Hackler, C.H.E., Professor, Clothing and Textiles; and Joy Cantrell, Associate Professor, 4-H and Other Youth Programs, Johannah Pourciau, Student Assistant, Florida Cooperative Extension Services; and Linda Heaton, C.H.E., Associate Professor, Textiles and Water Quality, Kentucky Cooperative Extension Service, March 1995, To order, call McCall’s Pattern Company, 1-800-255-2762

Author:
Developed by a team including, Carla Dill, Extension Assistant; Lucinda Schoenberger, Clothing Specialist; Mary Don Peterson, Clothing Specialist; Artyce Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

Reviewed by:
Steve Fisher, Extension Specialist, 4-H Youth Programs, Cooperative Extension Service, Kansas State University; and members of the Family Living Curriculum Development Committee and Clothing & Textiles Design Team

through REFLECTING and APPLYING does not help the young person understand the significance of what he/she saw, heard, or did. It is the transfer of this significance from one experience to another that helps young people apply their “learning” in future situations.