Kansas 4-H Clothing Leader Notebook
Level IV

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service
Optical Illusions of Clothing
Clothing & Textiles, Level IV, Me & My Body

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 possess. 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.

4-Clothing & Textiles, Level IV
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?
Leader Notes

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

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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
## 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</th>
<th>Lipstick</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Color</td>
<td>Clothes</td>
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<tr>
<td></td>
<td></td>
<td>Undertone</td>
<td></td>
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<td></td>
<td></td>
<td>Warm</td>
<td></td>
<td></td>
</tr>
<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>
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<td>Golden black</td>
<td>Golden blond</td>
<td>Green</td>
<td>Gold</td>
<td>Peach</td>
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<td></td>
<td>Charcoal black</td>
<td>Blue</td>
<td>Teal blue</td>
<td>Mocha and</td>
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<td>Golden gray</td>
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<td>Turquoise</td>
<td>brownish shades</td>
</tr>
<tr>
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<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>
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<tr>
<td></td>
<td>Golden brown</td>
<td></td>
<td>Clear navy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Golden gray</td>
<td></td>
<td>True blue</td>
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<td></td>
<td>Aqua</td>
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<td>Apricot</td>
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<td>Peach</td>
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<td>Coral pink</td>
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<td>Violet</td>
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<td>Yellow green</td>
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<td></td>
<td>Clear yellow</td>
<td></td>
</tr>
</tbody>
</table>
### OPTICAL ILLUSIONS OF CLOTHING

#### CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY

**Member Handout**

#### Your Personal Coloring, continued

<table>
<thead>
<tr>
<th>Skin Color</th>
<th>Hair Color</th>
<th>Eye Color</th>
<th>Recommended Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cool (Blue or gray undertone)</td>
<td>Clothes</td>
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<tr>
<td>Ivory</td>
<td>Black</td>
<td>Green</td>
<td>Black</td>
</tr>
<tr>
<td>Creamy</td>
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<td>Blue</td>
<td>White</td>
</tr>
<tr>
<td>Olive</td>
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<td>Hazel</td>
<td>True gray</td>
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<td></td>
<td>Ash brown</td>
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<td>True red</td>
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<td>Soft ivory</td>
<td>Ash blond</td>
<td>Blue</td>
<td>Blue-red</td>
</tr>
<tr>
<td>Rosy</td>
<td>Ash brown</td>
<td>Gray blue</td>
<td>True blue</td>
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<td></td>
<td></td>
<td>Hazel</td>
<td>Royal blue</td>
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<td></td>
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<td>Hot turquoise</td>
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<td>Chinese blue</td>
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<td>Royal purple</td>
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<td>True green</td>
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<td>Emerald green</td>
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<td>Pine green</td>
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<td>Hot pinks</td>
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<td>Muted shades of:</td>
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<td>blue</td>
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<td>pink</td>
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<td></td>
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<td>rose</td>
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<td></td>
<td></td>
<td>lavender</td>
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<td></td>
<td></td>
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<td>Rose browns</td>
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<td></td>
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<td></td>
<td>Grayed-navy</td>
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<td></td>
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<td></td>
<td>Gray-blue</td>
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<td>Blue-greens—</td>
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<td></td>
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<td>pastel to deep</td>
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Preparing 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.
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—you 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
PREPARING FOR THE ADULT WORLD
CLOTHING & TEXTILES, LEVEL IV, ME & MY BODY
Activity Sheet

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. 
4. 
5. 
6. 
7.

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

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.

Leader Notes
Have members sit in a comfortable place.
If they don’t know each other have them introduce themselves and state one appearance tip. You begin.
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.

Have members take a sheet of paper and pencil. Show pictures or name 10 famous youth. Have the members write down their opinions about the clothing these famous youth wear. Next, reread the defenses; have the members think of someone they know who dresses that defense. Have them list the defense and a description of the clothing this person wears, but not names. Discuss members’ answers.
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 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.
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 sports-wear.

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.
Scarves 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 accesso-
  ries.
• Assist boys in learning how to tie ties, girls with new ways to wear
  scarves.

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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.
Accessorizing With Ties and Scarves

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.
Care and Storage of Heirlooms and Special Items

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...
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. Vacuum
items (if sturdy enough) often to remove dust. Check regularly for insect infestation.

