

# JUDGING 4-H YOUTH CLOTHING PROJECTS

## INTRODUCTION

In the 4-H Youth Clothing Program the main objective is the development of the young person. The youngsters will be assisted in gaining new knowledge, attitudes and skills in their project work.

The major areas of learning in each of the 4-H Youth Clothing projects are:

Buymanship  
Care  
Construction  
Evaluation  
Selection  
Self Improvement

The 4-H Youth leader is a volunteer from the community who has received training on the clothing project. Her training is coordinated by the county 4-H Youth advisor.

The projects are grouped into units which provide a progression in learning experiences. The progression is related to the abilities of the youth and their level of interest. Do not expect perfection in construction techniques and methods from these age groups. Remember they are young and are learning many new skills. As experience accumulates, so too will their skills.

Units in the 4-H Youth Clothing Projects are:

Beginning	for members who have had little experience. 9 years is the minimum age limit.	<ul style="list-style-type: none"><li>• SEW FOR FUN</li></ul>
Intermediate	for members who have the background of skills and experience outlined in the beginning units.	<ul style="list-style-type: none"><li>• WARDROBE SWITCHABLES</li><li>• CREATIVE CLOTHING</li></ul>
Advanced	for members who have the background of skills and experience outlined in the intermediate units.	<ul style="list-style-type: none"><li>• FASHION AND YOU</li><li>• PUTTING IT ALL TOGETHER</li></ul>
Other	for older members who have completed at least two advanced projects and who can develop their own plan of work.	<ul style="list-style-type: none"><li>• SPECIAL INTEREST</li></ul>

## GENERAL PRINCIPLES

- There is no 4-H clothing construction method. In other words, there's no such thing as "the 4-H way".
- Sew no more than is necessary to give (1) an attractive appearance, (2) good fit, and (3) durability. It is the ultimate result that is important, not the method used.
- 4-H Youth clothing is made to be worn and may show signs of this. Worn items should be given the same consideration as new ones if they are clean, well pressed, and repaired, if needed.
- All items entered as 4-H clothing projects have been made by the member under the supervision of a volunteer 4-H leader. Garments made as part of a school project or other class project are not eligible for exhibit in the 4-H division.

## HOW TO RATE CLOTHING

Each entry has a "4-H Youth Clothing Judging Checksheet" attached to it, which can serve as a guide to you. It can also be helpful to the girl if you will write constructive comments on it. See page 5 for suggestions. (Remember that 4-H Youth Fashion Revue Judging is entirely different - see "You're a Model Everyday" for an explanation.)

There are two main groupings on the checksheet. One deals with "How it Looks," and the other with "How it is Made." Since workmanship affects the way a garment looks as well as its usefulness, we suggest that you count "How it is made" as 60 per cent of the score and "How It Looks" as 40 per cent of the score.

Don't attempt to check all of the points on the checksheet--there usually isn't time enough. Do check the points that are exceptional (good or poor), and remember to write helpful comments as well as give some words of encouragement to those who may need it.

## GUIDE FOR JUDGING 4-H CLOTHING - STANDARDS OF QUALITY

### 1. Grain

The pattern should be cut accurately with the grain of the fabric. Selvages may be used; as a side finish on a beginner's apron, etc.

Fabric grain should be balanced on both halves of the garment.

## 2. Seams

### Stitching

Seams should have stitches of even length with a balanced tension. Seams should be reinforced at ends with back stitching or knotting. Seam width should be uniform. Appropriate color thread should be used on all seams. Machine, rather than hand stitching, is recommended for the beginners since more durable results can be obtained. Seam edges should be finished in an appropriate way where fraying will occur.

## 3. Zipper

### Placket

Zipper plackets should be sewn with even stitching. The weight of the zipper should be compatible with the fabric. On traditional skirt or pant waistbands, the top of the zipper teeth should come within 1/2 inch of the waistband. Zipper teeth should be well-covered by the lap. Zipper teeth should be free from puckering. Horizontal seams should meet across the zipper opening. Zippers may be sewn to the top of the waistband on some styles, or to the top of the waistline on bandless styles. Buttonholes should be placed horizontally on bands to avoid gaping. Buttonholes should end about 1/2 to 5/8 inch from the waistband edge. Buttons should be flat, appropriate in color, size, and style for the garment.

## 4. Darts

Darts should be tapered and smooth, free of puckers or bubbles. The ends should taper to nothing--the last 2 or 3 stitches will barely catch in the fold of the fabric. The threads at the ends of the darts should be secured--either backstitched, tied at the ends, or the stitch shortened to make a smoother end. Horizontal darts are usually pressed down. Vertical darts are usually pressed toward the center. In heavy fabric, the dart should be split along the fold edge to about 5/8 inch from the end, and then pressed open.

## 5. Hems

Hemming by machine is acceptable if it contributes to overall appearance. Hemming by machine is encouraged in beginning projects, since it adds to the durability of the garment. Machine hems should be straight, close to the edge, ends even, and properly reinforced. The color of thread should blend with the fabric.

Traditional hems should be appropriate in width for the garment. Hems on flared or a-line skirts are usually no more than 1-1 1/2 inches in width.

Straight dresses or skirts may have hems up to 3 inches in width if appropriate for the weight of the fabric.

The hem should be inconspicuous from the right side, and it should be secure enough to hold up in wear and care.

Use single threads for hemming.

In heavy fabrics which do not ravel, such as double knits, flannels, etc., often the flattest hem can be produced by finishing the raw edge by overcasting, pinking, edge-stitching, and using a tailor's hem. If hemming tape is used, it should be as sturdy as the garment fabric.

Fused hems are acceptable.

#### 6. Waistbands/Waistlines

Waistbands should be smooth, and free from bulk.

The entire band should be uniform in width.

Overlap should be flush with placket - underlap should extend beyond the placket and under the band.

Waistband should be turned completely with corners square.

All seams should be matched, finished and pressed before waistline seam is sewn.

#### 7. Neckline Finish/Collars

Neckline finish should have smooth, gradual curves if called for in design.

Neckline curves should be staystitched to prevent stretching.

The underfacing should not show - understitching will minimize this.

Curved collar seams should be clipped or wedged, seams trimmed or graded to minimize bulk.

Only the top collar should be visible - build-in roll prevents collar from showing.

Understitching holds the under collar in place.

#### 8. Sleeves or Armholes

The fullness of a set-in sleeve should be evenly distributed front and back of shoulder seam. The ease should not be puckered or puffy.

Stitching should be reinforced in arm hole in area of strain.

The underarm curve of a sleeve that is cut in one with the bodice might be reinforced with tape, seam binding, or a bias strip.

#### 9. Buttonholes or Fasteners

The stitching on buttonholes should be flat, secure and intact. Buttonholes should be uniform in appearance, length of stitch, and color of thread.

Buttonholes should be equally distant apart, and of correct length for buttons used.

Fasteners—finishing stitches should not show on right side of garment.

Hooks are usually placed in from edge of overlap so it will be secure and lie flat.

#### 10. Belts, Pockets, etc.

Pocket corners should be reinforced.

Even stitching should be used to set pocket onto garment.

Pockets should be appropriate for complete design.

Belts should have an appropriate closure that is attractive and durable.

Belt should be flat, smooth, free from bulk.

Tie belts should be uniform in width.

#### 11. Interfacings

Interfacing should not be visible.

Interfacing should be covered by the facing.

Interfacing should be used to add needed shape, body and support.

#### 12. Lining

Linings should conceal the inner construction.

Care and color of lining should coordinate with fashion fabric.

Lining should have a neat, clean finish.

Lining seamlines should be aligned with garment seamlines.

#### 13. Other

##### Knit Fabrics

Garments made from knit fabrics require less inner construction than those made from woven fabrics. Appropriate thread, interfacings and linings should be used, i.e., requiring the same care and having the same properties as the knit. Seam finishes are not needed on most knits as the fabric does not fray. (Lightweight knits are often trimmed to a 1/4 inch seam allowance and overcast, or zig-zagged.) An inside tailor's or dressmaker's hem is recommended for hems, as it is one of the least conspicuous hems from the right side. Fusibles may be used for hemming if they can be applied without being conspicuous from the right side; and the same holds true for the use of stretch lace as a hem finish. As long as it is inconspicuous from the outside, it should be acceptable.

## A JUDGE'S VOCABULARY

How to phrase your remarks so the young person can learn from them.

### PROS AND CONS

#### PROS

Darts taper nicely.  
Even stitching (hand or machine or topstitching).  
Thread matches great.  
Gathers evenly distributed.  
Fullness at top of sleeve distributed evenly, nicely handled.  
Seams well pressed.  
Well laundered and neatly pressed.  
Hem has a good finish and is invisible from right side.  
Hand finished zipper gives the "couturier look".  
Lining fabric well chosen.  
Seam finishes are appropriate.

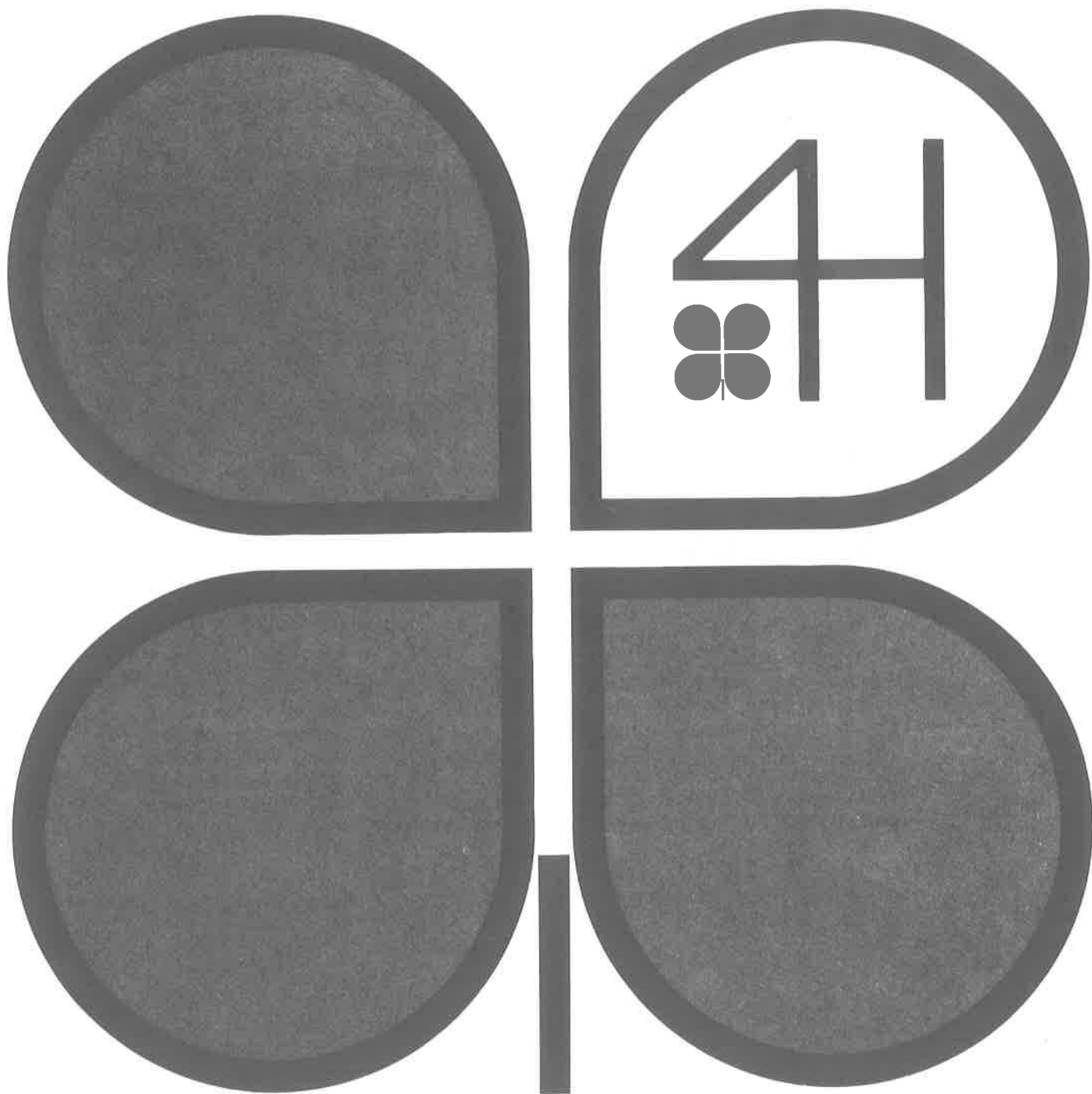
#### CONS

Anchor facing sparingly.  
Stitch closer to the edge.  
Grade seams to eliminate bulk.  
Hem is uneven.  
Grain of fabric is "off".  
Match plaids carefully.  
Do hand sewing with a single thread.  
Over pressed.  
Under pressed.  
For an "invisible" hem use a dressmaker's hem, tailor's hem or catchstitch.  
Under collar rolls to the outside.  
Allow enough tuck-ease on linings (at bottom of sleeves and hems).  
Learn to secure ends of machine stitching.  
Buttonholes must be (1) evenly spaced and (2) have even lips.  
If covering buttons, use lining under fabric to prevent metal from showing through.  
Facing on front of coat pulls to the outside.  
Buttons not appropriate texture for fabric.  
Taper darts gradually.  
Trim and clip curved seams.  
Interfacing is too heavy.

Prepared by:

Madelyn Williams  
Extension Clothing Specialist  
University of California  
Davis

Faye Barton  
Program Representative  
Family & Consumer Sciences  
University of California  
Davis



# 4-H Clothing Leader's Manual

*Cooperative Extension*  
Division of Agricultural Sciences  
UNIVERSITY OF CALIFORNIA

Leaflet 4-H 4012



This manual was prepared by these members of the 4-H Youth Clothing Committee:

**Kathy Ferguson**, Chair, Home Economist/4-H Program Leader, Contra Costa County,  
**Marilyn Anderson**, Home Economist/4-H Program Coordinator, Plumas-Sierra and Lassen counties,  
**Faye Barton**, Program Representative, Family and Consumer Science, U.C., Davis,  
**Jan Holley**, Home Economist/4-H Youth Advisor, Merced County,  
**Isela Valdez**, Home Economist/4-H Youth Advisor, Sutter-Yuba counties, and  
**Madelyn C. Williams**, Extension Clothing Specialist, U.C., Davis.

In cooperation with:

**Kathryn Cirincione-Coles**, Ph.D., Assistant 4-H Youth Program Director, Curriculum Specialist, U.C., Berkeley.

## Key Objectives

### **Beginning Units:** *Sew for Fun and Go-Togethers*

Upon completion of the **Beginning Units**, the 4-H member will:

- Have constructed at least two articles and one garment using easy-to-handle fabrics (such as cotton and cotton blends).
- Have demonstrated grooming principles: clean appearance (including hands, hair, feet, apparel) and straight posture, practiced at project meetings and clothing events.
- Have completed at least half of the *Learn to, Do, Make, and Explore* sections, as noted on pages 4 and 5 of the *4-H Clothing Project Guide*, before progressing to the **Intermediate Unit**.
- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

### **Intermediate Units:** *Wardrobe Switchables and Creative Clothing*

Upon completion of the **Intermediate Units**, the 4-H member will:

- Have applied construction methods in making at least three articles, two of which must be machine-made garments.
- Have demonstrated knowledge of coordinating fabric and pattern to enhance personal coloring, body proportion, and fit.

- Have completed at least half of the *Learn to, Do, Make, and Explore* sections of the *4-H Clothing Project Guide* before progressing to the next unit.
- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

### **Advanced Units:** *Fashion and You, Putting It All Together and Special Interest*

Upon completion of the **Advanced Units**, the 4-H member will:

- Have applied results of a written wardrobe plan (which lists both clothing needed and already owned) to select project work.
- Have compared clothing costs by keeping records of all clothing made and purchased.
- Have constructed at least three garments, using tailoring construction details on hard-to-handle fabrics (such as crepe, pile and suede-like fabrics).
- Have completed at least half of the *Learn to, Do, Make and Explore* sections on page 8 and 9 of the *4-H Clothing Project Guide* before progressing to the next unit.
- Demonstrate understanding of the relationship between clothing and energy conservation as to use and care of fabrics, light and dark colors, construction, climate adaptability, etc.



# Table of Contents

<b>I. INTRODUCTION</b>	<b>5</b>
A. Your Challenge as a Leader	
B. The 4-H Clothing Philosophy	
C. Energy Awareness and the 4-H Clothing Project	
<b>II. TEACHING TECHNIQUES</b>	<b>6</b>
A. Planning a Successful Year	
B. Meeting Suggestions	
Suggested Meeting Topics	
C. Scope and Sequence	
Performance Objectives	
Beginning units	
Intermediate units	
Advanced units	
D. Meeting Planning Guide	
<b>III. LEARNING ACTIVITIES</b>	<b>10</b>
A. Decision Making through Judging	
B. Demonstrations	
C. Field Trips	
D. Exhibits	
E. Speakers	
F. Fashion Revue	
<b>IV. WHAT YOU CAN EXPECT</b>	<b>12</b>
A. Know Your 4-H Members	
Physical Development	
Coordination	
The Senses	
Abilities	
B. Summary of Clothing-Related Abilities	
C. Help Members Evaluate Themselves	
D. Let Older Members Help	
<b>V. CLOTHING FOR THE HANDICAPPED</b>	<b>16</b>
A. How to Implement Clothing Suggestions	
B. Physical Characteristics and Clothing Suggestions	
1. Basic Movements	
2. Perceptual Abilities	
3. Physical Abilities	
<b>VI. INFORMATION TO HELP YOU</b>	<b>18</b>
A. Equipment	
Basic Sewing Equipment	
Additional Equipment	
B. Making Your Own Vs. Ready-to-Wear	
Advantages of Making Your Own	
Advantages of Purchasing Ready-to-Wear	
Selection	
Buymanship	
Making Your Own	

---

Checklist for Purchasing Supplies	
Fighting Inflation	
Clothing Sales	
Terms	
Buying Discount Clothing	
Used Clothing	
Care	
Maintenance	
Care Label Information	
Care Label Definitions	
C. Science	
Fibers	
Fabric Finishes	
Blends	
Natural Fibers	
Man Made Fibers	
Finish	
Basic Fabric Weaves	
Knits	
Pile Fabrics	
Napped Fabric	
Wool Fabrics	
Fabric Glossary	
D. Safety	
E. Personal Appearance	
Clothing Speaks	
The Teen Years	
Color, Line and Design	
Making Color and Line Work for You	
Wardrobe Plan	
Grooming	
Posture	
F. Energy Conservation	
Seasonal Guidelines for Thermal Comfort	
Keeping Your Cool	
Energize Your Winter Wardrobe	
G. The Second Time Around	
H. Measuring Metric	
Metric Terms and Symbols	
Clothing Care and Metric	

<b>VII. RESOURCES</b>	<b>51</b>
<b>VIII. CAREERS</b>	<b>52</b>
<b>IX. RECOGNITION</b>	<b>53</b>
<b>X. SUMMING IT UP</b>	<b>53</b>
A. Help 4-H Youth Set Standards	
B. The Range of Acceptability	
C. Factors Affecting Achievement	

# 4-H Clothing Leader's Manual

## I. Introduction

### A. Your Challenge as a Leader

Congratulations on volunteering to serve as a 4-H Clothing Project leader! You can make a real contribution to the lives of young people, now and in the future, by helping youths develop their clothing interests and achieve success within their capabilities. Teaching young people will also bring personal satisfaction as you, too, will learn much from the 4-H'ers with whom you work.

This general Clothing Leader's Manual is designed to help you:

- understand 4-H's philosophy and objectives in teaching clothing.
- Integrate the SIX important areas of CLOTHING education.
- Undertake energy-efficient (conservation) approaches.
- Apply positive teaching suggestions.
- Plan learning activities for members.
- Use a variety of resources.
- Evaluate and recognize each member's progress.

There are as many differences in youth development and abilities as there are club members. You are encouraged to adapt the project materials and meetings to suit the needs and interests of your members.

### B. The 4-H Clothing Philosophy

"Learn by doing" is the motto of 4-H. Much of the philosophy of teaching clothing is related to overall goals of the 4-H program, which are to assist youth to:

- Acquire new knowledge and skills.
- Develop initiative.
- Develop a positive self image.
- Cooperate with others.
- Explore careers.
- Achieve satisfaction from work.
- Develop leadership abilities.
- Develop energy efficiency.
- Choose alternatives.

Keep these basic goals in mind as you plan a clothing education program for your members.

This is a total clothing project and should include these six areas of *clothing* education:

1. Buymanship
2. Selection
3. Appearance
4. Science
5. Construction
6. Care, safety and energy conservation

Note, too, there are no set rules or "4-H ways" for constructing clothing in 4-H, other than achieving good appearance, durability, good fit and energy efficiency.

**Ultimate result is most important, not the method used.** Instructions for patterns vary a great deal, as do methods of construction. The type of zipper closing, method of hemming, etc. are less important than how neatly the garment is sewn, how serviceable it is, and how well it looks when finished.

Because 4-H youth "learn by doing," they should do their own work, under your supervision. School clothing projects, through Home Economics class assignments, should be kept separate from 4-H work.

Often leaders make the mistake of focusing only on construction details, ignoring such important fundamentals as fit, energy efficiency, the understanding of fibers and fabrics, the selection of ready-to-wear, and self-expression through clothing. Members should not be limited to "sewing", but should be challenged, stimulated, and motivated. Each member should be taken a little further toward his/her own goals of selecting and/or constructing clothing to enhance self esteem.

Every member can be motivated, but not in the same way and not by the same person. An enthusiastic and knowledgeable leader can impart information in several ways, without becoming repetitive, so that all members will learn.

### C. Energy Awareness and the 4-H Clothing Project

4-H'ers need to understand how energy conservation ideas can be employed in sewing and in the use and upkeep of clothing. Choosing appropriate colors, fabrics and styles in relation to climate needs, indoors and out, will affect energy usage. Specific ideas are suggested in the Energy Conservation Section and throughout the Leaders' and Members' publications.

Whatever the 4-H project, members and leaders can contribute to energy conservation in:

- Transportation to and from meetings (with efficient carpooling, biking, public transportation, walking).
- Monitoring the meeting environment (heating and cooling, appropriate dress, insulation, etc.).
- Efficient use of equipment and utilities along with specific energy ideas appropriate to the project.

## II. Teaching Techniques

### A. Planning a Successful Year

As the clothing leader, you are responsible for providing information helping members measure progress toward their goals. Because all young people do not have the same interests or needs, your program must be flexible.

A good meeting doesn't just happen, it is planned! As the teacher, you should keep in mind the "Learn to", "Do", "Make", and "Explore" sections of the *4-H Clothing Project Guide*. Choose from this guide those ideas that will meet the goals of your members.

To help you organize your plan you may want to select a committee of two or three members, a junior/teen leader and perhaps a parent.

- Get acquainted with all members, know their background, age, experience, interests, and abilities.
  - Utilize the help of your junior/teen leaders.
  - Review requirements of the units you will teach.
  - Review accomplishments of previous units in clothing.
  - Select a topic for each meeting scheduled.
  - Decide and plan accordingly if you want the members to do some work at home.
  - Plan group activities—judging classes, field trips, a fashion revue, demonstrations, skits, role play, etc.
  - Plan to vary your teaching methods—lectures, demonstrations, exhibits, guest speakers, visual aids (films, posters, etc.).
  - Emphasize energy conservation as a goal in every aspect of the project.
  - Plan a meeting involving 4-H members and parents to discuss the following:
    1. time and place where you will be meeting
    2. transportation to and from meeting to conserve energy
    3. how many and how long project meetings will be
    4. topics for meetings
    5. equipment availability
    6. requirements for completion of project.
- List available resources in your community:
- Ready-to-Wear
  - Fabric Stores
  - Sewing Machine Centers
  - Dry Cleaners
  - Library
  - Home Economics Teachers
  - Cooperative Extension
  - Local Professional Seamstresses and Tailors
  - Mobile Energy Conservation Exhibit

### B. Meeting Suggestions

The 4-H Clothing Project Guide (4H-4011) is designed to help you organize your project meetings. The first meeting should be a get-acquainted session that includes parents. Remember, informed and interested parents will give encouragement, to the benefit of the group.

Your group may meet weekly or biweekly. There is no set schedule, but it is best to have more frequent meetings to assure completion of the project more quickly.

You and your junior teen leaders should design the meeting with this in mind: Learning increases as youths move from listening, to seeing, to doing and finally to telling what they have learned.

For each meeting, you should include:

1. Its date, time, and place.
2. Topic and goal to be accomplished.
3. A fun activity to set the stage.
4. A review of accomplishments since the last meeting.
5. An example of the information being taught.
6. A review of energy-saving ideas.
7. Recognition of members for the work accomplished.
8. A reminder of the next meeting or activity.
9. Specific plans (tours, demonstrations, etc.) and appointment of the member in charge.
10. Equipment and supplies needed and appointment of members who will bring them.
11. Solicitation of energy-saving ideas for next meeting.
12. Suggested activities members can do at home.

### Suggested Meeting Topics

#### SELECTION

Accessories	Pattern sizes
Color	Proportion
Design for the individual	Texture
Line	Wardrobe planning

#### BUYING

Appropriate interfacing	Label information
Fabric grain	Notions selection
Fabric selection	Sewing equipment
Fabric stores	

#### CARE

Alterations	Mending
Costs	Sewing on buttons
Dry cleaning	Stain removal
Laundering	Storage

## SAFETY

Flammability of fabrics	Scissors/shears handling
Pressing equipment	Sewing machine operation

## CONSTRUCTION

Buttonholes	Seam finishes
Darts	Seams' grading
Hems	Sleeves
Linings	Understitching
Marking	Pattern use
Pattern alterations	Zippers

## SCIENCE

Clothing's effect on behavior	Ecology
Color	Fiber absorbency
Deodorant and perfume effect on fabrics	Fiber characteristics
	Fiber origins
	Finishes

## PERSONAL APPEARANCE

Exercise	Modeling
Garment fit	Posture
Hair styles	Walking
Makeup	

## ENERGY CONSERVATION

Adapting clothing to climate	Recycling clothing
Choosing fabrics and colors	Sewing machine use
	Use of laundry equipment

### C. Scope and Sequence

The order in which various topics are taught can spell the difference between a member continuing or becoming bored and frustrated.

Keep up to date with the latest fashions and sewing techniques. Remember, there is no one way of doing anything!

It is easy to teach clothing construction by following this logical format: individual pattern sizing, buying the pattern and fabric, layout, cutting, etc.

This may result in a finished product, but a member who has never sewn or who has had little experience may find it impossible to visualize the project from beginning to end.

Clothing units encourage the member not only to learn the basics of construction, but also prepares each to examine such other areas as personal aesthetics, care of clothing, consumerism, energy conservation, and record keeping.

The 4-H Clothing Project consists of three skill levels: **Beginning**, **Intermediate**, and **Advanced**. Within each level are units, explained in the *4-H Clothing Project Guide* which lists *Learn to*, *Do*, *Make*, and *Explore* items. Each skill level is the same for boys and girls, although the application of skills and selection of learning activities may differ to take into account individual interests.

## Performance Objectives

### BEGINNING UNITS

The two **Beginning Units** are designed for members without previous experience in clothing; they are called *Sew For Fun* and *Go-Togethers*. Most of those who enroll will be in the fourth through sixth grades. These members are characteristically excited about new experiences and eager to get to work. However, enthusiasm often exceeds ability and immediate expectations often tend to be greater than the best intention to finish.

A good way to begin the project is with a trip to a fabric store to capture each member's interest and to activate imaginations. You can then begin with specific lessons on buying a pattern, use of tools, pre-shrinking fabric, sewing on buttons, installing a zipper, etc.

#### *Specific Performance Objectives*

Upon completion of the **Beginning Units**, the 4-H member will:

- Have constructed at least two articles and one garment using easy-to-handle fabrics (such as cotton and cotton blends).
- Have demonstrated grooming principles: clean appearance (including hands, hair, feet, apparel) and straight posture, practiced at project meetings and clothing events.
- Have completed at least half of the *Learn to*, *Do*, *Make*, and *Explore* sections, as noted on pages 4 and 5 of the *4-H Clothing Project Guide*, before progressing to the **Intermediate Unit**.
- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

### INTERMEDIATE UNITS

The **Intermediate Units**, *Wardrobe Switchables* and *Creative Clothing*, are designed for members who have mastered the basic skills. As they develop their skills, they should begin to use more detailed methods, including set in sleeves, pockets, neckline finishes, buttonholes, stitch-in-the-ditch method, etc.

Recognizing lines and proportions of different styles and making simple pattern alterations to fit the individual should be applied in these units. Color coordination should also be emphasized at this time.

#### *Specific Performance Objectives*

Upon completion of the **Intermediate Units**, the 4-H member will:

- Have applied construction methods in making at least three articles, two of which must be machine-made garments.
- Have demonstrated knowledge of coordinating fabric and pattern to enhance personal coloring, body proportion, and fit.
- Have completed at least half of the *Learn to*, *Do*, *Make*, and *Explore* sections on page 6 and 7 of

the *4-H Clothing Project Guide* before progressing to the next unit.

- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

**ADVANCED UNITS**

*Fashion and You, Putting It All Together,* and *Special Interest* comprise the **Advanced Units** where members will gain new learning experiences.

This skill level allows exploring in depth a clothing subject in which the member may be interested and helps develop individual abilities, creativity and responsibility for learning.

Members will learn to use such tailoring details as bound buttonholes, gussets, buffer hems, fake fur, vinyl, etc.

In the *Special Interest* unit those individuals interested in related fields can experiment with textile and pattern designing, handwork techniques, and consumer and energy issues.

*Specific Performance Objectives*

Upon completion of the **Advanced Units**, the 4-H member will:

- Have applied results of a written wardrobe plan (which lists both clothing needed and already owned) to select project work.
- Have compared clothing costs by keeping records of all clothing made and purchased.
- Have constructed at least three garments, using tailoring construction details on hard-to-handle fabrics (such as crepe, pile and suede-like fabrics).
- Have completed at least half of the *Learn to, Do, Make* and *Explore* sections on page 8 and 9 of the *4-H Clothing Project Guide* before progressing to the next unit.
- Demonstrate understanding of the relationship between clothing and energy conservation as to use and care of fabrics, light and dark colors, construction, climate adaptability, etc.

On the next two pages is a Meeting Planning Guide. Use it to outline plans for each meeting. It should help in planning a well balanced clothing program. Follow the example given in the first row of columns.

Fill in as shown in the example:

MEETING/PLACE	TOPIC
September 20 <sup>th</sup> , 1982 Odd Fellows Hall	Zipper installation



### III. Learning Activities

4-H'ers "Learn By Doing". In the 4-H clothing project your role as a leader will be to provide a variety of opportunities and educational experiences for the boys and girls by:

1. Helping members to learn something new.
2. Setting up a good example by the way you teach.
3. Helping members to gain self-confidence from doing tasks well.
4. Involving other knowledgeable people in your teaching.
5. Helping members see that what they learn today will be helpful later.

Vary your teaching methods by using as many different learning situations as possible. For example, try:

- Decision making through Judging
- Demonstrations
- Field trips
- Exhibits
- Speakers
- Fashion Revue

#### A. Decision Making through Judging

4-H'ers make decisions in everything they do. You can help them improve their ability to make decisions by using judging as a teaching tool. In judging members learn to improve their reasoning and public speaking abilities as they compare one item with another. Seeing different qualities in similar items will help members improve their own standards and make wise choices.

Set up a judging class, first giving the 4-H'ers two similar items to judge; for example: two different kinds of scissors. Ask a member to tell which is the better of the two and the reason for the choice. As each 4-H'er gains confidence in judging and giving comments, ask each to rank four similar items in a class from the best to the least desirable, giving reasons for each choice. Subjects for judging can include:

- Buttons
- Buttonholes
- Choice of trim for fabric and pattern style
- Darts
- Different methods of transferring pattern markings to fabric
- Different necklines suitable for individuals
- Effect of different colors on skin, hair, eyes
- Fabric for a specific pattern
- Hems
- Pattern layout
- Scissors for cutting out a garment

- Seam finishes
- Sleeves
- Value of different labels on fabrics or ready-to-wear items
- Zippers and other closures.

#### B. Demonstrations

Demonstrations, used to show a recommended technique, are particularly important in the clothing project where it is often difficult to describe a method.

Use a demonstration to teach a new technique. Encourage members to give at least one demonstration during the year to fellow members or to other groups. Older members often do outstanding teaching with simple, informal "show me" demonstrations. Invite leaders, members, parents and others to demonstrate specific techniques.

To develop a demonstration:

1. *Visualize the audience.* Know who will be there—other 4-H'ers, leaders, parents. What are their interests? What kind of meeting?
2. *Choose a subject* that will fit the member's interests, experiences, knowledge and skills.
3. *Choose a goal* that will either help others learn or will show what the member knows.
4. *Gather information* from 4-H project manuals, textbooks, magazines, and local people. It is one of your responsibilities, as a leader, to help 4-H'ers to be selective in choosing resources. Every effort should be made to have accurate, up-to-date information.
5. *Write a plan.* Organization is essential for a good demonstration. Younger members would not be expected to have as complex or as detailed a plan as older members. The plan guides the member so that: information is presented in a logical and understandable sequence and a good balance between explaining and showing is achieved.
6. *Choose equipment and visuals* designed for the job. Visuals (posters, charts and models) should be used only where needed. Lettering on charts should be large enough and dark enough to be seen by the audience.
7. *Practice delivery* to help the demonstrator have more confidence and to be fully prepared for the final presentation.
8. *Select a title* that is catchy or intriguing to increase member interest in learning about the subject.



*Subjects for demonstrations can include:*

- Clothing of different cultures
- Clothing for different occasions
- Different interfacings—where to use and how
- Fabric information
- Garment finishes
- Grooming
- How to sew on a button
- How to use pressing equipment
- Making correct measurements
- Packing a suitcase
- Posture
- Preparing fabric for construction
- Saving energy
- Use of color
- Wardrobe planning

\*See *A Leader's Guide to 4-H Club Demonstrations* (4-H Leaflet 8013)

### C. Field Trips

Field trips that relate to the project are educational and should be well planned to suit your group. Discuss in advance points you would like emphasized by the tour guide.

Some field trip possibilities are:

- Apparel manufacturer
- Beauty shop/barber shop
- College home economics department
- Color analyst
- Commercial laundry
- Department store
- Designer workroom
- Dry cleaning plant
- Energy utility (portable van)
- Fabric store
- Museum—costume and textile exhibits
- Ready-to-wear outlet
- Research center
- Weaver's work shop

### D. Exhibits

Exhibits are educational. Make sure your 4-H members see your local fair's exhibits. Some counties have competitions for creating educational 4-H panel displays that describe in simple, visual form a technique, process or sequence.

4-H'ers are encouraged to exhibit their finished garments at fairs and at other public showings, such as:

- Parents nights.
- Energy fairs
- Exhibit days
- Fashion Revues
- National 4-H Week programs
- Other community group or organization meetings.

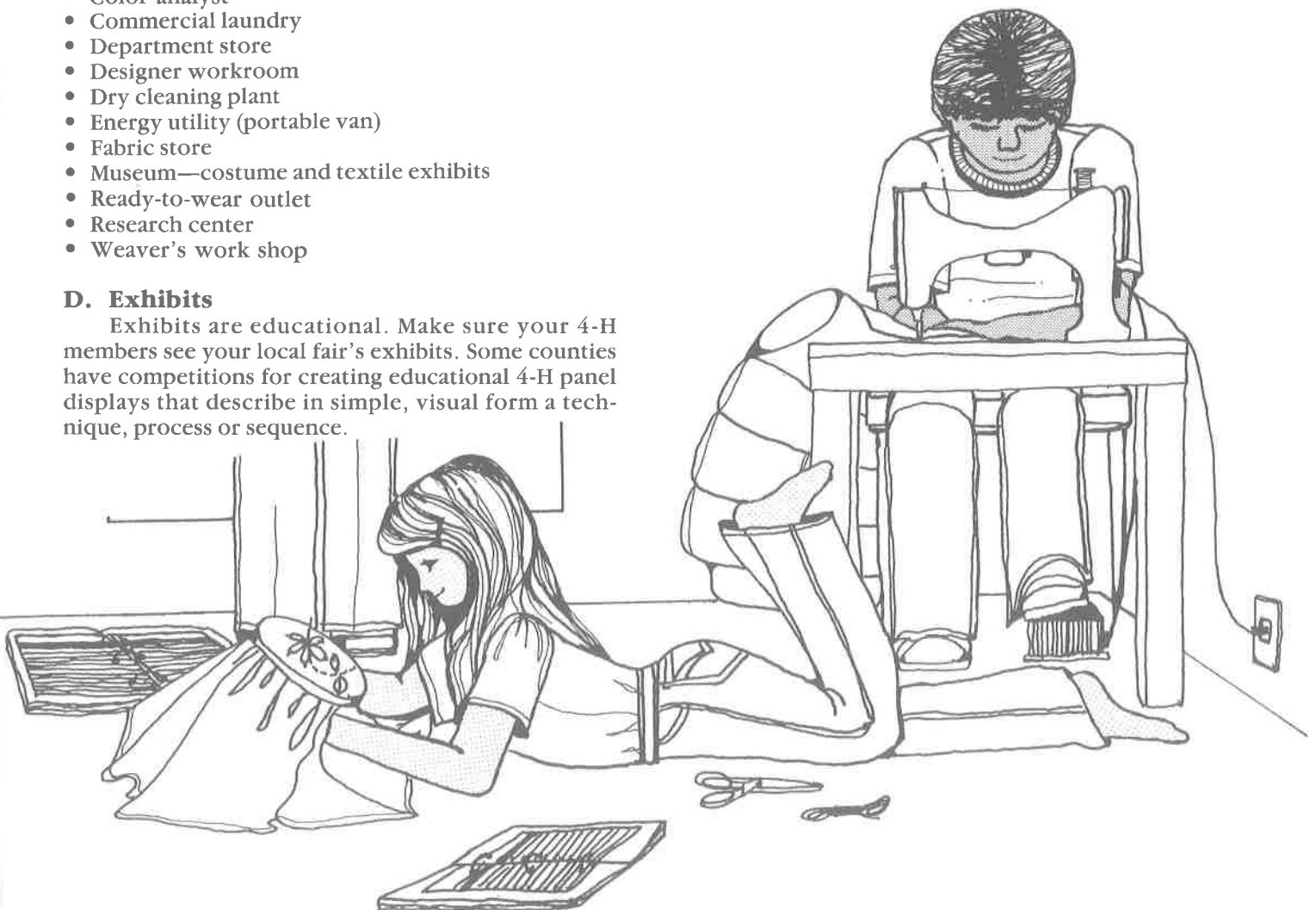
### E. Speakers

Invite resource people to present specific educational programs to add variety to your meetings.

### F. Fashion Revue

Wearing and modeling garments 4-H members have made is part of the clothing project. Participation in Fashion Revue, a part of the National Award Program, offers an opportunity to have a total fashion and personal appearance experience and to show project accomplishments to family and friends.

The Fashion Revue evaluation is based on the results of the entire project experience. For evaluation details refer to *You're a Model Every Day* (4-H-4009). Each year your county will hold a County 4-H Fashion Revue. Check with your county 4-H youth advisor for further information about this exciting event.