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 submerging 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 1/8 of a 3 1/2 ounces cake of neutral soap in 1 cup of distilled water; then add 1 ounce of this to

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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 \( \frac{3}{7} \) 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 \( \frac{1}{4} \) 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

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

Use of brand names in this, or any other lesson, does not imply endorsement.
### CARE AND STORAGE OF HEIRLOOMS AND SPECIAL ITEMS

#### CLOTHING & TEXTILES, LEVEL IV

**Heirloom Inventory**

<table>
<thead>
<tr>
<th>Heirloom: ____________________________________________</th>
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<tr>
<th>Reason for Original</th>
<th>Age Keeping</th>
<th>Owner</th>
<th>Owners</th>
<th>Creator</th>
<th>Other Information</th>
<th>Fiber Content</th>
<th>Care Procedures</th>
<th>Care Received</th>
<th>Cleaning/ Repairs</th>
<th>Display</th>
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(Diagram where)
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.
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 trafra@ksuvm.ksu.edu

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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
Careers in Fabric Care and Maintenance

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, *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 remov-
ers, 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.
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 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.

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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>
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<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>
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<tr>
<td>Interpersonal: Works with others</td>
<td>✓</td>
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<tr>
<td>Participates as a member of a team—contributes to group effort</td>
<td>✓</td>
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<tr>
<td>Teaches others new skills</td>
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<tr>
<td>Serves clients/customers—works to satisfy customers’ expectations</td>
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<tr>
<td>Exercises leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies</td>
<td>✓</td>
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<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>
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<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>
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</tbody>
</table>

45-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.

<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>
<tr>
<td><strong>FOUNDATIONAL SKILLS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, speaks</strong></td>
<td></td>
</tr>
<tr>
<td>Reading—locates, understands, and interprets written information in manuals, graphs, and schedules, and the like</td>
<td></td>
</tr>
<tr>
<td>Writing—communicates thoughts, ideas, information, and messages in writing; and creates letters, directions, manuals, reports, graphs, and flow charts, etc.</td>
<td>✓</td>
</tr>
<tr>
<td>Arithmetic/Mathematics—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques</td>
<td>✓</td>
</tr>
</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 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:</strong> Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, reasons</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:</strong> Displays responsibility, self-esteem, sociability, self-management, integrity and honesty</td>
<td>✓</td>
</tr>
<tr>
<td>Responsibility—exerts a high level of effort and perseveres towards 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>
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 aide 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 presoaks 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.
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
MAKE-UP OF SOAPS AND DETERGENTS
CLOTHING & TEXTILES, LEVEL IV, CARE & MAINTENANCE
Activity Sheet

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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</table>
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).
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.
Advanced Stain Removal
Clothing & Textiles, Level IV, Care and Maintenance

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.
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

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

The use of brand names in this, or any other lesson, does not imply endorsement of that product.
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.
- **Catsup**—Remove excess with a dull knife. Sponge with dry cleaning solvent or waterless hand cleaner. Rinse. Apply detergent to stain. Launder using hot water and bleach safe for the fabric. Or, treat dry garment with spot and stain remover. Launder in hot water and chlorine bleach if safe for fabric. Or, treat dry garment with spot and stain remover. Launder in warm water and enzyme presoak for 15 to 30 minutes. Launder.
- **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.
- **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.
Cleaning Equipment Cost and Care

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.
Pass out specification sheets from the manufacturer for the models of appliances you will compare. Find a consumer comparison such as “Consumer Reports” or “Consumer Digest” and copy the comparison tables for each member. These are generally available in your public school or library, or Extension office.

You can set monthly income to use for purchase if desired and make up more situations in addition to these. Or assign members to work in teams.

Use a kilowatt rate close to the rate in your area. You can call your local utility company for this information.

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 site 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.

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64-Clothing & Textiles, Level IV
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 yourself 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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The use of brand names in this, or any other lesson, does not imply endorsement.
Appliance Comparison Worksheet

**Clothes Washer**

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<th>Make/Model</th>
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<tr>
<td>A. Construction material</td>
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<tr>
<td>B. Washing cycles</td>
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<td>C. Tub capacity</td>
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<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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<td>K. Finance charge</td>
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**Clothes Dryer**

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<tr>
<td>A. Construction material</td>
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<td>B. Fabric cycles</td>
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<td>C. Control for fabric temperatures</td>
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<td>D. Energy usage</td>
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<tr>
<td>E. Venting options (if gas)</td>
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<td>F. Warranty</td>
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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 \(1\frac{3}{4}\) inches \(\times\) \(2\frac{3}{4}\) 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

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
Textiles in the Global Economy
Clothing & Textiles, Level IV, Textile Science

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 employees 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

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.