## IV. What You Can Expect

As your 4-H members progress, you may wonder, "How well am I doing as a clothing project leader? How are my members doing with their projects?" Both questions point to the need to evaluate each meeting to reinforce learning and to make any necessary changes in teaching methods. Both you and your 4-H members will benefit from evaluation. Are you reaching the goals you and your members set for the project?

Ask yourself these additional questions:

- Will what I am teaching be useful to members in five years? . . . in ten years?
- Will what I teach be applicable to other clothing projects?
- Am I putting too much emphasis on sewing a perfect garment instead of letting the members learn from their mistakes?
- Have I helped each member to make pattern and fabric selections that will produce a fashionable garment (s)he will use?

In addition to these questions, it may be important to consider: "Are the members enjoying the meeting? Is each feeling a sense of accomplishment and a part of the group?" After these questions have been answered, ask, "What will I do differently next time?"

As a 4-H Clothing leader, you will have certain expectations for your members. As you examine member progress, remember that although high standards of workmanship are important, members will need practice to develop the skills to achieve them. As you evaluate a member's work, you may need to change your thinking and not expect the workmanship you demand of yourself. Determine an acceptable range of standards appropriate for each project and each individual's abilities; then help the member achieve within that range.

As a 4-H leader, you may feel the urge to prevent your members from making errors that would result in unwearable garments. Letting members profit by mistakes can be difficult, but because we learn more easily from experience than from a recitation of facts, mistakes can be valuable to learning.

Younger members may be embarrassed by their mistakes; never use them as an example. They should, however, understand the reasons for mistakes and how they can be corrected.

In an attempt to prevent failures, you may find yourself becoming overbearing with older members. Older members need to work independently. Mistakes will happen, but they need to become self-reliant and to assume responsibility for their own work. Older members can minimize mistakes by being shown how to use sewing books and pamphlets, visual aids and

samples on their own. Remember, you will not always be there to answer their questions.

### A. Know Your 4-H Members

Establish an atmosphere for growth by knowing your members personally. One's clothing reflects one's attitudes, values and standards. Recognizing these traits in your members is as important as knowing their skill levels.

No two individuals are alike. It may be helpful to make a list of what you know about each member to help you understand their aspirations and needs. Physically and psychologically, individuals are ready to master skills at varying times. A member's readiness to coordinate hands with eyes makes a difference in what (s)he can do successfully. The following summary will help you guide members.

#### Physical Development

9 and 10 years old

##### *Individuals:*

Grow little in height but girls' hips and busts begin to develop and rib cages change position.

##### *Leader may:*

Introduce grooming, care of clothing, and modeling to help develop assurance.

May start to put on pre-puberty weight.

Usually have poor posture.

10, 11 and 12 years old

##### *Individuals:*

Begin prepuberty growth spurt that continues for 2 to 3 years. At age 10, girls and boys are more nearly the same height and weight than at any other time in life. May grow 1 ½ to 2 inches in height per year between 9 and 11. The most rapid growth spurt is between 10½ and 12 ½.

##### *Leader may:*

Help members choose size for patterns, making them aware that rapid growth changes may mean one or more changes in pattern size in a year. Offer guidance in selecting patterns that will "grow" with them.

## Physical Development

10, 11 and 12 years old  
(continued)

<i>Individuals:</i>	<i>Leader may:</i>
Tend to be long-legged and rangy. Legs grow faster than trunk. Skeletal muscles grow rapidly but lag behind growth in size. Experience rapid eye development from far-sightedness to near-sightedness; eyes attain adult size.	Stress adequate hem allowance.

12 and 13 Years Old

<i>Individuals:</i>	<i>Leader may:</i>
May have reached adult height at end of growth spurt.	Help members interpret figure information found on sizing charts in pattern books.

May have difficulty in adjusting to changes in body shape and size. Long bones grow rapidly; arms and legs lengthen.

May relate rate of physical development both positively and negatively to feelings about self. At 13, girls may be heavier and taller than boys.	Help develop positive feelings about body changes by guiding members into styles appropriate for figure types.
--	--

Grow muscles that represent 40 to 50 percent of body weight.

May have poor posture because of fatigue or self-consciousness.	Show how good posture (particularly through example) can reduce fatigue.
---	--

May be disturbed by pimples or excessive perspiration.	Encourage proper care of face, hair and figure.
--	---

May show uneven face development; nose is especially prominent.	Guide interest in make-up for appropriate use.
---	--

Show changes of adolescence. Rapid growth is usually finished, and sex glands have matured.	Encourage physical cleanliness and grooming.
---	--

## Coordination

9, 10 and 11 years old

<i>Individuals:</i>	<i>Leader may:</i>
Have established a preference for left- or right-handedness.	Avoid trying to change this pattern.
Are developing eye/hand coordination.	Introduce simple crafts.
Tend to dawdle.	Praise completed projects and responsible acts.
Need energy to learn skills.	Avoid pressuring members. Provide opportunity to work at own pace.
Tend to be group-oriented.	Let young people work together.

11, 12 and 13 years old

<i>Individuals:</i>	<i>Leader may:</i>
Grow fast and may be awkward.	Praise completed tasks, especially those involving physical coordination.
Develop large muscle control. Base self-image on facial features, body proportions, and eye coordination.	Not expect fine finger control until at least 12 years old.
Tend to be sensitive and shy.	Encourage the member to do demonstrations within own project group to develop self-confidence.

## The Senses

9, 10 and 11 years old

<i>Individuals:</i>	<i>Leader may:</i>
May have reading difficulties.	Provide simple patterns.
Prefer primary colors (red, yellow and blue), but individual differences in sensitivity to color may vary widely.	Encourage members to become more aware of colors in clothing.

### The Senses

9, 10, and 11 years old  
(continued)

<i>Individuals:</i>	<i>Leader may:</i>
May have poorly developed judgment, depth, and distance perception.	Help members visualize and interpret patterns.
Have poor sense of time. Members are apt to finish project in last-minute blitz.	Give help in managing time. Provide short easy projects for immediate sense of accomplishment.
May want to feel, taste, and smell things.	Provide new experiences for the senses.

11, 12 and 13 years old

<i>Individuals:</i>	<i>Leader may:</i>
Can read finer print.	Encourage member to read and follow pattern guide sheet.
Can manage time more efficiently.	Provide help in determining time required for specific jobs.
Develop arithmetic skills.	Let member figure yardage; do measuring.
Are extremely sensitive about being different.	Be complimentary when a task is done well.
Lack foresight and are excitable, moody and impulsive.	Avoid pressure.
Have definite line, design and color preferences but may not relate them to own body build.	Guide member in making wise choices, but encourage creativity.

### Abilities

9, 10 and 11 years old

<i>Individuals:</i>	<i>Leader may:</i>
Are very active.	Be alert to a short attention span.
Need individual help to accomplish goals.	Provide moral support, not pressure.
Are cooperative.	Avoid talking down to the member.

### Abilities

9, 10, and 11 years old  
(continued)

<i>Individuals:</i>	<i>Leader may:</i>
Can assume simple responsibilities.	Assign simple energy tasks as closing off room and machine lights after use.
Are able to sew, cut, knit, draw, and sketch.	Provide creative ways to use skills.
Begin to value work and are critical of own artistic efforts.	Help each member evaluate own work realistically.

11, 12 and 13 years old

<i>Individuals:</i>	<i>Leader may:</i>
Are sensitive to social situations and may blush, stammer and tremble.	Provide situations for learning the social graces, for example, in grooming and role-playing situations.
Can babysit to earn money.	Use money management in connection with clothing projects.
Can tackle difficult sewing tasks.	Consider differing abilities. Not all members like more difficult tasks.
Can care for some of own clothes.	Use projects in care and repair of clothing to broaden and reinforce home experiences.
Can take pride in community responsibility.	Assign energy conservation tasks, as related to the project to members.

### B. Summary of Clothing-Related Abilities

#### THE MEMBER:

- Wants acceptance.
- Is very aware of a changing body.
- Needs family approval.
- Needs to work at own speed.
- Is overwhelmed by too much too fast.

#### SUCCESSFUL CLOTHING

#### CONSTRUCTION REQUIRES:

- Short-term projects.
- Directions that are simple, easy to read, and easy to understand.

- Help with demonstration techniques.
- Emphasis on machine stitching (because pre-teens find machine-stitching easier to do than handstitching).
- Standards of perfection comparable to abilities.

**SUCCESSFUL CLOTHING SELECTION REQUIRES:**

- Encouragement to select clothing independently.
- Help in choosing patterns and fabrics suited to individual abilities.
- Guidance to select appropriate accessories.

Remember 4-H members attend meetings for many reasons—not just to learn to sew. They may become discouraged if your expectations differ from theirs. Taking time to know your 4-H'ers and to show them you care will make your 4-H meetings more enjoyable and a more open atmosphere will be conducive to learning.

**C. Help Members Evaluate Themselves**

Evaluation can be important to the learning process for members, too. Members can learn from *positive and constructive* evaluation. Evaluation, as a group, can be a more enjoyable experience. "Show and tell" demonstrations where members select skills they have learned to show other members offer an excellent opportunity for you to evaluate the extent of learning. At the same time, you can reinforce learning with praise as well as with the correcting of "mistakes".

Older members, more aware of standards, may want to "judge" each other's garments before taking them to the fair. Real value can be gained in doing this, only if the same score card is used. To be really beneficial, this type of evaluation should be done far enough in advance of any exhibition to allow time for the member to improve the garment. (Obtain *4-H Clothing Judging Checksheet* 4H-4008.)

In any evaluation, members cannot be held accountable for something you did not teach; but they can be led to realize they need to learn more.

As members evaluate their progress in the clothing project, have them check the "COMPLETED?" column in the *4-H Clothing Project Guide*. Members can use the evaluation wheel in "You're a Model Every Day" after completing each garment. This will help members to see the total fashion look and to start thinking about the next project.

**D. Let Older Members Help**

Junior and teen leaders can be a big help in assisting younger members, if you let them, and if you guide them into appropriate areas of responsibility. *Decide together what their responsibilities will be; then let them do it.* If you develop trust and cooperation, your junior and teen leaders will ask questions when they need help. Don't embarrass them if they don't know something. Give them the help they need and trust them to complete their work.



## V. Clothing for the Handicapped

In all communities there are people of all ages with physical characteristics that label them as disabled or handicapped. Signs of the handicap are often immediately visible. Clothing is another physical sign that can greatly influence how we feel about ourselves and how others see us. Most people use clothing to some degree as a vehicle for self-expression and group acceptance. For a handicapped person, the situation is no different. Choices should not be made for them and their clothing should not appear to be different from that of the nonhandicapped.

For a person who struggles with the physical act of dressing, achieving greater independence can contribute to increased self-confidence. However, functional clothing need not sacrifice style and fashion. With good information on clothing, you could become involved in helping the handicapped to use clothing to their advantage.

Remember, the handicapped are people with limited physical ability. Don't get hung up on medical terminology. What is important is recognizing the abilities and limitations of the individual. Once you know these physical characteristics, you can make suggestions for meeting special clothing needs.

One way of organizing these characteristics as a helpful reference is listed under "Physical Characteristics and Clothing Suggestions." (See Section B.)

The first area includes basic fundamental movements. A child may experience muscle rigidity when excited and completely resist movement. A person partially paralyzed or with various muscle and joint-related conditions may not be able to reach with the full range of motion. Limitations in small-joint movement may result in difficulties with manipulating closures and fasteners. Several special conditions that may inhibit movement include: being a wheelchair user, wearing braces and using crutches.

Various limitations may also occur in perceptual abilities. An elderly person may lose some of his or her body awareness and be less able to reach quickly. A person who has had a stroke or some disturbance of the nervous system may lose the ability to maintain the body balance necessary in dressing. Sight limitation is another perceptual problem.

The third category of characteristics relates to physical ability. Having the endurance or strength to complete the body manipulations involved in dressing can be a problem for stroke and muscular dystrophy people. Lack of physical control of the body functions may be evidenced by incontinence or drooling.

The chart suggests basic clothing for each characteristic. The first step may be to identify the characteristics of the person desiring assistance, and the second to offer solutions to situations faced.

### A. How to Implement Clothing Suggestions

Helping the handicapped obtain garments that will increase their independence or comfort need not mean sacrificing style. Many garments available today have very functional features that can meet special needs, along with being fashionable. Patterns can be selected that will meet many needs just as they are.

In some situations, clothing selected directly from ready-to-wear or from patterns may require adaptation. For example, fasteners are often a problem for many handicapped persons; adding hook-and-loop tape fasteners underneath the button on a shirt and resewing the button on the top of the buttonhole maintain a natural appearance but enable individuals with small motor manipulation difficulties to remain independent. Sewing on cuff buttons with elastic thread allows for expansion in dressing without unbuttoning. Pants are often a problem for the permanently seated person. Pants pull down in back and bunch up in the front. An easy adjustment can be made to ready-made pants to increase the comfort and improve the appearance. The front waistband is lowered and a fabric insert is added in the back.

Finally, there will be times when neither purchasing nor adapting will work. Here is where skill in pattern making and combining and changing patterns becomes necessary. The handicapped person may have a special problem that requires a special style to accommodate it. For example, a special garment that opens completely flat to ease dressing a paralyzed person may need to be designed. In any situation, utmost consideration should be given to create fashionable garments that are becoming to the individual and that do not exaggerate any differences from clothing styles of today.

It is possible to share your knowledge of clothing in many ways, from selection to design, with the handicapped who have special needs. Contact public health nurses, rehabilitation counselors, special education teachers, physical and occupational therapists and nursing homes. The best part about sharing will be the friendships exchanged during the process.

### B. Physical Characteristics and Clothing Suggestions

#### 1. Basic Movements

*For resistance to movement*

- knit fabrics
- flat opening garments
- open underarm, side and leg seams and replace with pressure tape

*For limited large motor movement*

- front opening garments for self-dressing

- back opening wrap garments if dressed by someone else

*For limited single small motor movements*

- pull-over garments, no fasteners
- large buttons with shanks
- pressure tape replacing buttons

*For special conditions*

**\*Wheelchair**

- absorbent, easy-care, soft stretchable fabrics
- adjustable waistline
- blouses and shirts worn over pants and skirts

**\*Braces**

- large openings, seams can be split and secured with pressure tape or zippers
- reinforcement on strain areas, iron-on patches, double fabric, double stitching

**\*Crutches**

- full-cut back and sleeves
- underarm reinforcement
- long shirt tail or body suit

**2. Perceptual Abilities**

*For limited body awareness (sensory loss or slower reaction time):*

- flame-retardant fabrics
- front-opening garments
- garments without excessive fabric or detail to catch on things

*For limited sense of balance:*

- reaching tongs
- seated or lying dressing procedure
- front or side closures

*For limited visual discrimination:*

- Mark garments that coordinate as well as front or back of garments by using pieces of different textured fabric or clothing tags available from American Foundation for the Blind, 15 West 16th Street, New York, NY 10011.

**3. Physical Abilities**

*For limited endurance and strength*

- lightweight fabrics
- one-piece garments
- pressure tape openings
- seated dressing procedure.

*For incontinence*

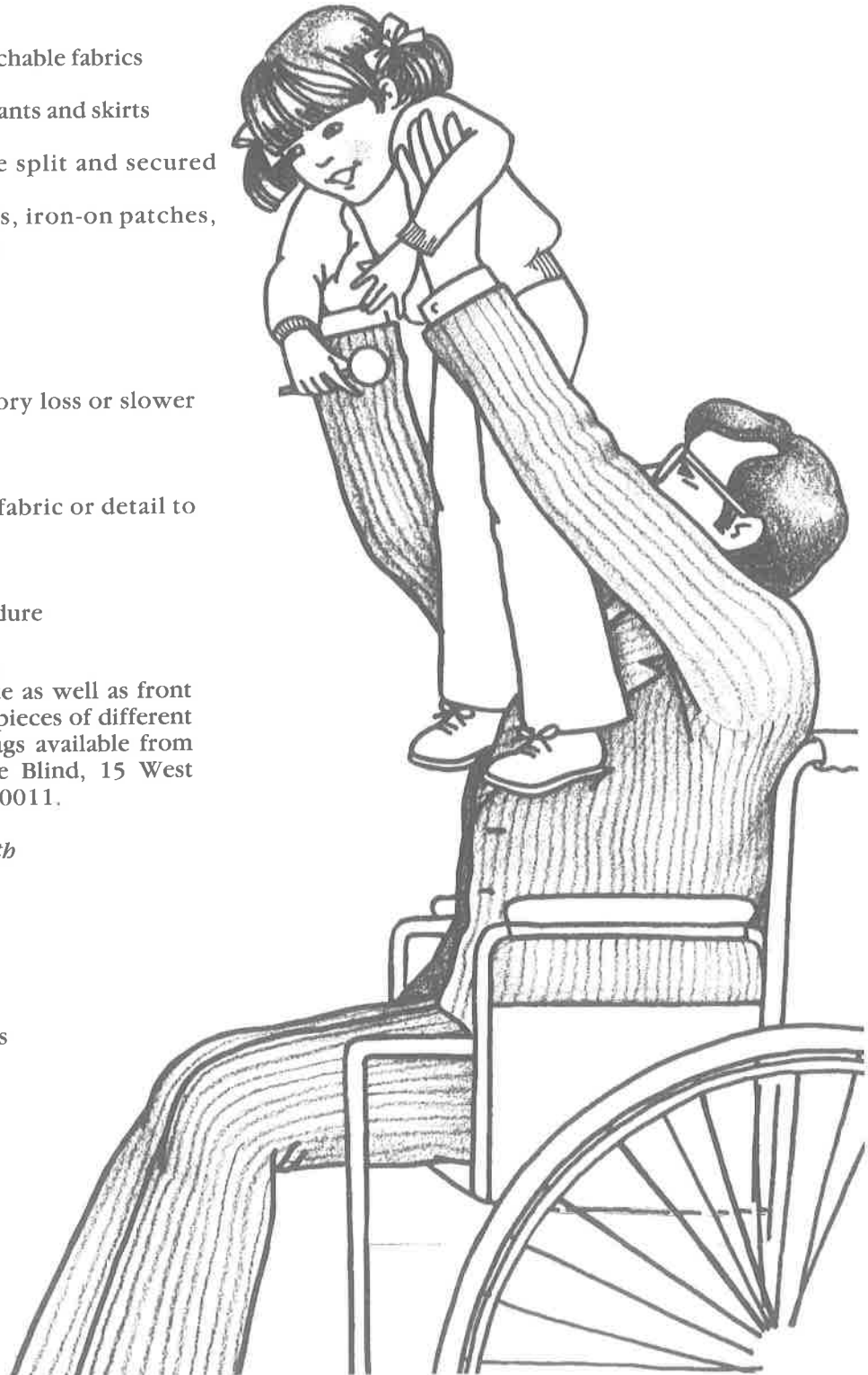
- washable fabrics
- easily managed outer garments
- protective pants, diapers

*For drooling*

- washable fabrics
- bibs or aprons

*For sensitivity to heat and/or cold*

- fabrics and colors most suitable to specific temperature and climate.



## VI. Information to Help You

### A. Equipment

Many types of equipment are available for your clothing projects, some basic to success and others optional but convenient. Equipment may be altered or modified to accommodate your members' abilities.

### BASIC SEWING

Basic Equipment	Selection	Buymanship
Iron	Select an iron that can be used dry or with steam.	Check for usual appliance warranties.
Ironing Board	Select a board with a smooth surface and padding. Height should be adjustable.	
Needles	Choose needles appropriate to your fabric, thread, and type of stitch. <i>Sharps</i> are average length, general purpose needles with round eyes. <i>Crewels</i> have long slender eyes of average length.	
Pins/ Pin Cushions	Pins should be rustproof, fine and sharp to protect the fabric. Pin cushions should be selected to be most convenient for your use. Some people like to wear a wrist cushion.	
Press Cloths	Types of pressing cloths include cheesecloth, muslin, drill, heavy cotton or smooth wool.	Press cloths can be reused. A yard of lightweight or heavy cloth will last indefinitely.
Scissors	Scissors have the same size handles. Small embroidery scissors are most useful to snip threads.	Select scissors you can handle efficiently. Ask to "cut" with them before purchasing.
Seam Gauge	A seam gauge is a short ruler.	Select a seam gauge on which the slide moves readily.



On the following charts, basic equipment is described (where applicable) in terms of selection, buymanship, care, safety, and science. After the basic list is a list of "additional" equipment. Because many pieces of equipment are "added" as construction processes become more difficult or tedious, the term "additional" seems appropriate.

## EQUIPMENT

Care	Safety	Science
Clean soleplate as needed. Do not store with water inside or face down.	Always remove plug from outlet when not in use.	Determine the kind of water (tap, distilled, etc.) that will insure efficiency and longevity.
Replace pad when worn or soiled.	Check that board is positioned securely at comfortable height.	
Store in original container or in pin cushion.	Pick up any needles you drop.	Broken, bent, or dull needles should be replaced.
Use pin cushions to prevent spillage. Cushions are more convenient than boxes.	Always try to find lost pins. They can be stepped on and cause injuries.	Discard dull pins. They can snag fabric or create large holes.
Launder press cloths to remove sizing before use if moisture absorption is necessary.		Cheesecloth is used with lightweight fabrics. Muslin is used with mediumweight fabric. Drill is used on heavy cotton. Wool is used with wool or textured fabrics.
Avoid cutting materials other than fabric. Using them for "fabrics only" will insure sharpness.	Store in case or box.	Some scissors cannot be sharpened. Find out whether yours can be.

## BASIC SEWING

Basic Equipment	Selection	Buymanship
Seam Ripper	A seam ripper has a curved blade with a sharp point that easily slips under a stitch. It is used to rip out seams and looks similar to a pen.	Buy seam rippers that are very sharp.
Shears	Shears have shaped handles, one larger than the other to fit your hand with long blades. Better quality shears are often joined with a screw.	Ask to hold and use before buying. Shears must feel comfortable in your hands.
Tape Measure	Look for inches on one side and metric measurement on the other.	Tape should be flexible, but should not stretch.
Thimble	Thimbles protect the second finger as it pushes a needle through fabric.	Thimbles must fit the finger to be effective.
Thread	Choose thread suited to your fabric. Thread comes in several types—cotton, cotton-wrapped polyester, polyester and silk.	
Tracing Wheel	Select a smooth wheel for smooth heavy lines. A ridged wheel makes a lighter, dotted line.	Newer tracing paper guarantees removal by laundering.

# EQUIPMENT

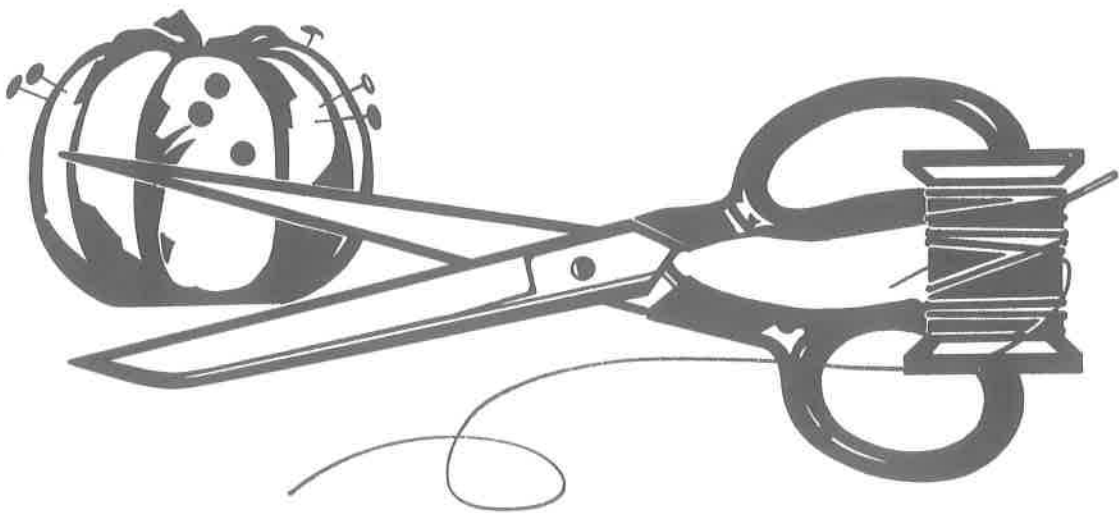
Care	Safety	Science
	Replace cap immediately after use. Rippers are knife-sharp.	
Avoid cutting materials other than fabrics.	Store in box or drawer when not in use.	Have shears sharpened by expert as needed.
Roll up for storage.		
Store in button box or other container to avoid losing.		

## ADDITIONAL EQUIPMENT

Equipment	Description
Clapper	A wooden block, usually with curved edges, it is used to flatten seams and edges after seam has been sewn.
Cutting Board	A fold-up fiberboard or heavy cardboard that can be used as a cutting surface for your table, bed or floor. Convenient markings on the board assist in achieving accuracy in your layout.
Marking Pencils	There are a variety of dressmaker's pencils. Most marks can be removed easily. Special ones for knit fabrics can be simply sprayed with a little water.
Needleboard	A needleboard is used to prevent napped or pile fabrics from becoming flattened when pressed. It is used on velveteen, velvet and corduroy.
Pinking Shears	Pinking shears are used to finish seam edges on firmly woven fabrics. On fabrics that fray badly seam edges may be pinked before stitching.
Press Mitt	A press mitt is inserted into sleeve caps and other curved areas to make pressing easier.
Seam Board and Point Presser	A seam board is used to press seams and a point presser is used to press points in collars or lapels.
Seam Roll	A seam roll is a padded roll used to press seams. Many are covered with wool on one side and cotton on the other.
Skirt Marker	A skirt marker is an aid when leveling a hem. Some use pins and others use chalk for marking.

## ADDITIONAL EQUIPMENT

Equipment	Description
Sleeve Board	A sleeve board is used when pressing sleeves. Slip sleeve on board to press.
Tailor's Chalk	Tailor's chalk comes in squares or small rounds. Clay-based chalk can be used on a variety of fabrics. Wax should only be used on wool.
Tailor's Ham	A tailor's ham is a padded cushion used for pressing shaped areas. Many are covered with wool on one side and cotton on the other.
Triangle Rule, T-square and L-square	Triangle rule, T-square, and L-square are used to check grain-lines, layouts and to find true bias.
Tweezers	Tweezers are used to pull out loose threads after ripping out a seam.
Yard Stick and Meter Stick	Yard stick and meter stick are used to measure grain lines and long lines.



## **B. Making Your Own Vs. Ready-to-Wear**

It is not practical to make an exclusive choice between constructing all your clothing or purchasing all ready-to-wear. The wise consumer will use both methods. Understanding the advantages of each should help your members make decisions about their clothing needs.

### **Advantages of Making Your Own**

You can:

- Coordinate new clothes with those you already have.
- Duplicate favorite styles in different fabrics or colors.
- Enjoy the creative process, design and construction.
- Help others with the new sewing skills you learn.
- Increase your knowledge as you select materials for your clothing projects.
- Obtain a perfected fit if ready-to-wear sizing does not meet your needs.
- Own clothes that are original, uniquely your own.
- Satisfy your needs for achievement in learning new techniques in clothing construction.
- Save money.

### **Advantages of Purchasing Ready-to-Wear**

You can:

- Eliminate the risk of being unable to fit a pattern properly, or of making construction mistakes.
- Follow current fashion trends or purchase fad items more quickly.
- Have the garment ready to wear when purchased.
- Know immediately what the garment looks like rather than depending on pattern illustration.
- Own garments requiring designs, fabrics, equipment, or special construction techniques unavailable to you.
- Plan wardrobe coordination with garment in hand.
- Prevent the "clutter" of sewing, the necessary cleanup.
- Save time and the money spent for sewing equipment.
- Take advantage of clothing sales to save money.

### **Selection**

Members need to analyze their lifestyles as they relate to clothing needs. Think about: school, church, community, sports, travel, and home. Consider these activities when planning or replenishing a wardrobe. Clothing should be:

- Acceptable to the member's social group.
- Appropriate for the occasion and climate.
- Attractive for individual coloring, face and figure.
- Comfortable to wear.
- Currently or classically fashionable.
- Durable and easy to care.
- Energy efficient, indoors and outdoors.

- Functional for the member's activity.

Decide the type and number of items necessary to meet current wardrobe needs.

Investigate some of the reasons for making clothing or purchasing ready-to-wear.

Evaluate individual resources: time, money, working space, equipment, and sewing ability. Decide whether to purchase or construct clothing.

### **Buymanship**

Understanding quality is necessary to becoming a wise consumer. While you can pay high prices for low quality clothing, in general high quality clothing will cost more.

End use and expected wear-life are important in determining how high the quality should be. You may not require the same quality for a halter top that you will wear for one season, as you will for a tailored coat or suit that you may wear many seasons.

Brand names and designer labels can mean a higher price because of consumer demand. It can also mean that the manufacturer will stand behind the quality advertised.

Always do comparison shopping before spending your clothing dollar. Comparison shopping should be done through newspaper ads whenever possible to avoid using gasoline energy.

Some of the expectations about quality in clothing are listed on the following page. It will not be possible to examine every garment in detail, but it is crucial to check the particular expectations most important for the individual garment. For example, if a garment is buttoned, check for strong buttonholes. If the fabric tends to ravel after laundering, check seam finishing. Check hem width to see whether it can be altered. As members become more experienced in selecting ready-to-wear, they will find it natural to note the marks of quality.

*Checklist for determining quality in ready-to-wear:*

- Buttonholes on the grain and firmly attached.
- Collar centered.
- Fastenings (snaps, hooks, buttons) securely attached.
- Garment cut on correct grain.
- Hem finished and with adequate width for alterations.
- Interfacing in facings, collars, cuffs to prevent stretching and to provide support (facings do not show).
- Matched design, plaid or stripes.
- Neckline and collar smooth.
- Pockets matched and on the same level.
- Seams at least ½ inch wide (1.2 cm.).
- Seams flat and finished to prevent raveling.
- Trims and fastenings require the same care as fabric.
- Undercollar hidden from view.
- Zipper securely and evenly stitched.

## Selecting Whether to:

### Make Your Own

- Sew according to resources and needs.
- Select classic designs for items that are tedious or difficult to construct.
- Select inexpensive, easily constructed items to meet fashion trends or fads.
- Choose pattern designs that can be purchased or adapted from commercial patterns.
- Identify construction techniques necessary to complete construction of the item selected.
- Compare quality of the item desired with sewing ability and the availability of the same item in ready-to-wear.
- Evaluate plans for new clothing with the accessories already owned. Plan for items that will need only one or two basic colors in accessorizing.
- Discover whether the equipment necessary to construct the design successfully is available.

### Buy Ready-to-Wear

- Decide which items to purchase first.
- Purchase items to coordinate with present wardrobe.
- Investigate updating classic designs with the purchase of a new scarf or a vest, sweater, or jacket.
- Build or replenish a wardrobe in one or two basic becoming colors.
- When shopping, carry a fabric swatch or garment to coordinate with new purchases.
- Select styles suitable for individual coloring, face and figure.

*Final checklist before purchasing.* Have members ask themselves these questions:

- Does it improve my appearance?
- Where can I wear it?
- Can I afford the care it will require?
- Is it comfortable when I move around?
- Does it fit into my present wardrobe?
- Is it the price I have budgeted?
- Is it really me?
- Will it help me conserve energy?
- Can it be returned if unsatisfactory?

### Making Your Own

The same expectations about quality are important when you sew. The end use and expected wear-life should be considered before time and materials are invested in sewing. High-quality materials are necessary to achieve high-quality garments.

In general, designs that require many construction processes, much hand stitching, etc. should be made of higher quality fabrics than simple two- or three-step designs. Guide members in purchasing the best quality fabric they can afford. Help them place a budget priority on basic classic designs that will be worn often. Advise them to avoid costly investments in fabric for shortlived fads or novelties.

### Checklist for Purchasing Supplies

#### FABRIC

*Look for this information:*

- Type of finish
- Percentage of expected shrinkage
- Width per yard
- Price per yard
- Wear-dated guarantees
- Generic name
- Percentage of fiber content
- Manufacturer's name
- Care of fabric
- Country of origin.

*Fabric should be:*

- Appropriate for intended use.
- Of quality comparable to time and difficulty of construction processes.
- Woven or knitted evenly throughout length.
- Woven on grain—lengthwise and crosswise yarns should be perpendicular.
- Appropriate for climate and temperature.
- Knit evenly—ribs and creases will be perpendicular.
- Without heat-set wrinkles or permanent creases.

*Fabric should have:*

- Finish compatible with end use.
- Even coloring without flaws in dyeing or printing.
- Color that will not crock (rub off).
- Color appropriate for climate and temperature.

#### NOTIONS

*Trims should be:*

- As flexible as the fabric.
- Compatible with the fabric.
- Appropriate for garment end use.
- Requiring the same cleaning procedure as the fabric.

*Tapes should:*

- Perform utilitarian function needed.
- Require the same cleaning procedure as fabric.

*Thread should:*

- Be purchased for intended use. (Thread used for topstitch details might not be suitable for seam stitching.)

*Needles*

- Machine needle size will depend on type of fabric.
- Select hand needles that are used most efficiently for intended use.

*Pins*

- Should be purchased for intended use.
- Sharpness is greatest mark of quality.

### Fighting Inflation

*Stretch your clothing dollar.* All shopping involves choices. Shopping to *stretch* the clothing dollar can mean careful decisions about quality, cost and care. Learning where and how to make purchases that save clothing dollars is a part of consumer education.

*Stretch your fabric dollar.* Besides the usual fabric stores, discount stores, fabric discount chain stores and variety stores carry fabrics at low cost.

Two- and three-yard fabric lengths may be mill ends—ends of bolts sold by the textile mill to a jobber or broker who in turn sells to discount stores. The fabric lengths may be “seconds,” fabric damaged during manufacturing either in the construction, dyeing, printing, or final finishing. If specific guidelines are followed in purchasing, this fabric can be used successfully.

*Grain:*

- Check lengthwise and crosswise grain. Yarns should be at right angles to each other.
- Before buying, roll off a yard, match selvages carefully, then fold back one-half yard matching selvages.
- When fabric is more than 1 inch off grain, think carefully about buying it.

*Fabric construction:*

- Fabric should be firmly woven.
- Look for construction flaws. Nearly all flaws will appear at regular intervals throughout the bolt. Check each yard that you intend to purchase.
- Check for flaws in weave, dyeing or printing. Look

at both sides of the entire piece you plan to purchase.

- Think about the size of the pattern pieces. Will you be able to fit them around the flaws successfully or will you need extra yardage to allow for the flaw?

*Color:*

- Check color. Is it even throughout? Does it rub off (crock)? If so, it will fade and not retain its brightness.
- Is it printed on the grain?

*Wrinkling:*

- Crush the fabric in your hand to see how long it takes for the wrinkles to disappear.

*Yarn slippage:*

- Determine the slippage of yarns by pinning in a small tuck and pulling on both sides. If the yarns pull away from the pin, the fabric would pull away from a stitched hem.

*Fold:*

- In synthetics, check for heat-set wrinkles and permanent folds. Sometimes these cannot be removed.

*Recoverability:*

- Stretch the fabric between thumb and fingers. Does it recover to its original size?

### Clothing Sales

Recognizing the various types of sales will assist you in being a better bargain hunter. Among the types are the following:

*Clearance Sale:* Used to get rid of old fashions and make way for new. Usually discounts range from 25 to 50 percent off the regular price.

*Annual Sale:* Clothing prices are temporarily reduced. After a short time they return to the original price. Savings are usually from 10 to 15 percent.

*Special Purchase Sale:* Clothing is purchased just for the sale; 15 to 20 percent can usually be saved.

*Anniversary Sale:* Annual sale honors the store. Some clothing items will be from regular stock; others will be special purchase.

*Seasonal Sale:* A sale is repeated each year and timed with the seasons.

*Stimulative Sale:* Used as a promotion during slow periods. Sometimes called “back-to-school”, “sidewalk” and “crazy daze”.

Know when a bargain is a real one. Clothing is NOT a bargain when:

- It can't be returned.
- You don't have something to go with it.
- It isn't on your needs list.
- It is no longer in fashion.
- You're buying it for a gift and you're not sure of the size.
- You can't try it on.
- It needs altering.

### Terms

Be aware of the terms used at clothing sales to indicate quality or cost savings:



**Irregulars:** May have imperfections in color, weave, knit or size.

**Seconds:** May have obvious faults. Both irregulars and seconds are faulty to begin with. However, that frequently does not diminish their appearance or durability.

**Former price:** Refers to the last price in effect.

**Original price:** Was the first price of the garment.

**Regular price:** Was the price before the sale.

**Summary:** Buying clothing at sales requires *thinking* about your needs, *planning* your shopping list, *comparing* garments and *judging* quality.

Some real fashion bargains can be found in factory outlets and retail clearance centers all over the country. They may not have the range of styles and sizes carried in retail stores. Most have spartan surroundings, scarcity of sales help and a strict cash and carry, no return policy.

### Buying Discount Clothing

In some places you may not be permitted to try on the garment. Take a tape and know your measurement plus required ease for the places of crucial fit such as waistline, bustline, skirt or pant length, sleeve length and forearm and wrist circumference.

Decide why the garment is marked a second or irregular—so you won't be surprised later:

- Is the print the same on all the garment parts?
- Are the side seams where they should be?
- Does the skirt seem to hang on the grain?
- Is the color even throughout?
- Do horizontal and vertical design lines meet as they should?

*Never assume* the size on the label matches the size of a regular garment in a retail store.

Type of Retail Store	Special Characteristics	Services Offered
<b>Chain Store</b>	Basically a group of variety or specialty stores under central ownership.	Highly standardized merchandise managed remotely from a central or regional office.
<b>Department Store</b>	Sells home furnishings as well as clothing, household textiles and yardage.	Sales personnel, charge accounts, mail and phone orders, delivery of merchandise, return privileges, gift wrapping.
<b>Discount Store</b>	Offers large assortment of merchandise supermarket style.	Basically self-service. Some have charge account and return privileges. Merchandise can often be of lower quality than offered in department or specialty stores.
<b>Factory Outlet</b>	Offers samples, irregulars and close-outs from the manufacturer at anywhere from 20 to 70 percent off the usual retail cost.	Usually accept cash or major bank credit cards only. No returns. Some will give lay-away privileges. Self-service is the rule.
<b>Mail Order Company</b>	Originally featured time-tested variety of house dresses and work clothes, but today offers much higher fashion, large variety of clothes for the entire family. May no longer offer yardage.	Charge accounts, return privileges, mail/phone order, mail delivery. Some mail order companies have added catalog surplus stores which offer tremendous discounts.
<b>Retail Clearance Center</b>	Offers end-of-season merchandise from retail stores. Offers designer and top brand name clothes at anywhere from 20 to 70 percent off usual retail cost.	Limited credit. Usually only cash or major bank credit cards. Some lay-away. Usually no return privileges.
<b>Specialty Store</b>	Specializes in related categories of merchandise; children's wear, men's wear, furnishings, women's apparel, etc.	May offer same services as department store. May have added shopper services.
<b>Variety Store</b>	Mass outlet for lower priced, lower quality ready-to-wear and (some variety stores) yardage.	Usually few customer services. Usually accepts major credit cards. May offer charge accounts.

## Used Clothing

Used clothing costs less than new and often gives many years of satisfactory service. It may be chosen to wear as is, for remodeling or for use as fabric in a new garment.