Pass out copies of Member Handout, “Six Stages of Textile Development” and review with members.
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 its 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 specialty 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.
REFERENCES:

*Textiles and Apparel in the International Economy*, Kitty Dickerson,

*Textiles*, Norma Hollen, Jane Saddler, Anna Langford, Sara Kadolph,
  Macmillan Publishing Company, 866 Third Avenue, New York, New York 10022

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
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.

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 (launder) 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?
Yarns of the Future

Clothing & Textiles, Level IV, Textile Science

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 repellant 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
At this time allow a review of any new fabrics or ones with special/unusual finishes, unique printing or dying processes.

Allow members to touch and examine a microdenier fabric or garment. Discuss the price and when/why might the price be appropriate for them to spend on a garment.

Allow members to discuss why these fabrics and garments may or may not be desired by the consumer. Allow for discussion about and examination of any other unique items that may be available.

Leader Notes

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 regained 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:
Deanna Munson, Textile Specialist, Kansas State University, Cooperative Extension Service, Justin Hall, Manhattan, Kansas 66506

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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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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?
Leader Notes

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@ksuvm.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

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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.
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 transfer-
able—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.

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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.
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 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>
<th>Neighborhood park clean-up</th>
</tr>
</thead>
<tbody>
<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>
</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 |
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>
<tr>
<td><strong>FOUNDATIONAL SKILLS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens, speaks</strong></td>
<td>✔</td>
</tr>
<tr>
<td>Reading—locates, understands, and interprets written information in manuals, graphs, and schedules, and the like</td>
<td></td>
</tr>
<tr>
<td>Writing—communicates thoughts, ideas, information, and messages in writing; and creates letters, directions, manuals, reports, graphs, and flow charts, etc.</td>
<td>✔</td>
</tr>
<tr>
<td>Arithmetic/Mathematics—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques</td>
<td>✔</td>
</tr>
</tbody>
</table>
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.

### FOUNDATIONAL SKILLS

<table>
<thead>
<tr>
<th>Foundational Skill</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:</strong> Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, reasons</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>
</tbody>
</table>

### Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, integrity and honesty

<table>
<thead>
<tr>
<th>Personal Qualities</th>
<th>Neighborhood Park Clean-up</th>
</tr>
</thead>
<tbody>
<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>
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 II
SPCH 105 (2) Public Speaking I
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
OR
MATH 220 (4) Analit. Geom. & Calc. I*
STAT 320 (3) Elements of Statistics
CIS ___ (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
FSHS 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 Chem. I
CHM 532 (2) Organic Chem. Lab
CHM 550 (3) Organic Chem. II
CHM 566 (3) Instrumental Methods of Analysis
CHM 567 (1) Instrumental Methods of Analysis Lab

For a minor in Chemistry (7 Hours)
CHM 500 (3) Gen. Physical Chemistry
PHYS 115 (4) General Physics I
OR
PHYS 113 (4) General Physics I

125 Hours Required for Graduation
* Required for Textile Chemistry option.
**Not required for Textile Chemistry option.

Fall 1996
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.
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.

Pass out sample Price List/Order Form. Let members ask questions and discuss.
• 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.
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 craftserson 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

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
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?
LAWS AND REGULATIONS OF SEWING FOR A PROFIT
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS AND FIBERS
Member Handout

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
LAWS AND REGULATIONS OF SEWING FOR A PROFIT
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS AND FIBERS
Member Handout

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>Name</th>
<th>Ship to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dandy Duds</td>
<td>140 Clay Street</td>
</tr>
<tr>
<td></td>
<td>Clover, Kansas 66667</td>
</tr>
<tr>
<td></td>
<td>(316) 294-8707</td>
</tr>
</tbody>
</table>