### Guidelines when buying used clothing:

- Fabric should be holding up well at the points of stress such as knees, elbows and seat.
- Stitching should be strong.
- Elastic should have a good stretch.
- Zippers should work.
- Buttonholes should not be raveling.
- Buttons should be attached.
- The style of the garment should not be so out of date that you will feel uncomfortable wearing it.
- If the fabric is to be used to make a new garment, be sure that it is in good condition to warrant investing time and labor.

## Care

The old adage, "An ounce of prevention is worth a pound of cure," might read—"worth a pound of care." Repairing small imperfections in clothing before it is worn can result in much greater wear-life and fewer repairs later. The following checklist should be studied before wearing new clothes you've just purchased or old ones still in your wardrobe.

### Reinforcement possibilities:

- Re-hem or finish hem to prevent raveling
- Tie or clip loose threads.
- Rework machine buttonholes.
- Reinforce stress areas: underarms, sleeves, crotch, pockets.
- Resew buttons and add thread shanks.

### Repairs:

- Create interesting appliques or decorative motifs to cover repair problems.
- Fusibles can save time in repairing hems, small rips, and raveled edges and in applying trims and appliques before stitching.
- Darning, now done frequently by machine, strengthens weak spots or repairs tears.
- Patches are used for large tears or holes. Match fabric so that a patch will be inconspicuous or deliberately use a patch as part of decorative motif.

### Some general care instructions:

- If you are MAKING YOUR OWN preshrink all fabrics and notions. sew care instruction labels into clothing and follow these instructions.
- If you are buying READY-TO-WEAR read labels carefully and follow instructions.

Regardless of whether you are making your own or purchasing ready-to-wear, the following care procedures should be followed.

## Maintenance

Launder soon after soiling for best results, according to instructions on care label. To save energy, launder with a full load. Cooperative Extension Leaflet 21180, *Laundry Techniques to Save Energy*, has other suggestions to save energy on water temperature and drying techniques.

**Stain removal:** Never guess. Use a soil removal chart such as the one in Cooperative Extension Leaflet 2900, *Removing Stains from Fabrics*.

**Dry cleaning:** Before making or buying any garment that requires dry cleaning, consider the added expense for this kind of care. Because a garment that needs to be dry cleaned is usually seasonal, have it cleaned before long-term storage. Stains can become set and the soil will attract moths and mildew. Choose a dry cleaner carefully.

Learn standard wear-and-care expectations of specific fabrics and fibers.

## Care Label Information

Care labels are sewn in most of your clothes. Ask for the care label when you buy fabric. It should tell you how to:

- wash
- bleach
- dry
- iron
- dryclean

Machine wash warm  
No bleach  
Line dry

Care labels must:

- use words, not symbols
- stay readable for the life of the garment
- stay attached
- be easy to locate

Care labels are not required on:

- headwear
- handwear
- footwear
- remnants or mill ends
- items selling for \$3 or less

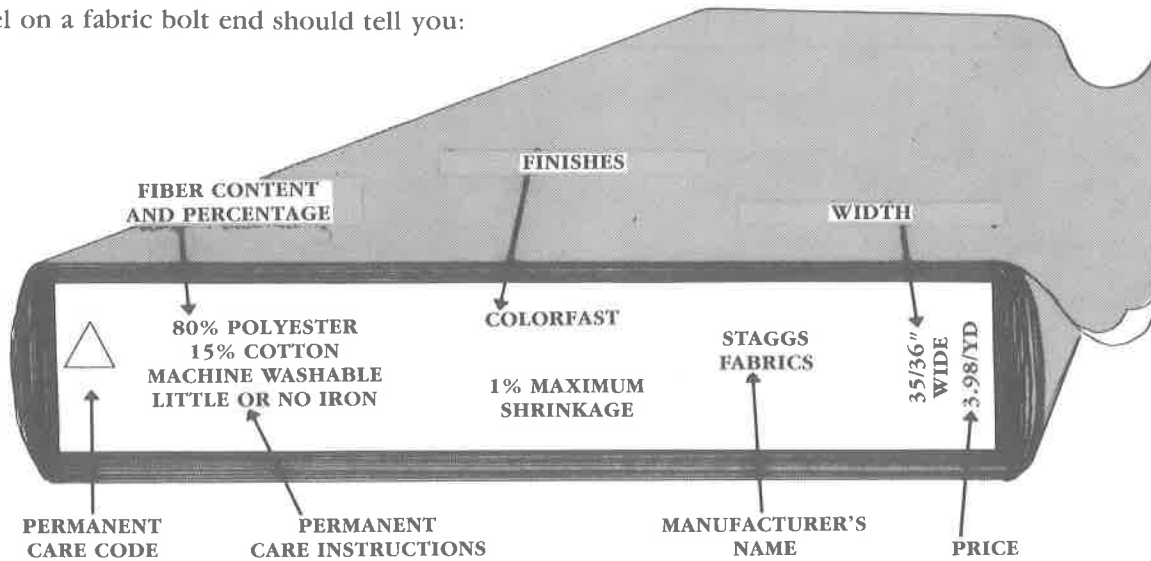
Other labels and hangtags give additional information about:

- fiber content and percentage
- manufacturer
- country of origin (if imported)
- size
- price
- shrinkage
- finishes

SIZE 9  
Preshrunk  
Water Repellent  
\$12.00

STAGGS  
Originals  
90% Wool  
10% Silk  
Made in Hong Kong

The label on a fabric bolt end should tell you:



### Care Label Definitions

#### MACHINE WASHABLE

<i>When Label Reads:</i>	<i>It Means:</i>
Machine Wash	Wash, bleach, dry and press by any customary method including commercial laundering and dry cleaning.
Home Launder Only	Same as above but do not use commercial laundering.
No Chlorine Bleach	Do not use chlorine bleach. Oxygen bleach may be used.
No Bleach	Do not use any type of bleach.
Cold Wash Cold Rinse	Use cold water from tap or washing machine "Cold" setting.
Warm Wash Warm Rinse	Use warm water or "Warm" washing machine setting.
Hot Wash	Use hot water or "Hot" washing machine setting.
No Spin	Remove wash load before final machine "Spin" cycle.
Delicate Cycle Gentle Cycle	Use appropriate machine setting; otherwise, wash by hand.
Durable Press Cycle/Permanent Press Cycle	Use appropriate machine setting; otherwise, use warm wash, cold rinse and short spin cycle.
Wash Separately	Wash alone or with like colors.

**NON-MACHINE WASHABLE**

<i>When Label Reads:</i>	<i>It Means:</i>
Hand Wash	Launder only by hand in lukewarm (hand comfortable) water. May be bleached. May be dry cleaned.
Hand Wash Only	Same as above but do not dry clean.
Hand Wash Separately	Hand wash alone or with like colors.
No Bleach	Do not use bleach.
Damp Wipe	Surface clean with damp cloth or sponge.

**HOME DRYING**

<i>When Label Reads:</i>	<i>It Means:</i>
Tumble Dry	Dry in tumble dryer at specified setting—high, medium, or low or no heat.
Tumble Dry Remove Promptly	Same as above but in absence of cool-down cycle remove at once when tumbling stops.
Drip Dry	Hang wet and allow to dry with hand shaping only.
Line Dry	Hang damp and allow to dry.
No Wring No Twist	Hang dry, drip dry or dry flat only. Handle carefully to prevent wrinkles and distortion.
Dry Flat	Lay garment on flat surface.
Block to Dry	Maintain original size and shape while drying.

**IRON OR PRESSING**

<i>When Label Reads:</i>	<i>It Means:</i>
Cool Iron	Set iron at lowest setting.
Warm Iron	Set iron at medium setting.
Hot Iron	Set iron at hot setting.
Do Not Iron	Do not iron or press with heat.
Steam Iron	Iron or press with steam.
Iron Damp	Dampen garment before ironing.

**MISCELLANEOUS**

<i>When Label Reads:</i>	<i>It Means:</i>
Dry Clean Only	Garment should be dry cleaned.
Professionally Dry Clean Only	Garment should not be cleaned by self-service dry cleaning.
No Dry Clean	Use recommended care instructions. No dry cleaning materials to be used.

## C. Science

### Fibers

Fibers are the threadlike strands that are spun into yarns and then spun into fabrics.

Fibers can be either natural or manmade. Some natural fibers are cotton, wool, silk and linen (flax). These come from nature—plants and animals.

Manmade fibers can be recognized by their *trademark* name, by their *generic* name or both.

The *generic* name identifies a group of fibers with similar characteristics. Some generic names are: acetate, nylon, polyester.

In addition to the generic name, the *trademark* name is usually found on the labels attached to ready-to-wear clothing and on fabrics sold by the yard. It identifies an individual fiber.

Manmade fibers used in clothing have some general characteristics that affect clothing care. Because they do not absorb water, they dry quickly. Manmade fibers are also heat sensitive. This means fibers are affected by high temperatures.

Charts describing the characteristics and care of common fibers can be found in Leaflet 2833, *A Consumer's Guide to Fibers, Fabrics and Finishes*.

### Fabric Finishes

Finishes on fabrics are important in determining how satisfied you will be with the durability and maintenance of the fabric you purchase.

Finishes are used to:

- Control shrinkage
- Improve feel
- Lessen drying time
- Make fabrics attractive and serviceable
- Repel insects
- Resist fading
- Resist soiling
- Resist wrinkling

Finishes, like fibers, have trademarks or brand names.

### Blends

Since it is impossible to find one fiber with all the qualities desired in a fabric, different kinds of fibers are blended. The resultant fabric has the best qualities of each of the fibers present. A blended fabric is one in which the fibers are mixed before being spun into yarns. Yarns are blended for economy, variety, strength, less shrinkage, greater absorbency, resistance to abrasions, no wrinkling and warmth.

#### Some facts to know about blends:

- Acetate drapes well and absorbs dyes beautifully.
- Acrylic or polyester added to cotton or rayon will decrease drying time.
- Each fiber will contribute its best qualities to a blend only if it is present in sufficient quantity.
- A blend of at least 55 percent acrylic or polyester is needed with wool and of 65 percent with cotton

NATURAL FIBERS		
Fiber	Characteristics	Care
Cotton	Durable, soft, absorbent, cool, comfortable, wrinkles.	May be machine-washed in hot water. Press while damp with hot iron.
Linen	Comfortable to wear, cool, durable, wrinkles.	Launder if preshrunk. Press at high temperature setting while damp.
Wool	Extremely warm and comfortable, durable, wrinkle resistant.	Dry clean or hand wash knits. Washable wools may be machine-washed in warm water.
Silk	Strong, luxurious fiber. May tend to water spot.	Dry cleaning is usually preferred. If washable, use moderate temperatures in washing, drying and pressing.
MAN MADE FIBERS—Most Commonly Used		
Fiber	Characteristics	Care
Acetate	Drapes well, wrinkles easily, fast drying, economical.	Dry cleaning preferred. Press with cool iron on wrong side while damp.
Chromspun* Estron*		
Rayon Bemberg*	Soft, cool, wrinkles easily, economical.	Dry cleaning preferred. Press while damp on wrong side to prevent shine.
Triacetate Arnel*	Easy to wash and dry, wrinkle resistant, comfortable to wear.	Machine wash in warm water. Touch up with steam iron if necessary.
Acrylic Orlon* Acrilan*	Warm, rubbing causes pilling, quick drying.	Wash in warm water. Use moderate, never hot, temperature if pressing is necessary. May have a "line dry" care label.
Nylon Qiana* Cantrese*	Wrinkle-resistant, easy to wash and dry, absorbs other colors when wet.	Machine wash in warm water. Wash whites separately. May be tumble dried at low temperature or line dries.
Polyester Dacron* Fortrel*	Strong, easy to wash and dry, snags easily.	Machine wash in warm water. Remove immediately from dryer after tumbling stops. Use low dryer temperature or permanent press cycle.

\*Trademark names.

and rayon to retain washability, quick drying and wrinkle resistance.

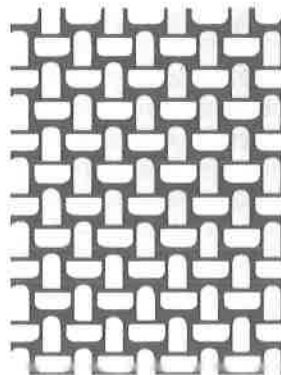
- Use of cotton, linen and rayon increases absorbency.
- Use of silk will increase cost.
- Use of cotton, rayon and acetate decreases cost.
- Nylon and silk add strength and luster.
- Wool and acrylic add warmth but because wool is more expensive, acrylic is used more often.
- Wool, silk and polyester provide crease resistance, but polyester is used more often because wool and silk are more expensive.

FINISH	WHAT IT MEANS	CLOTHING CARE
Mercerizing Mercerized*	Cotton fabrics are stronger and have more sheen. The colors are brighter and smoother.	Clothes can be laundered without losing the luster of the fabric. Avoid over-bleaching.
Crisp Finish	Gives starched appearance. Is applied to sheer cottons, such as lawn and batiste.	Some sizing may be removed at the first washing. Starch or fabric sizing may need to be added.
Permanent Press Penn-Prest* Dan Press*	Fabric needs little or no ironing after laundering.	Some finishes turn yellow; fabric is weakened if chlorine bleach is used.
Shrink-resistant Sanforized* Sanforized Plus*	Will retain its original shape after laundering. Labels should detail percentage of shrinkage to expect.	Clothes can be laundered without excessive shrinkage.
Spot and Stain Resistant Zepel*	Closes pores of fabrics and makes them more resistant to stains.	Remove stains as soon as possible.
Flame-Retardant Sleepsafe* Safeguard*	Retards burning of the fabric.	Some finishes lose their effectiveness when washed with soap or nonphosphate detergent or when chlorine bleach is used.
Waterproof	Coats and seals a fabric so that water does not pass through it. It is non-permeable to air.	Usually wipes clean and has slick, vinyl appearance.
Water-Repellant	Water repellant finishes result in a fabric that resists wetting and is relatively porous.	Follow label instructions. Some repellants are renewable only by commercial dry cleaners; other can be laundered.
*Trademark names		

### Basic Fabric Weaves

Woven fabrics consist of sets of yarns interlaced at right angles in established sequences. The yarns that run parallel to the selvage or to the longer dimension of a bolt of fabric are called *warp yarns*; those that run crosswise are called *filling yarns*.

The *plain weave* is the most simple form of weaving. It consists of the alternate interlacing of warp and filling yarns. This is 1/1 weave. The squares paralleling the vertical direction of the diagram can be visualized as warp yarns, while the horizontal rows represent the filling yarns.

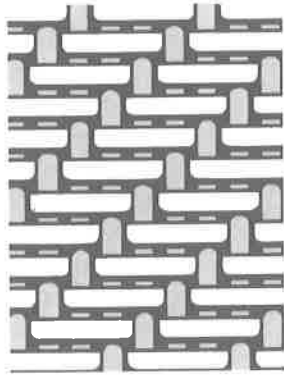


PLAIN WEAVE

*Rib* and *basket* are probably the most popular variation of the plain weave. Ribs are produced by using heavy yarns in the warp or filling directions by grouping yarns in a specific area or by having more warp yarns than filling yarns.

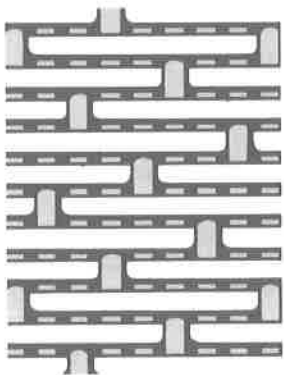
A *basket weave*, generally defined as having two or more warp ends interlaced as a unit with one or more filling yarns, does not have construction as firm as a plain weave, has less strength and is not usually recognized as important to the construction of everyday garments.

The second basic weave pattern, the *twill weave*, is characterized by a diagonal line on the face and often on the back of the fabric. Fabrics made by the twill interlacing generally are strong and durable. Probably the one most popular twill weave fabric is denim. Twills tend to show soil less quickly than plain weaves. They are more expensive to manufacture because the weaving techniques are more complicated.



TWILL WEAVE

In a *satin weave*, the fabric is characterized by long floats on the face. These floats are caught under cross threads at intersections as far apart as possible for the particular construction. The long floats create a shiny surface and tend to reflect light easily. They can snag easily and thus satin weave fabrics are not as durable as plain or twill weaves. Satins are frequently used to line other fabrics.



SATIN WEAVE

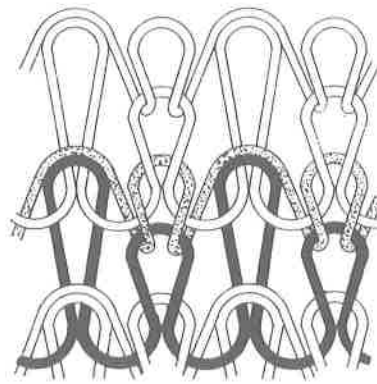
### Knits

To construct knits, loops of yarns are interlocked either lengthwise or crosswise. Depending on the loops' direction, knit fabrics are divided into two basic categories: *weft knits* and *warp knits*.

In weft knitting, one continuous strand of yarn runs to form a horizontal row of interlocked loops. (Hand knitting is a simplified form of weft knitting.) Weft knitting can be done in either flat or circular form. When the fabric is made on a flat machine, it can be shaped during the knitting process by increasing or decreasing the number of loops in a given row. If it is made on a circular knitting machine, the fabric will be tubular.

**Weft knits.** There are several types of weft knit construction, but the three that are most important for consumers to understand are double knits, single knits and interlocks.

*Double knits*, although constructed from a single yarn, have two interlocked layers—face and back—



DOUBLE KNIT

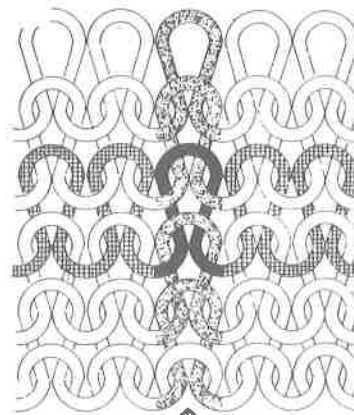
which cannot be separated. This gives the fabric built-in stability with comfort-stretch and good recovery in both the length and width.

*Single knit* fabric is a thinner, lighter-weight weft knit, consisting of a single layer of fabric. It is often bonded to another fabric to prevent excessive stretching and to add body. Single knits provide two-way stretch and are, therefore, ideal for dress shirts, T-shirts and golf shirts.

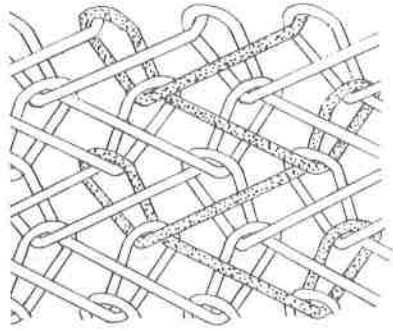
*Interlock knits* are a weft knit fabric popular for such ready-to-wear apparel as sweaters, underwear and at-home clothing. These fabrics have a smooth surface on both sides and possess less elasticity than do other weft knits. Because the edges of interlock knits tend to run, manufacturers and home sewers must finish all seam edges in garments made of these fabrics.

*Warp knits.* In warp knitting, hundreds of parallel yarns are passed through a separate needle on the knitting machine. Each needle creates interlocking loops along the length of the fabric. This is in contrast to weft knitting in which loops are formed in a crosswise direction.

Warp knit fabrics stretch primarily in the width. Special finishing techniques can also provide comfort-stretch in the lengthwise direction. The two main types of warp knits are tricot and raschel.



SINGLE KNIT



TRICOT KNIT (Sometimes known as "jersey")

*Tricot* is characterized by fine vertical ribs on the front and crosswise ribbings on the back. Tricot knits are runproof, snag resistant and nonravelling. They resist bagging and creasing in wear. Tricot knits were first used in lingerie and underwear, but technological improvements have made them appropriate for dresses, blouses, loungewear and swimwear. They are also used for shirts, slacks and summer-weight jackets. There are many popular variations of the tricot construction including pile knits and velours.