Wholesale price list No. 4, January 1996

<table>
<thead>
<tr>
<th>Date</th>
<th>Order No.</th>
<th>Buyer</th>
<th>When ship</th>
<th>How ship</th>
<th>Terms:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<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>XX</td>
<td></td>
<td></td>
<td>$5</td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>Wrist Pincushion</td>
<td>XX</td>
<td></td>
<td></td>
<td>$2</td>
<td></td>
</tr>
<tr>
<td>202</td>
<td>Travel Kit</td>
<td>XX</td>
<td></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

OK to back order
OK to substitute

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.
Sample Invoice

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 #_________________________</td>
</tr>
<tr>
<td>Your Name</td>
</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Telephone No.</td>
</tr>
<tr>
<td>Date___________________________</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>Return or damage claims not accepted unless made within 5 days after receipt of merchandise.</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td></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
*Clothing & Textiles, Level IV, Creating with Fabrics & Fibers*

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 ¼ 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 ¼ 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 ¼ inch outside of the center front and extend back into the bodice. The length is equal to the diameter of the button plus ¼ 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 ¼ 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 2½ 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 2½ 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.
Leader Notes

• 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>Un-gathered edge (waistband-armhole)</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>
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 seamlines 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.
Leader Notes

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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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.
Have members pick a problem that they need to remedy, or you assign one. If you wish, members may want to work in teams of two. Have several copies of the various Member Handouts as resources. Have them follow the illustrations on how to alter. You monitor progress.

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.
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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.

Measure the amount of gap.

Markings mean “let the waist and seat out this much.”

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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.
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Alteration Tips, continued

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.
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.
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Alteration Tips, continued

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.
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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 contrast-
ing 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 ½ inch.
11. Place lapel and collar on tailor’s ham. Pin right and wrong side of lapel and
collar together. Allowing ¼ inch for seam allowance on underlapel and
undercollar, trim off excess fabric.
Alteration Tips, continued

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.

12. Turn in seam allowance on underlapel and collar. To prevent underlapel and undercollar from showing on the right side, allow ¼ 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.
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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 ⅛ inch shorter.
**Advanced Fit and Alterations**

**Clothing & Textiles, Level IV, Creating with Fabrics & Fibers**

**Member Handout**

**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 \( \frac{1}{2} \) 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 \( \frac{3}{4} \) inch wide bias strips of lightweight lining fabric to use for the binding. Stitch the bias strip to the hem edge with a \( \frac{1}{8} \) 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.
Custom Tailoring and Couture 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 tailoring techniques
• Various couture techniques

ABOUT THEMSELVES:
• To become independent life-long learners using community resouces
• 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.
Leader Notes

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 interfacings 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 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.
Leader Notes

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

Using the reference book you have purchased, use the index to find the illustrations for these techniques.
• 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 interfacings.
Seams on interfacings, 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 \( \frac{1}{4} \) 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 \( \frac{1}{4} \) inch apart
• mark the fall the same but \( \frac{1}{2} \) 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 \( \frac{1}{4} \) 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
**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.

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 enforcement 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 \(\frac{3}{8}\) 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 \(\frac{5}{8}\) 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 \(\frac{1}{2}\) 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 1\(\frac{1}{2}\) 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 \(\frac{1}{2}\) 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:
Leader Notes

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\(\frac{1}{2}\) 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 \(\frac{1}{8}\) inch apart at the underarm from notch to notch. Trim away seam allowance to stitching only from notch to notch.
**Leader Notes**

*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 ⅜ 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 many 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, $\frac{1}{8}$ to $\frac{1}{4}$ inch from first stitching into the seam allowance.

Trim the underarm seam from notch to notch to $\frac{3}{8}$ 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 $\frac{3}{6}$ to $\frac{3}{8}$ 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
caught 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 $\frac{5}{8}$ inch.

Stitch a line $\frac{5}{8}$ 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 $\frac{1}{8}$ 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
hangs ½ inch below the finished hemline of the jacket (unless pattern directs otherwise). Turn under ¼ inch of the lining, pin this fold ¼ 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 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 ¼ 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 ½ 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.

162-Clothing & Textiles, Level IV
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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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 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:

Amalgamated Clothing Workers of America
  15 Union Square
  New York NY 10003
The New York Connection
  516 Fifth Avenue
  New York NY 10036

United Garment Workers of America
  Textile Association of Los Angeles
  31 Union Square
  New York NY 10003
  819 Santee St., 9th Floor
  Los Angeles CA 90014

International Ladies Garment Workers’ Union
  1710 Broadway
  New York NY 10019

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.
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, CO MJ 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:
- Demonstrate
- 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
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.

Go through the special needs and discuss what problems a person in each category would have and how you might solve the problem.

DIAGNOSIS 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 informa-
tion?

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 Special Needs, video, 1987, Gret Atkin, Clothing 
and Textile Specialist, New York State College of Human Ecology, 
Cornell University, Ithaca, New York 14853, call Media Resource 
Center, 
607-255-2080 for ordering information
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 
Cold Weather Cocoon, Janis Stone, Extension Specialist in Textiles and 
Clothing, Iowa State University, Ames, Iowa, 50011-3171, 
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Contemporary Tailoring Construction Techniques

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.

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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.

Make copies of the handout “Contemporary Tailoring Blazers,” and use as a method to do quick tailoring.
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?

Q. What did you learn about dealing with change from this lesson?

**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:
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*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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CONTEMPORARY TAILORING CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

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. Sleeve 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.

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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 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 helps achieve permanent shape. After shape is achieved, garment is never pressed flat.
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**

1/3 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**

1/3 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 1/4 inch seam, leaving about 4 inches open at the large end.

Turn right side out and stuff until firm. Slipstitch the opening.
CONTEMPORARY TAILORING CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

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 CONSTRUCTION TECHNIQUES
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Member Handout

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 1½ 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.
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—1/4 to 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.
Contemporary Tailoring Blazers, *continued*

<table>
<thead>
<tr>
<th>Body Measurements and Pattern Adjustments</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><strong>measurements</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>A. Chest/Bust:</strong> Over fullest part of chest/bust and straight across back.</td>
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<td></td>
<td>3–4 inch</td>
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<tr>
<td><strong>B. Waist:</strong> Tie string around body at smallest part to find waistline. Measure at string. (Leave string in place.)</td>
<td></td>
<td></td>
<td>3–4 inch</td>
<td></td>
<td></td>
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<tr>
<td><strong>C. Hip:</strong> 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>3–4 inch</td>
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<tr>
<td><strong>D. Back neck to waist:</strong> From neck bone down center back to string at waist.</td>
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<td>0</td>
<td></td>
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<tr>
<td><strong>E. Back width:</strong> 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>1–1½ inch</td>
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<tr>
<td><strong>F. Shoulder:</strong> From base of neck to shoulder bone.</td>
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<td>0</td>
<td></td>
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<tr>
<td><strong>G. Arm circumference:</strong> Around fullest part of arm (about 1 inch below armpit).</td>
<td></td>
<td></td>
<td>3–4 inch</td>
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<td></td>
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<tr>
<td><strong>H. Arm length:</strong> From shoulder bone to elbow and on to wrist bone with arm slightly bent.</td>
<td></td>
<td></td>
<td>1 inch</td>
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<tr>
<td>Shoulder to wrist</td>
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<td></td>
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<tr>
<td>Shoulder to elbow</td>
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<td>0</td>
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<tr>
<td><strong>I. Finished length of jacket:</strong> From neck bone down center back to desired length.</td>
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</tbody>
</table>

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Contemporary Tailoring Blazers, continued

Placement of Fusible Interfacing

Here are some general guidelines to follow when using fusible interfacing:

- Extend fusible interfacing into entire 5/8 inch seam allowance of jacket front sleeve edges.
- Extend fusible interfacing 1/4 inch into all seam allowances that are not topstitched.
- Cut fusible interfacing to the 3/8 inch seamline 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 3/8 inch seam allowance of sleeve edge. It extends 1/4 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 5/8 inch seamline (5). Draw a new grainline that follows roll line. Before fusing wedge of interfacing to wedge of lapel, mark rows of lines 1/4 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 1/4 inch at a time. After each row is pressed into place, curve lapel and press the next 1/4 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 1/2 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 1/4 inch down from this point toward the neck edge. Connect this point to the notches along the neck edge.
Contemporary Tailoring Blazers, continued

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: ⅛ inch tighter for a small bust; ⅜ 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 ¼ 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.

a. 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. (19a). 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 \(\frac{1}{4}\) 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 $2 \times 1\frac{1}{2}$-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.
CONTEMPORARY TAILORING CONSTRUCTION TECHNIQUES
CLOTHING & TEXTILES, LEVEL IV, CREATING WITH FABRICS & FIBERS
Member Handout

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 ¼-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 ¼-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 ¼ 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).
Contemporary Tailoring Blazers, continued

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.