*Raschel* is a more complex warp knit than tricot. The versatile raschel knitting machine can use any kind of yarn: fine, coarse, smooth, slubbed, rigid or elastic. It produces a variety of fabrics with a wide range of end uses, such as curtains, thermal underwear, bridal veils, laundry bags, dish cloths, lace for intimate apparel and power net for foundation garments and swimwear.

#### Pile Fabrics

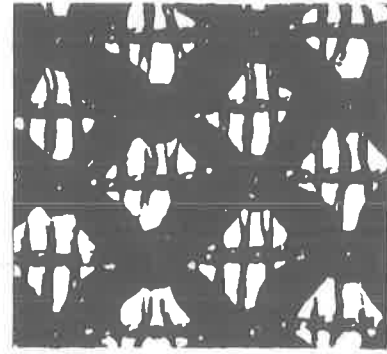
*Woven pile fabrics* have an extra set of warp or filling yarns interlaced in such a manner with the groundwarp and filling that loops or cut ends are produced on the fabric's surface. The base or ground fabric may be either plain or twill weave.

In *filling pile fabrics*, two sets of filling yarns are used and one set of warp. After weaving, the floats are cut and brushed to form a pile (corduroy and velveteen).

In the *warp pile*, extra warp yarns form the pile (velvet and velour). Terry pile fabric is produced by construction—uncut loops of warp yarn on both sides of the cloth.

#### Napped Fabric

Napping, a process that can be applied to cotton, rayon, wool and other fiber yarns, utilizes weaving machine cylinders on which there are fine metal wires with small hooks. The hooks pull fiber ends to the surface to produce the nap. Napping can be done on one or both sides of the fabric, and the depth of



RASCHEL KNIT (One of many types)

the nap is determined by the speed of the fabric moving under the cylinder, the speed of the raising rollers as they turn and the number of times the fabric is passed through the machine.

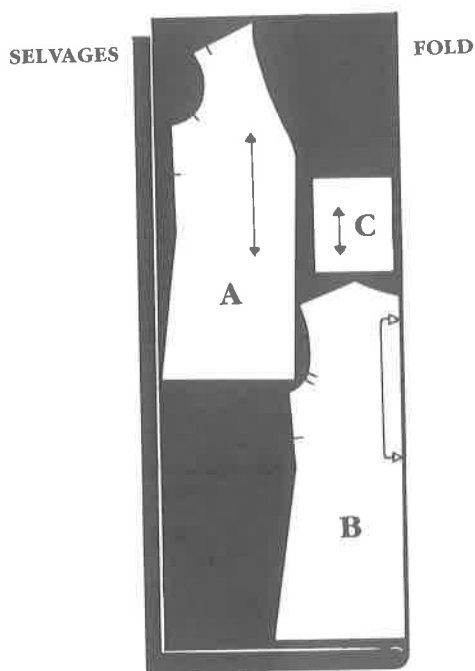
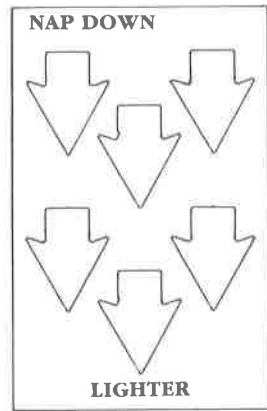
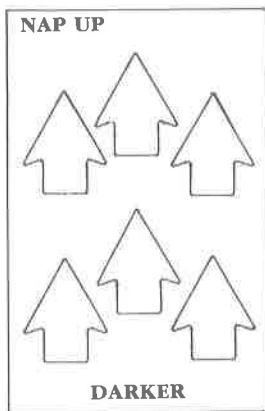
Fabrics with napped surfaces include flannels, flannelettes, blankets and some coating and suiting materials. Suede cloth is made by napping the fabric and shearing the nap to produce a smooth, compact and uniform surface. Napped fabrics should not be confused with pile surfaces produced by fabric construction.

Because the surface of pile and napped fabrics is directional, depending on how the nap or pile lies, these fabrics require special handling when cutting. Think of the directional nature of the fabric surface when you are laying out the pattern. Think of the surface as a one-way street and that all of the pattern pieces must run in the same direction.

The first thing to think about is: Which way should the nap or pile run—up to the neck or down to the hem? Direction affects the color and wear of the finished garment. For the richest, deepest fabric color, run the nap (pile) up so that the fabric feels smooth when stroked toward the neckline. Such fabrics as velvet, velveteen, and velour are usually cut this way. For a lighter, shinier color, run the nap down so that the fabric feels smooth when stroked toward the hem. The nap is also less likely to be roughed up during use when it runs down and the fabric will tend to wear better. Corduroy, suede cloth and deeply napped fabrics are usually cut with the nap running down to the hem.

Once you decide on the nap's direction, follow the layout given in the pattern instructions for fabric "with nap". When no "with nap" layout is given, make your own by arranging all of the pattern pieces with their tops facing in the same direction, including the small pieces like patch pockets or collars. Just remember: *All names of the pattern pieces should face the same way.*





**Popular wool fabrics:**

*Wool boucle:* The French word means “buckled or ringed.” A woven wool fabric with loopy, knotted surface.

*Wool crepe:* A soft fabric with a pebbly, crinkled or puckered surface usually due to slack warp yarns.

*Wool double knit:* A fabric knit on a machine with double needles that produce a double thickness, the same on both sides.

*Wool felt:* A matted, compact nonwoven fabric formed by the interlocking of the wool fibers through the felting process.

*Wool flannel:* A soft fabric, either of plain or twill weave in solids and plaids such as tartans (Scottish Clan Plaids), with a slightly napped surface on one or both sides.

*Wool fleece:* A heavy napped or pile fabric with a lush, fuzzy surface, warm but light.

*Wool garbardine:* A firm fabric woven of worsted yarn using a twill weave often finished with a high sheen.

*Wool herringbone:* Fabric with a broken twill weave that gives a balanced zigzag effect.

*Wool jersey:* Lightweight, plain knit fabric often made in tubular form with definite right and wrong sides.

*Wool melton:* A heavily felted, plain face-finished cloth. Heavy felting produces the compact character of this fabric.

*Wool shetland:* Soft, lightweight, warm fabric made from the wool of the Shetland Sheep.

*Wool tweed:* A rough nubby fabric characterized by fiber-dyed, mottled color effects. The Scotch name for twill.

**Wool Fabrics**

To recognize quality in wool fabrics you should know these terms:

*Virgin wool:* Has never been spun or woven.

*All wool:* Can be of reprocessed or reused wool.

*Recycled wool:* Has been reduced to fibers from previously manufactured products and then carded, spun, woven, and finished exactly the same way as virgin wool fibers are processed.

Symbols on labels for ready-to-wear clothing denote pure wool or a wool blend. Established by the Wool Bureau, Inc., they are a consumer certification of a standard of quality. The Woolmark goes beyond the legally required statement of fiber content to indicate superior quality.

**Fabric Glossary**

The following fabric glossary lists those fabrics most often selected by designers and seamstresses for use in clothing for youth. All can be made in 100 percent cotton or blended with manmade fibers for increased strength and wrinkle resistance as well as more effective easy-care performance. Following this glossary is a description of other important fabrics.

Fabric Name	General Description
Batiste	A sheer fine fabric, woven of combed yarns with a mercerized finish. Used for lingerie, blouses and infant wear. Heavier batistes may be used for linings.
Broadcloth (cotton)	A soft, closely woven fabric with a slight filling rib. Has a smooth and satinlike finish. Used for dresses, blouses, shirts, slips.
Chambray	A smooth durable cloth of a dyed warp and unbleached or white filling. May be woven in stripes as well as solid colors. Used for sportswear and dresses.
Corduroy	A hard-wearing pile fabric with a velvety ribbed surface effect. May be woven with a plain-weave back or a twill; the best quality has a twill back. The several types depend on fabric weight and wale width. Pinwale, wide-wale and cable denote wales of various widths. Also available with no wales at all.
Denim	A staple cotton cloth, both rugged and serviceable, and recognized by a steep twill on the face. Standard denim of blue warp yarn and gray or white filling. More recently other colors have been added.
Dimity	A plain weave fabric with occasional heavy lengthwise cords. Crisp and light-weight, it is used in dresses, sleepwear and blouses.
Dotted Swiss	CLIPPED DOT: A traditional fabric, usually in cotton and cotton blends, with a separate thread woven into the face of the fabric and then clipped to form a small thread dot. FLOCK DOT: A voile or lawn ground is printed with a bonding agent in dots or other pattern. Flock is secured with the bonding agent.
Duck	A medium to heavy weight plain weave useful for lightweight jackets and very often associated with nautical clothing. Very durable, sometimes called canvas.
Flannel Flannelette	A heavy, soft cotton material with a napped finish on one or both sides. In a lighter weight with the nap on only one side it is known as flannelette.
Gingham	Medium or fine yarns may be used to obtain a plaid, checked or striped effect characteristic of gingham. Usually yarn dyed, gingham is strong and serviceable. Designs range from conservative checks to traditional clan plaids and large bold checks.
Organdy	A light, transparent fabric with a crisp fit. May have a watermarked or moire effect. The better qualities are made of Pima or Egyptian cotton and are given a "permanent Swiss finish". Available in white, solid colors and prints.
Percalé	A staple cloth of good fine texture. This compact, plain weave fabric comes in white, solids or prints. Withstands rugged wear and is used in dresses and sportswear.
Pique	Characterized by heavy corded, ridged or ribbed wales in the warp direction. Closely woven and relatively expensive.
Plisse	Cotton fabric treated in a striped motif or in spot formation with a caustic soda solution which shrinks part of the goods to provide a crinkled effect. This effect may or may not be removed after washing, depending on the fabric's quality.

## GLOSSARY

Weave	Special Information for Care/Selection/Use
Plain	Very soft, lightweight. Nice to use as blouse fabric under heavier jumpers.
Plain Rib variation	A wide variety of quality. Check for fabrics with very even weave.
Plain	Handles well, makes great shirts, launders easily and lasts. Has a white selvage.
Pile Filling pile, wales run lengthwise.	Launders well. Lined with thick pile or quilted fabrics, it is suitable for winter outerwear. Lined with flannel, it has an ideal weight for jackets. Great weight for jumpers, skirts, dresses and robes.
Twill Colored warp yarns, White filling yarns.	Classic for sportswear and boys' wear. Ideal for making basic skirts and jumpers for girls. Can be combined with numerous fabrics, solids and prints. Comes in various weights and colors and can have water-repellant finishes.
Plain Heavy length-wise cords (rib variation).	Select high quality. Dimity may pull apart at the cords, if poorly constructed. Can be used effectively for dressier blouses. Combines beautifully with lace trims.
Surface figure	When dots are on sheers, usually used for better dresses, dressier blouses and special occasion clothing. Durability will depend on background. Clipped dot considered better quality than flocked.
Plain	Can be dyed successfully by home designers. Excellent for lightweight jackets.
Plain or twill napped on one side.	Flannel and flannelette handle well, but in the cheaper qualities, the nap may wear off after repeated washings. In solids, stripes, plaids and prints, flannel is used for warm sleepwear, shirts and linings. Untreated, flannelette is extremely flammable.
Plain	Plaid gingham is a classic for back-to-school clothes and is used for dresses, skirts, jumpers, shirts and blouses. Contrasts beautifully with white pique.
Plain	In children's wear, it is used most often for party dresses alone or in combination with other fabrics. Comes in beautiful pastels.
Plain	Soft, in lovely small prints for children's wear. Very functional if blend is of cotton/polyester. Used for everyday wear, dresses, shirts, etc.
Dobby weave: cord runs lengthwise.	Used in children's wear whenever a firm fabric with some surface interest is desired. Traditionally used for contrasting collar and cuff sets.
Plain Chemical finish produces crinkled surface.	Generally less serviceable than seersucker. Crinkly effect is often not permanent and repeated laundering or ironing may cause material to stretch and sag as tension is released from crinkled surface.

Fabric Name	General Description
Poplin	Has a more pronounced rib filling effect than broadcloth. Mercerized and usually also treated for a lustrous effect. May be bleached or dyed with fadeproof colors. Printed poplin is also popular.
Seersucker	A fabric with a pucker-stripe effect that is achieved in weaving. Colored stripes often used. Launders well and wears well; needs no ironing. The crepe effect is permanent. Used for sleepwear, sportswear, summer clothing.
Terrycloth	An absorbent cotton fabric with uncut loops on both sides of the cloth. Its base may be woven or knit. The knit cloth is lighter weight and more elastic when made of nylon or nylon blended with cotton.
Velour	Knit with a pile face that may be printed or embellished with woven stripes. Unusually soft. Children love the feel, refer to it sometimes as "furry".
Velveteen	A rich, low-pile cloth that comes in all colors, is mercerized and has a durable texture. This strong fabric can be laundered but will retain its beauty better when dry cleaned. Provides warmth and tailors well. Used for party dresses and jumpers as well as coats in all size ranges.
Wafflecloth	Fabric woven with a dobby look. Pattern is formed by a heavy yarn on the back of the cloth that is caught at intervals by a filling thread.

#### D. Safety

Build safety into your wardrobe with awareness of the design features which affect safety. Accidents can occur when clothing has unsafe features for a particular activity. Of all the accidents that can happen, fire-related ones are the most frightening. The design of clothes can prevent some fires from occurring. Large pockets and sleeves can catch a pan handle or touch a hot burner; full skirts can bring the wearer perilously close to a campfire or to sparks from a fireplace. The design of loose, full garments permits more air to reach outer and under surfaces of the garment so that a fire can spread rapidly.

The actual rate at which clothing burns is affected by the type of fiber, the fabric's construction and the garment's design. Natural fibers, cotton and silk, catch fire easily and burn rapidly. Manmade fibers that also burn easily are rayon, acetate and acrylic. Polyester and nylon do not burn easily but they melt, causing a sticky substance to adhere and burn deeply into the flesh. Blends can both burn readily and melt. Wool is difficult to ignite and slow to burn.

Construction of a fabric also affects the way it burns. Open and loose weaves are more flammable than are tightly woven fabrics. Sheer and lightweight fabrics ignite more rapidly and burn faster than heavy durable weaves. Fuzzy-surfaced fabrics with a brushed nap catch fire easily and burn at a fast rate.

There has been legislation to regulate flammabil-

ity standards to protect the consumer. The Department of Commerce has developed Flammability Standards for certain textile products which specify laboratory test methods that subject textile products to sources of fire which cause them to burn in household situations.

The most popular garments that fall under this legislation have been children's sleepwear. Mandatory compliance for labeling went into effect on May 1, 1975. Usually labels complying with this have the following statement stamped on the label or on the package: "Meets U.S. D.O.C. Standard FF5-74".

Flame-retardant does not mean fireproof! A flame-retardant or flame-resistant product has "reduced" flammability, burns very slowly after ignition and does not propagate fire rapidly but it is altered and eventually consumed by fire. A fireproof product is one that is totally unaffected by fire. *Very few substances are fireproof; even steel is affected by heat.*

Flame-retardant fabrics have been criticized in many ways. The most important criticisms are:

- Flame-retardant does not mean fireproof.
- Treated fabrics are more expensive.
- Treated garments may wear out faster than normally.
- Treated garments must be washed in a phosphate detergent in soft water to retain flame-retardant properties.
- Fabric softeners cannot be used.

## GLOSSARY

### Weave

### Special Information for Care/Selection/Use

Plain  
rib variation

Heavy poplin is given a water-repellant finish for outdoor use. This versatile fabric is used in every area of children's wear, from pajamas to raincoats.

Plain  
Crinkles are due  
to yarns held at  
different tensions.

Has permanent surface interest. Very durable after repeated laundering and use.

Warp pile  
Loops on both sides.

Loops must be very small to prevent snags in children's clothing. Cotton blended with synthetics increases durability. Avoid nearness to sources of ignition.

Filling pile  
Cut pile is short  
and thick.

Lots of air in the small spaces of this fabric. Keep fabric away from sources of ignition.

Filling pile

Velveteen pile sheds at the cut edge; therefore, all seams should be carefully finished, preferably with a binding, or the garment should be lined.

Dobby weave  
Floats form  
cellular design.

Provides great contrast as trim. Good for gingham plaids and other prints. Used much like pique, usually called waffle-pique.

- Chlorine bleach renders the finish ineffective.
- Inherently flame-retardant fibers, such as mod-acrylic, cannot be ironed and must be dried at very low settings since they have a low melting point.
- The finish may impair the soft feel of fabrics.

*To protect clothing against fire:*

Avoid:

- Fabrics that entrap air (fuzzy, napped, velour, terry, other loosely woven fabrics) around open campfires, stove burners, fireplaces or other sources of ignition.
- Wide sleeves, gaping pockets and open plackets which might catch on pot handles or cause accidents around a hot burner.
- Wearing clothing with large flouncy ruffles or flaring skirts around sources of ignition.
- Wearing robes or other synthetic sleepwear too close to any source of ignition.

*To generally assure safety in clothing:*

Avoid:

- Drawstrings or ties at the neck.
- Unnecessary ribbons, sashes or bows that can get caught.
- Wide cuffs on pant legs, pants and skirts that are so long they can trip the wearer.
- Large gaping pockets on smocks, robes, or play-clothes that catch on door knobs, drawer handles, pan handles, etc.
- Sleeves too wide or loose at the wrist.
- Ruffles and flaring skirts.

- Dark dull colors for outer garments when walking, biking or jogging.

## E. Personal Appearance

### 1) Clothing Speaks

*Why talk about what clothing communicates?*

Research has found that people are usually judged by appearance in first impressions whether they know it or not and whether they like it or not. People also use clothing to influence others.

We will use the word "clothing" to refer to TOTAL APPEARANCE, including accessories, hair, makeup, grooming, posture, mannerisms, facial expression and clothes. When we view a person, we see all of these together as well as a separate breakdown of items worn.

*Research has found:*

- Interest in clothes is greatest during adolescence.
- People who have a high interest in their appearance are more socially oriented than those who have a low interest.
- The socially self-assured person will probably not place as much importance on clothing as the person who is not so sure of himself socially.
- People of a higher socio-economic status have more interest in clothes and more awareness of their significance than do people of lower social classes.

### *How to learn about values:*

One way to learn to know yourself and your values is to think about what you have done in the past, how you have lived and how you are living. You can tell what others value by observation. Appearance can tell a lot about another person's values. What others wear or do not wear tells us what is important to them.

### *Clothes help fill psychological needs:*

One of teenagers' main needs is to be independent of adults. At the same time they want to conform and value belonging with their own age group. They also want to appear attractive to the opposite sex.

To belong teenagers choose clothes everybody else in their group is wearing. There is some evidence that youth who do not express this need to belong through their appearance are often those who have low social confidence and participation. The degree to which you value belonging and group approval determines how you choose your clothes.

### *Individual values:*

Because adolescence is an insecure period, appearance assumes a great importance. Conforming to the group helps develop social confidence and identity. This is sometimes the first step in learning to be an independent person with a special place in society.

As youths mature and acquire more individual values that go along with a sense of security, they may feel less interest in clothes. Until that time, however, the effects of wearing unacceptable clothes can be devastating.

### *How others see you:*

Just as groups are different from one another, individuals within a group vary greatly in their thinking about clothing and themselves.

### *Self image:*

Do you think other people see you as you see yourself? Has your clothing given other people the impression you want to give them? Inappropriate clothing and appearance can indicate an insecure personality.

The picture you have of yourself, your self-image, is a function of the feelings you have about yourself: your appearance, abilities, failings and the total organization of characteristics that distinguish you as an individual. Your self-image may or may not agree with how other people see you. You may consider yourself well dressed by your standards and others may consider you about average by theirs.

How others see you is like seeing your reflection in a mirror. The way you see your own reflection is the way you look at other people, imagining what they think of you, of your appearance, of your manners, of your character and friends.

What you imagine they think of you has an effect

on you. You can have a positive or a negative reaction to this imagined judgment. It is hard to look into the mirror and have it tell you what other people think of you.

What really makes you feel pride or shame in your appearance is not the mechanical reflection of yourself in the mirror, but the **IMAGINED EFFECT YOU THINK THIS APPEARANCE HAS ON OTHER PEOPLE**. Self-confidence affects the way you carry yourself and, in turn, the appearance of your clothing. Clothing worn well portrays confidence.

## **2) The Teen Years**

Teens are finding out who they are and what they want to do with their lives. They want to be strong individuals with comfortable self-images. They find it intriguing to try out new dress styles, cosmetics, shaving lotion, or haircuts. *They are also trying to dress for their new roles in which they constantly find themselves.* They accept some people and not others, some dress styles and not others, and want to be like a certain person and not another. By choosing, teens learn what is important to them in life and how to develop a strong self-image.

Clothes help people feel good about themselves. Clothing that makes you feel more poised, more confident and more in control of any situation tells others about your best self. Clothes that prevent individuals from having positive feelings about themselves may not be the right clothes for them or the role they have. They should analyze why these clothes conflict with their own self-image.

## **3) Color, Line and Design**

### *Make color work for you.*

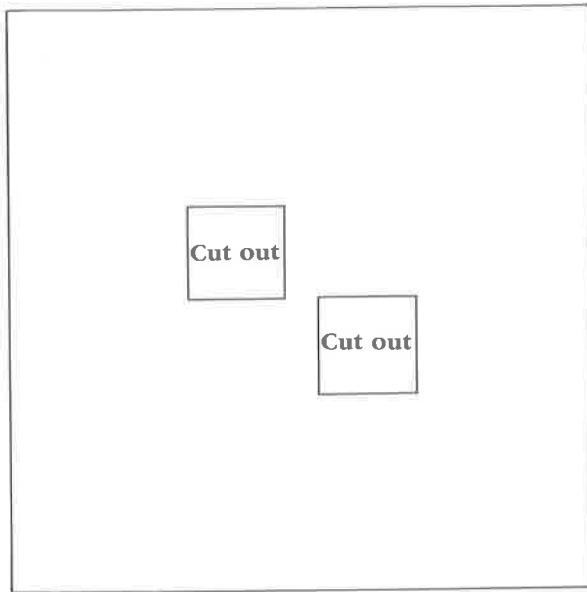
The colors that make up your own personal color harmony—the colors of your hair, eyes, skin and blush tone or related red—are your most individual and expressive colors. They can provide the theme for your wardrobe color plan.

These personal colors can be matched in fabric to start a valuable shopping guide called a color aid. You can see your own coloring more clearly when it is expressed fabric. Ask a friend to help you get a good match for your hair, your eyes and your skin tone and choose your most becoming red. Magazine ads in color are a good source for these if fabric samples are not available.

This personal color harmony strip is the beginning of your color aid. Be sure to carry it with you when you go shopping, and use it to help you select your most becoming colors.

If your clothes include your personal colors, they will have a made-just-for-you look.

For directions to expand your color aid, refer to *Choosing Colors to Wear*, Publication 3061.



Mask, actual size. (Cut two ½-inch “windows” in a 3-inch square of paper.)

On stick #1 your personal colors are grouped as a composite (see illustration).

**Wardrobe colors** that belong to the hue families are found in your personal coloring:

Colors that match our personal colors are placed on sticks #2, #3, #4, and #5 (see illustration).

If possible, start each of these sticks with a section of the same fabric or paper used on composite #1 stick.

As you find additional colors of the same hue as one of your personal colors, add these to the appropriate stick. Look for colors in the same hue families that are lighter—darker—more vivid—less vivid.

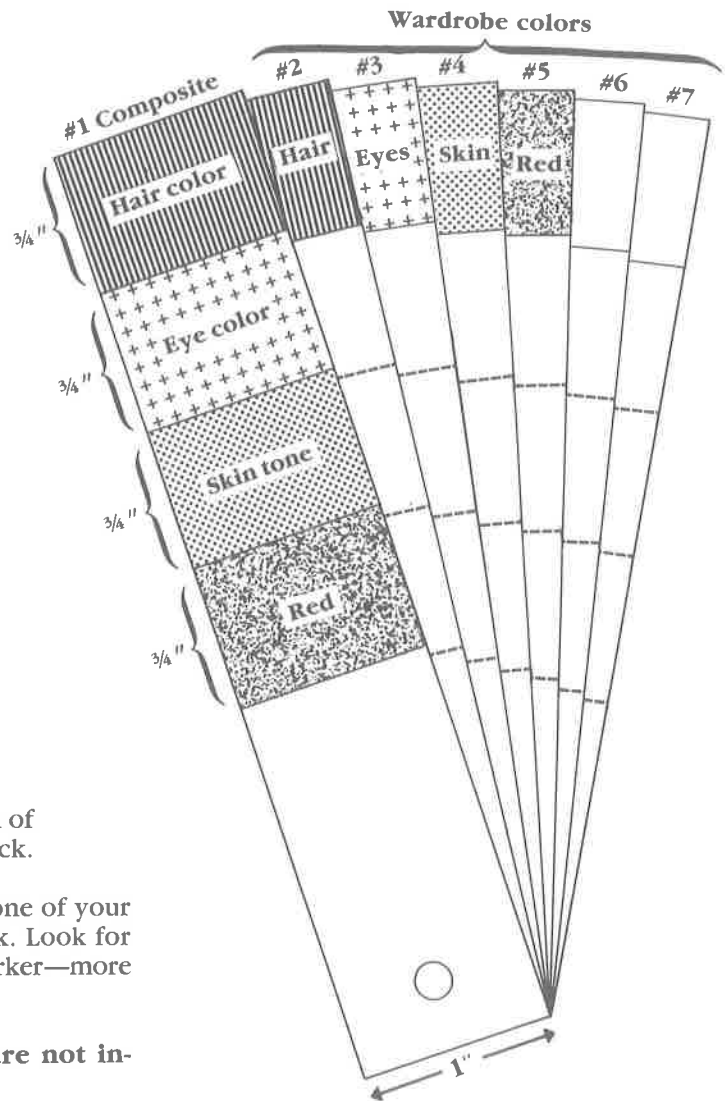
**Wardrobe colors** that belong to hue families are not included in your personal coloring:

For sticks #6 and #7, select two color families not found in your personal coloring—colors that enhance your personal colors. For example, a person with brown hair, golden amber eyes, and peach skin might choose a green and a blue green for sticks #6 and #7. Select lighter—darker—more vivid—less vivid versions of the colors.


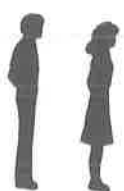

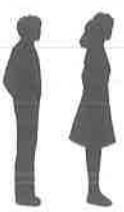
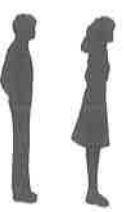

Add more sticks to your color aid as you find other colors or additional versions of colors you already have chosen.

To match your skin tone, make a “mask” from a square of white paper (a 3×5-inch card is easy to use). Cut two windows in it.

Now place the skin tone fabric or paper behind one window and hold the mask against your forehead. If you can’t tell any color difference between the sample in the window and your skin tone, you’ve done a good job of matching.



## Making Color and Line Work for You

Figure Type:	Select Outfits That:
<p>Short</p> 	<p><i>Add height:</i></p> <ul style="list-style-type: none"> <li>Vertical lines</li> <li>Plain colors</li> <li>Small prints and plaids</li> <li>Narrow belts of self fabric or same color</li> <li>Simple, uncluttered silhouettes</li> </ul>
<p>Short and slender</p> 	<p><i>Add height and fullness at the same time:</i></p> <ul style="list-style-type: none"> <li>Vertical lines</li> <li>Belts of contrasting colors</li> <li>Pockets</li> <li>Soft, full sleeves</li> <li>Filly collars</li> <li>Gently flared skirts and dirndl skirts</li> </ul>
<p>Short and full</p> 	<p><i>Add height and slenderize at the same time:</i></p> <ul style="list-style-type: none"> <li>Plain colors or small prints</li> <li>Jacket length between waist and hipline</li> <li>Contrasting collars to emphasize face and neck</li> <li>Simple necklines (such as V-necklines)</li> <li>Vertical lines and princess lines</li> <li>Semi-fitted silhouette</li> </ul>
<p>Tall</p> 	<p><i>Balance height with horizontal emphasis:</i></p> <ul style="list-style-type: none"> <li>Separates</li> <li>Long jacket lengths</li> <li>Contrasting colors and large plaids</li> <li>Bulky fabrics</li> <li>Large pockets, wide belts</li> </ul>
<p>Tall and willowy</p> 	<p><i>Balance height and add width and curve to figure:</i></p> <ul style="list-style-type: none"> <li>Horizontal details</li> <li>Large plaids</li> <li>Wide belts</li> <li>Turtle-neck collars, soft scarves</li> <li>Long, full sleeves</li> <li>Soft, rounded silhouette</li> </ul>
<p>Tall and full</p> 	<p><i>De-emphasize size and accent height:</i></p> <ul style="list-style-type: none"> <li>Unbroken vertical lines</li> <li>V-necklines</li> <li>Long sleeves</li> <li>Contrasting collars to emphasize face and neck</li> <li>Easy-fitting silhouette</li> </ul>



**Wardrobe Planning:**

Start a wardrobe plan by taking a careful look at the clothes in your closet. Sorting out what one has can determine future needs. One suggested way to do this is to create three groups and give away or recycle the latter two categories: wearable, almost wearable and no longer wearable.

Now list on the *Wardrobe Plan* chart that follows those items that are wearable and make plans for future additions.

**Wardrobe Plan**

Activities	Shirts, Blouses, Pants, Skirts	Dresses or Suits	Coats or Jackets	Sleep and Loungewear	Undergarments Accessories
CASUAL CLOTHES for relaxing or working at home, dates, spectator and active sports, school.					
DRESSY CLOTHES for dates, parties, church, and other occasions.					
MISCELLANEOUS CLOTHES for special activities such as sports, work, or other personal interests.					
ENERGY-EFFICIENT CLOTHES to conserve energy.					

#### 4) Grooming

High school students were asked in a survey to list their most prevalent grooming problems. The results are listed below.

##### Girls' Grooming Problems

Poorly applied makeup  
Poor posture  
Unbecoming hairstyles  
Unkempt hair  
Poorly selected clothing  
Skin problems  
Poorly manicured hands  
Lack of general cleanliness  
Poorly selected footwear  
Neglected teeth

##### Boys' Grooming Problems

Poor posture  
Poorly manicured hands  
Unkempt hair  
Skin problems  
Unbecoming hairstyles  
Lack of general cleanliness  
Poorly selected clothing  
Not shaving when needed  
Poorly selected footwear  
Neglected teeth

Both sexes are highly critical of each other's grooming. They are more likely to listen to criticism and advice from peers rather than from adults. Therefore, involve your members in grooming discussions encouraging criticisms and suggestions to come from them.

#### 5) Posture

Poor posture is one of the most serious appearance problems today. Many girls and boys are not aware that they have the problem, nor do they know how to improve it.

Good posture depends on the position of the hips, which must rest squarely upon the supporting legs. If the hips are tipped either forward or backward, the body is thrown out of line. Dance or movement classes are excellent for developing good posture and self-confidence.

These guidelines for good posture were recommended by the President's Council on Youth Fitness:

##### Good Standing Posture

- Feet parallel and slightly apart with toes pointed straight ahead.
- Knees easy, not bent or forced back.
- Abdomen held in by contracting abdominal muscles.
- Back flat as possible.
- Hips firm and tucked under the body.
- Shoulders relaxed and down, shoulder blades pressing slightly together to bring chest into normal position.
- Head high, as if a book is being balanced on it. Chin slightly in, back of neck pushed slightly backward. Most of the body weight evenly distributed on the balls of the feet.



##### Good Sitting Posture

- Sit back so that hips touch the back of the chair.
- Feet flat on the floor.
- Sit tall.
- Keep chest out, neck and head in line with upper back.

When writing, lean forward from the hips, maintaining the correct alignment of the back, neck and head.

#### F. Energy Conservation

The clothing you wear is your most intimate environment and directly affects your comfort, in summer and winter, and your use of energy in this era of energy shortages. Learning to select the most appropriate apparel for your climate, instead of consuming heat or air conditioning energy, can save money and keep you comfortable.

##### Clo Value

Insulation values of garments can be measured in terms of Clo. *Clo is the unit of insulation necessary to maintain a mean skin temperature of 92° F in a room of 70° F with air movement not more than 10 feet per minute, humidity not more than 50 percent with a metabolism of 50 calories per square meter per hour (seated quietly).*

The larger the clo value the greater the insulation value. There is a wide range of individual and clothing differences so when working with these tables, remember they represent averages and serve only as guidelines. The typical outfit worn in American homes, schools and offices in summer and winter has .8 clo insulation value. Clo varies with temperature and activities. Table 1 shows clo comfort guidelines.

**Table 1. Clo comfort guidelines.**

Activities	Room Temperature		
	65–68 °F (18–20 °C)	68–70 °F (20–21 °C)	70–72 °F (21–22 °C)
Seated quietly, eating, sewing, crocheting, writing	1.6–2 clo	1.4–1.6 clo	1.2–1.4 clo
Paring potatoes, typing, office work, dressing and undressing	1.2–1.5 clo	1.1–1.4 clo	.8–1.0 clo
Dishwashing, ironing, shaving	.9–1.1 clo	.6–.8 clo	.5–.7 clo
Walking 3 mph, housekeeping, laundry	.5–.8 clo	.5–.6 clo	.3–.5 clo

**Table 2. Typical Clo values for women's and girl's clothing.**

Underwear	Clo	Separates	Clo
___ pantyhose	.01	___ cool blouse—long-sleeved	.20
___ warm tights	.25	___ cool blouse—short-sleeved	.17
___ warm knee-high socks	.08	___ medium-warm blouse—long-sleeved	.25
___ bra and panties	.04–.05	___ medium-warm blouse—short-sleeved	.225
___ girdle	.04	___ warm blouse—long-sleeved	.29
___ full slip	.19	___ warm blouse—short-sleeved	.26
___ half slip	.13	___ cool sweater—long-sleeved	.20
___ long underwear tops (knit)	.25	___ cool sweater—short-sleeved	.17
___ long underwear bottoms (knit)	.25	___ medium-warm sweater—long-sleeved	.27
___ long thermal underwear tops	.35	___ medium-warm sweater—short-sleeved	.243
___ long thermal underwear bottoms	.35	___ warm sweater—long-sleeved	.37
<b>Footwear</b>	<b>Clo</b>	___ warm sweater—short-sleeved	.33
___ sandals	.02	___ cool skirt	.10
___ pumps	.04	___ cool skirt, below-the-knee hem	.101
___ boots	.08	___ medium-warm skirt	.16
___ knee-high fashion boots	.25	___ medium-warm skirt, below-the-knee hem	.176
___ knee-high leather boots (lined)	.30	___ warm skirt	.22
<b>One-Piece Outfit</b>	<b>Clo</b>	___ warm skirt, below-the-knee hem	.23
___ nylon-cotton coverall	.55	___ cool slacks	.26
___ cool dress	.17	___ summer shorts	.15
___ with long sleeves	+ .017	___ medium-warm slacks	.35
___ below-the-knee hem	+ .01	___ warm slacks	.44
___ medium-weight dress	.42	___ cool jacket or blazer	.17
___ with long sleeves	+ .04	___ medium-warm jacket or blazer	.17
___ below-the-knee hem	+ .02	___ cool shawl over shoulders	.30
___ warm dress	.63	___ warm shawl over shoulders	.40
___ with long sleeves	+ .063		
___ below-the-knee hem	+ .03		

Table 3. Typical Clo values for men's and boys' clothing.

Underwear	Clo	Separates	Clo
—briefs	.05	—cool woven shirt with short sleeves	.14–.19
—sleeveless undershirt	.08	—cool woven shirt with long sleeves	.22–.23
—short-sleeved undershirt	.09	—medium-warm shirt with shirt sleeves, woven	.20
—long underwear tops	.25	—medium-warm shirt with long sleeves, woven	.26
—long underwear bottoms	.25	—warm woven shirt with short sleeves	.25
—long thermal underwear tops	.35	—warm woven shirt with long sleeves	.29
—long thermal underwear bottoms	.35	—warm knit shirt with short sleeves	.25
—cool socks	.03	—warm knit shirt with long sleeves	.37
—warm socks	.04	—cool trousers	.26
—cool knee socks	.05	—medium-warm trousers	.29
—warm knee-high socks	.08	—warm trousers	.32
<b>Footwear</b>	<b>Clo</b>	—cool vest	.15
—sandals	.02	—medium-warm vest	.22
—low shoes (Oxfords)	.04	—warm vest	.30
—high shoes and side zips	.15	—cool sports jacket or suit coat	.22
—lined, knee-high boots	.30	—medium-warm sports jacket or suit coat	.35
<b>One-Piece Outfit</b>	<b>Clo</b>	—warm sports jacket or suit coat	.49
—nylon-cotton coverall	.55		

### Seasonal Guidelines for Thermal Comfort

#### Keeping Your Cool

The way you dress can reduce your need for air conditioning and thus save energy.

The body's thermal comfort is related to heat exchange between the body and the environment. The body mechanisms operate to maintain the internal organs at constant temperature. This is achieved when the body produces heat at the same rate that heat is lost from the body.

Heat is lost from the body in four ways:

- **Radiation.** Heat transfer occurs by electromagnetic waves. Body heat can be increased by radiation from the sun.
- **Convection.** Heat transfer occurs by the flow or spreading of warm molecules from a warm object to a cool one. Swinging one's arms increases heat loss by convection.
- **Conduction.** Heat transfer occurs through a medium without actual physical transfer of material. Heat is transferred by conduction when a warm body is placed on a cold chair.
- **Evaporation.** Heat transfer occurs as water is transformed into vapor. Heat is lost from the body in evaporation as body heat is used to evaporate perspiration from the skin's surface.

Radiation, convection, and conduction usually do not allow for heat loss when environment temperature is greater than skin temperature. Therefore, on hot summer days the main way the body loses its heat is through evaporation.

Clothing plays a role in the transfer of heat between the body and the environment. Textile fibers and still air, poor conductors of heat, are good insulators. Therefore, garments that allow for a still air layer provide good insulation from cold and extreme heat. Clothes that fit too tightly and cling to the skin reduce the insulative effectiveness. In moderately warm weather, because the insulative effect tends to hold body heat in, garments are more comfortable if they have larger openings at neck, arms and legs to allow heat to escape.

Moisture absorption of the fiber and fabric also affects heat transfer. If moisture is absorbed without wetting the fabric's surface, the fabric will be more comfortable. It will not cling and feel clammy on the skin.

With the principles in mind, here are some guidelines for keeping cool *indoors* during the summer:

- Wear absorbent fibers and fabric. They will aid in removing moisture from the surface of the skin without it becoming clammy and the fabric will not cling.
- Wear garments that allow perspiration to evaporate from the skin's surface. Evaporation occurs more efficiently from the skin than it does from wet clothing.
- In high, humid heat little clothing is best as long as the person stays out of direct sunlight.
- Wear sandals or open shoes to allow heat to escape and perspiration to evaporate.

- Wear loose-fitting garments with large openings at neck, arms, and legs to allow body heat to escape.
- Wear lightweight and open-weave fabrics.
- Men: Reduce layers of clothing. Omit undershirt, wear short-sleeved shirts, and wear unlined, light-weight suit jackets.
- Women: Wear skirts and omit nylon hose.