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 members tell the last item they acquired. Was it purchased, made or received as a gift? You begin.

193-Clothing & Textiles, Level IV
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 1½ 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)**

$65.25
52

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?

\[
\text{Cost per wear} = 40.50 \text{ plus cost of care (} 40 \times .25 = 10.00 \text{)} - 50.50
\]
\[
\frac{50.50}{40} \quad \text{Total cost divided by number of wearings} = 1.26
\]

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.
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

Author:
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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
WHAT TO BUY OR MAKE—COST PER WEARING
CLOTHING & TEXTILES, LEVEL IV, WARDROBE PLANNING
Activity Sheet

Figuring Cost Per Wearing
Self-constructed Garment

Example

<table>
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<th>Supplies</th>
<th>Price per Unit</th>
<th>Quantity</th>
<th>Total Supply Cost</th>
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<tr>
<td>Fabric</td>
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<td>$24.00</td>
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<td>Elastic</td>
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<tr>
<td>Buttons</td>
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<td>$2.00</td>
</tr>
<tr>
<td>Thread</td>
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<td>$0.50</td>
</tr>
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<td>Pattern</td>
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<td>$4.75</td>
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<td>4 hours</td>
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<th>Total Washings</th>
<th>Total Cost of Care</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$0.25</td>
<td>once a week (52 weeks in a year)</td>
<td>$13.00</td>
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**Total Cost** $62.25

Total Wearings 52 (once a week)

**Total Cost per Wearing** $62.25 = $1.25 per wearing

Your Garment

<table>
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<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>$</td>
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<td>Elastic</td>
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<td><strong>Total</strong></td>
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<th>Total Cost of Time</th>
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<tbody>
<tr>
<td></td>
<td>$</td>
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</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>Store Bought Garment</th>
<th>$20.25</th>
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<tr>
<td>Tights</td>
<td>$20.25</td>
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<tr>
<td>Leotard</td>
<td>$20.25</td>
</tr>
<tr>
<td><strong>Total Cost of Garment</strong></td>
<td>$40.50</td>
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<table>
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<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ .25</td>
<td>once a week</td>
<td>$10.00</td>
</tr>
<tr>
<td>(for 10 months)</td>
<td></td>
<td></td>
<td></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>Total Cost of Garment</th>
<th>$</th>
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<tbody>
<tr>
<td>Cost</td>
<td>$</td>
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</table>

<table>
<thead>
<tr>
<th>Price per Wash</th>
<th>Total Washings</th>
<th>Total Cost of Care</th>
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<tbody>
<tr>
<td>$</td>
<td></td>
<td></td>
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</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

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.
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
## 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>
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<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>
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<tr>
<td>No additional professional improvement required</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Long hours and weekend work</td>
<td></td>
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<tr>
<td>Normal working hours and more time for family and leisure</td>
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<tr>
<td>Responsibilities for managing work of others</td>
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<tr>
<td>Work under someone’s direction and follow instructions</td>
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<tr>
<td>Requires own initiative and imagination</td>
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<tr>
<td>Clearly defined work</td>
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<tr>
<td>High salary</td>
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<tr>
<td>Medium range salary</td>
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<td></td>
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<tr>
<td>Always changing work schedule</td>
<td></td>
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<tr>
<td>Predictable work schedule</td>
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<tr>
<td>High pressure</td>
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<tr>
<td>Low pressure</td>
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<tr>
<td>Executive position</td>
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<tr>
<td>Mid-level position</td>
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<tr>
<td>High status</td>
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<tr>
<td>Medium status</td>
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<td></td>
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<tr>
<td>Work in office alone</td>
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<td></td>
<td></td>
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<tr>
<td>Work in office or studio with other people</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Combination of working alone and with others</td>
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<tr>
<td>Work in a factory</td>
<td></td>
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<tr>
<td>Work in an office</td>
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<tr>
<td>Travel required</td>
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<tr>
<td>No travel required</td>
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<tr>
<td>Strict deadlines demanded</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Work at self-directed pace</td>
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</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; Artuye Hedrick, Clothing Specialist, Cooperative Extension Service, Kansas State University

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