Although keeping cool outdoors does not directly reduce your indoor cooling needs, it can help you become acclimatized to warmer temperatures and in turn help you to be more comfortable in a warmer house.

Some guidelines for keeping cool *outdoors* during summer:

- Wear loose fitting garments that allow body heat to escape from the air layers surrounding the body.
- Wear white and light colored garments. These are more effective in reflecting the sun's radiant heat than are darker colors. As an example, if two people are sitting in direct sunlight—one nude and the other dressed in white—the one dressed in white, because of reflection, will have only half of the heat gain.
- Wear protective head gear. Too much direct sunlight on the head will cause overheating.

Of course, we all know the less clothing worn the cooler we stay. But do you know by how much? The figures may surprise you. For example, a man who removes his jacket, replaces a long-sleeved shirt with a short-sleeved shirt, takes off his tie, and opens his collar remains comfortable at 79° F as he was previously at 76° F.

If we adopt the cooler mode of dress and raise the thermostat settings in all air-conditioned homes and businesses by only 1° F, America would save the equivalent of 100,000 barrels of oil a day. Building owners and business operators should encourage employees to abandon warmer, more formal dress styles of long-standing tradition in banks, offices, restaurants, and stores. Workers in warmer countries function quite successfully while dressing comfortably and avoid the intense air-conditioning addition of our society.

Women	Raise Air Cooling Thermostat Setting
Replace light slacks with light skirt	1.5° F
Replace long-sleeved dress with sleeveless dress.	.2° F
Replace dress made of tightly woven cloth with one having an open weave	.5° F
Remove stockings.	.1° F
Replace full slip with half slip	.6° F
Remove full slip	1.0° F
Replace pumps with sandals	.2° F
Remove hat.	.2° F
Remove light, long-sleeved sweater	1.7° F
Remove heavy, long-sleeved sweater	3.7° F

## Energize Your Winter Wardrobe

Cut heating costs by carefully selecting the amount of clothes worn and considering the fabric construction, thickness and structural design of your clothes.

- *Dress in layers.* Several layers of clothes will insulate the body better than one heavy, thick garment. Warm air is trapped between fabric layers and holds body heat. For ease of work or play—more layers are needed for sitting or sleeping in cold rooms. People vary in the exact amount of clothes needed for comfortable warmth.

- *Keep torso warm.* . . . to maintain necessary warmth for body organs. T-shirts, camisoles, vests, sweaters and shawls are good layers under and over shirts for torso warmers. The body will automatically send excess heat from the torso to the hands and feet.

- *Allow for cooling down.* Layers of clothes and clothes designed for release of excess body heat give the body a chance to cool off and avoid perspiring. Venting off head and torso heat will cool the body quickly. Choose clothes that open at the neck, wrists and waistline. Look for jackets with drawstring or tab fasteners at wrists and waist, collared shirts and sweaters with front buttons or zippers and sleeves that roll up. Mufflers keep the neck warm, yet are easy to remove as the body overheats. Damp clothing can make you chill as body heat is used to dry the clothes.

- *Cover your head.* . . . with hats, caps or hoods for cold weather. The head can lose body heat rapidly. Try the old-fashioned stocking cap for bedtime. When the head is covered, body heat will be sent to warm hands and feet.

- *Fit for comfort.* . . . with the clothes you choose. Women will find pants warmer than skirts and warm stockings and boots desirable for colder weather. Avoid skin-tight clothes that restrict circulation and reduce the insulative air between the fabrics. Thick-soled shoes or boots are warmer on cold ground or floors than thin-soled shoes. Try mittens on coldest days in place of gloves, as fingers held together in mittens will share the heat.

Men	Raise Air Cooling Thermostat Setting
Replace heavy trousers with light trousers	.6° F
Replace winter-weight jacket with summer jacket	2.5° F
Replace long-sleeved shirt with short-sleeved shirt	.8° F
Replace long, light trousers with Bermuda shorts	1.0° F
Remove summer weight jacket	2.0° F
Remove undershirt (T-shirt)	.5° F
Remove tie and open collar	.2° F
Replace knee-length socks with ankle socks	.6° F
Remove light, long-sleeved sweater	2.0° F
Remove heavy, long-sleeved sweater	3.7° F

Three golden rules to follow for keeping warm during a cold winter season are:

1. Remember that thickness of the garment, not weight, determines how warm a garment will keep its wearer.
2. Keep clothing clean and dry, and avoid excessive perspiring, if possible.
3. Wear loose clothing in layers, to trap warm air against the body.

You can anti-freeze your wardrobe and warm up when you:

- Wear darker-colored garments because they absorb the sun's rays and make you feel warm.
- Judge the warmth of fabric according to bulk and feel. A fabric that is slick and cool to the touch won't be as warm as one that feels soft and fluffy, regardless of fiber content.
- Choose natural fibers, such as wool and cotton; they are better insulators of air and better absorbers of moisture than manmade fibers because of weave and fiber structure.

Take advantage of fashion's layered look. The more layers, the more air is trapped and the warmer you'll be up to a point. Too much layering can, by compression, eliminate all the warmth providing air. Layering also allows you to peel off extraneous clothing when overheated.

*Women and girls.* Instead of a dress or skirt, wear pants; they are able to trap heat better because of the smaller leg opening.

*Men and boys.* Wear a sleeveless sweater or vest under your jacket to provide another layer of warmth.

Thick fabrics, knitted or woven of fuzzy yarns, act as insulators by trapping warm air in spaces between fibers and yarns.

Quilted fabrics insulate well because of the sandwich effect of fiber or down filling covered with fabric. Avoid thick heavy fabrics that hamper activity.

Fabrics must be resilient (keep their "loft" or thickness) to give good insulation. In wet weather, quilted fabrics filled with polyester fiber regain thickness quickly because polyester dries fast. Down is an excellent insulator in cold, dry weather but when wet it loses thickness and dries very slowly.

Examples of insulator fabrics: fleeces, fake furs, quilted fabrics, thick fuzzy knits and synthetic pile.

For windbreakers fabrics must be closely woven. Wind blows through knits or other porous fabrics, such as loose weaves, and quickly chills the body. A sweater is warm in still air, but cold on a windy day.

Examples of good windbreaker fabrics are: nylon taffeta, nylon ripstop, cire and other coated or glazed fabrics, wool gabardine, cotton denim.

## G. The Second Time Around

With inflation we must learn to stretch our clothing dollars—and there's no better way than recycling.

If there is an item in the closet that has not been worn for a year, ask why. Does it need altering, restyling, or a complete make-over? Think carefully about time and effort for the project. Is the fabric going to last long enough, so that time spent won't be wasted?

Explore a garage sale or thrift shop for clothing that can be recycled at minimum cost. Often barely worn garments can become new with a small adjustment.

Here are some ideas to guide you:

### From Old Fabrics to New Ideas

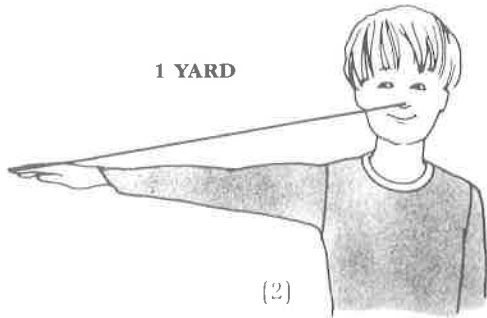
<i>From these:</i>	<i>Make these:</i>
• Man's shirt	child's shirt, blouse, dress, slip, playclothes, rompers, or sunsuits
• Man's suit	child's suit, jumper, jacket; woman's tailored dress, jacket, pants
• Overalls or jeans	child's overalls, jacket; accessories such as purses, hats
• Man's pants	child's pants, overalls, skirt
• Man's ties	pillows, quilts, skirts
• Woman's suit	woman's dress, jumper, skirt; child's coat, suit
• Woman's skirt	child's coat, dress, jumper, skirt, pants, or jacket
• Woman's dress (if design is not too large)	woman's jumper, blouse, skirt, jacket; child's dress, blouse, skirt, coat, or jacket
• Coat	jacket
• Bathrobes	child's bathrobe
• Woman's slip	woman's panties, half-slip; child's gown, robe

<i>From these:</i>	<i>Make these:</i>
• Leather (or imitation) coat	accessories such as vest, hat, purse, or slippers
• Sweater	accessories such as mittens, weskit, cap; child's dress, sweater
• Sweatshirt	bibs
• Knit dress	child's coat
• Trims, laces furs	trims for garments or craft projects
• Shower curtain	poncho, raincoat, rain hat
• Blanket	coat, jacket, cape, poncho, bathrobe, shawl
• Bedspread	bathrobe, vest, jacket, cape, shawl
• Sheets	blouses, shirts, dresses, play clothes, or pajamas
• All kinds of old clothes	woven rag rugs, braided rugs, patchwork projects

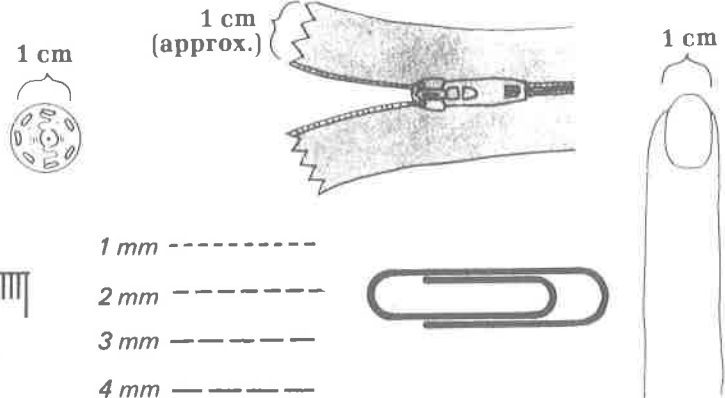
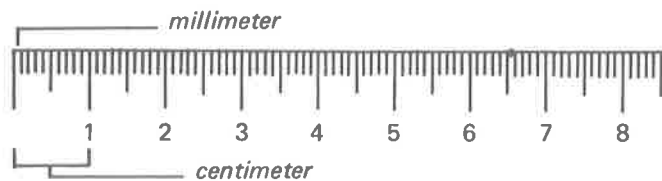
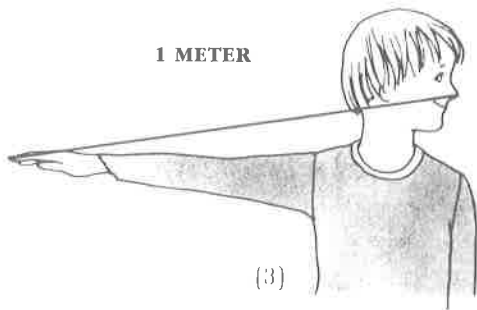
## H. Measuring Metric

Conceptualizing metric measurements means building new ideas about size, identifying new symbols to relate to in our thinking.

For example, in our standard system the rough measurement of a yard is often described by the following diagram:



The rough measurement for a meter is described by this diagram:



Some of the advantages and disadvantages of using the metric system are listed:

### Advantages:

- A universal system
- Easier to learn
- Faster to calculate
- Less chance of error
- Simpler to learn
- Practical, since based on 10's
- Increased foreign travel

### Disadvantages:

- Our reluctance to use
- Fear of change
- Cost of change
- Acceptance by people

Metric measurements affect the area of clothing in several ways:

- In body measurements.
- In measuring fabric.
- In determining pattern size.
- In labeling notions, tape measures, hem gauges and "meter" sticks.

Many products now have dual labels. We see the sizes we are accustomed to plus the metric ones so that we can get used to metric measurements.

The most important measurement that is used in textiles and clothing is the *meter*. A *meter* is approximately 40 inches. A *centimeter* is about the width of a zipper tape or a paper clip. A *millimeter* is about the diameter of a straight pin.

### Metric Terms and Symbols

Prefixes	Suffixes		Metric Terms		Metric Terms
milli—m	meter—m	0.001	millimeter	milligram	milliliter
centi—c	liter—l	0.01	centimeter	centigram	centiliter
deci—d*	gram—g	0.1	decimeter*	decigram*	deciliter*
deka—da*		1	meter	gram	liter
hecto—h*		10	dekameter*	dekagram*	dekaliter*
kilo—k		100	hectometer*	hectogram*	hectoliter*
		1,000	kilometer	kilogram	kiloliter

\*not in common use

In home sewing, the meter is used to determine fabric length. Fabric widths are measured in centimeters. To measure construction areas such as seam allowances, hems and zipper openings, the centimeter and millimeter are used.

**Standard Measurements in Home Sewing:**

- 2-2.5 mm Length of a stitch or 4 stitches per cm
- 1.5 cm Width of a seam allowance
- 5 cm Width of a hem
- 18 cm Length of a skirt zipper
- 6 mm Distance of top stitching from edge
- 2 mm Length of hand quilting stitches

**Standard Fabric Widths:**

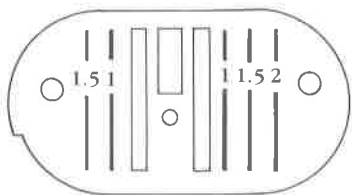
Metric width	Fabric type	Standard width
70 cm	interfacing	26 in.
90 cm	cotton muslin	35-36 in.
115 cm	cotton/polyester blend	44-45 in.
140 cm	wool	54-56 in.
150 cm	double knits	58-60 in.

The stitch-length regulator on most European brand sewing machines is already labeled for you with numbers from 0-4. These numbers are based on metric measurements. Therefore, an average "2" setting gives a stitch 2 mm long.

In addition, the width of a zigzag stitch on most European and domestic machines is calibrated in metric measurements. If the stitch width is set on 4, the stitch will be 4 mm wide.



There are two size designations for sewing machine needles. According to American sizing standards, common needle sizes are 11, 14, and 16. According to metric sizing standards, common needle sizes are 75, 90, and 100. Size indicates the diameter of the needle above the scarf measured in hundredths of a millimeter. For example, a size 90 needle (American size 14) has a diameter of 0.90 mm.



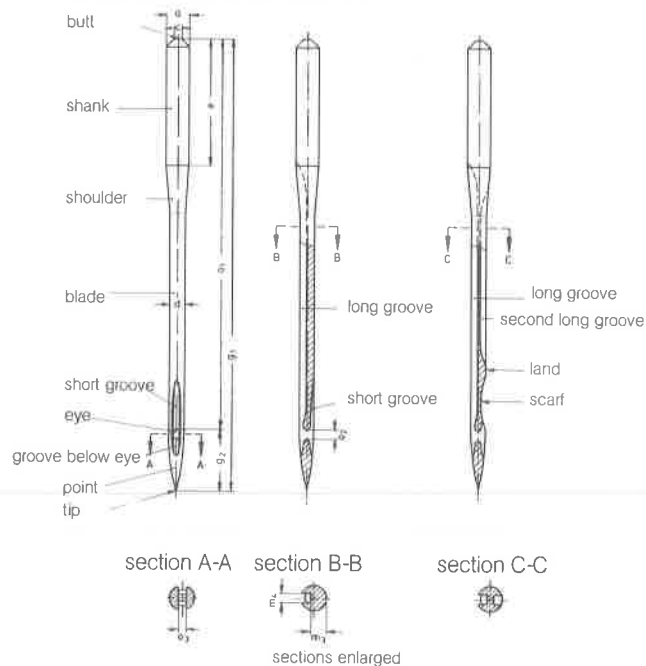
METRIC THROAT PLATE

**Sewing Machine Needle Sizes**

Metric Size (Nm)	American Size
70	10
75*	11*
80	12
85	13
90*	14*
95	15
100*	16*

\*Most commonly used needle sizes.

**Description and Measurements of Sewing Machine Needles**



**Clothing Care and Metric**

In metric measurement, temperature is given in degrees *Celsius*. The Celsius scale has a freezing point of water at 0° C and a boiling point of water at 100° C. The labels on clothing, such as on permanent press, designate a water temperature of 40° C (warm water) instead of 104° F for laundering a garment.

Powdered detergent may be measured in grams per liter of water. A *liter* is a generous quart and a *gram* is about the weight of a paper clip.

Laundry loads may be measured in kilograms instead of pounds, such as 1 pound equals 0.45 kilograms.

A standard capacity washer uses 60 to 70 liters of water, instead of 15.8 to 18.4 gallons.

The temperature setting on an iron will be measured in degrees Celsius, but fabric settings (rayon, wool, cotton and linen) will remain the same.



### University of California Cooperative Extension Publications

- Boy's Clothing Project Outline*, 4-H 4005  
*Buying Clothes for Your Children*, Leaflet 2756  
*Carpet Beetles and Clothes Moths*, Leaflet 2524  
*Choosing Colors to Wear*, TA 3061  
*Clothes to Fit Your Needs* (for the physically limited), Leaflet 21089  
*Clothing Judging Checksheet*, 4-H 4008  
*Consumer Color Chart*, Priced Publication 4018  
*A Consumer Guide to Fibers, Fabrics and Finishes*, Leaflet 2833  
*Fashion Revue Card*, 4-H 4010  
*Flame Retardant Clothing*, Leaflet 2281  
*4-H Clothing Project Guide*, 4-H 4011  
*4-H Clothing Project, Leader's Manual*, 4-H 4012  
*The 4-H Collar*, 4-H 4006  
*How to Fit Pants*, Leaflet 2343  
*How to Make a Color Aid*, TA 7  
*Laundry Techniques to Save Energy*, Leaflet 21180  
*A Leader's Guide to 4-H Demonstrations*, 4-H 8013  
*Practice Stitching Guide*, 4-H 4210  
*Removing Stains from Fabrics*, Leaflet 2900  
*Sew for Fun*, 4-H 4013  
*Walking in Comfort*, Leaflet 2344  
*Your Child's Shoes—Buy Them to Fit*, Leaflet 2834  
*You're a Model Every Day*, 4-H 4009

### United States Department of Agriculture Publications

- Buying Your Home Sewing Machine*, G 38  
*Clothing Speaks*, ESG 566  
*Energy Management Checklist for the Home*, P.A. 1118 (U.S. Government Printing Office)  
*How to Prevent and Remove Mildew—Home Methods*, G 68 (Revised)  
*Sewing Menswear—Jackets*, P.A. 1174 (U.S. Government Printing Office)  
*Sewing Menswear—Pants*, P.A. 1115 (U.S. Government Printing Office)

### References for Boys

- From: Simplicity Pattern Company, Educational Division, 200 Avenue, New York, New York 10016.  
*Bachelor Buttons* leaflet series:  
 No. 1: *How to Sew on a Button*  
 No. 2: *Sizing for Boys and Men*  
 No. 3: *Fashion Scoreboard: A Bachelor's Guide to Grooming and Gear*  
 No. 4: *The Craftsman*  
 No. 5: *Fashion Games for Guys*

*Know Your Pattern* (a teaching kit with large charts, quizzes, teacher and student guides)

From: Sears Roebuck and Company, Dept. 703, Public Relations, Sears Tower, Chicago, Illinois 60684. *Young Men's Clothing: A Teenager's Handbook*

From Levi's Sportswear, 2 Embarcadero Center, San Francisco, California 94106. *The Whole Man Handbook (A Definitive Guide to Dressing Well)*

### Books

Burns, Marjorie Arch:

- Altering Ready-to-Wear*, J. B. Lippincott, 1976.  
*Lining, Underlining, Interfacing*, J. B. Lippincott, 1976.  
*Super Sewing*, J. B. Lippincott, 1974.  
*The Tailored Look*, J. B. Lippincott, 1976.

Butterick Publishing:

*The New Vogue Sewing Book*, Butterick Publishing, New York, 1980.

Cho, Emily and Grover, Linda:

*Looking Terrific*, Ballantine Books, New York, 1978.

Coats and Clark Sewing Book:

*Newest Methods from A to Z*, Western Publishing Co., Inc., 1976. Gieseck-Williams, Audrey: *Clothing Skills for Creative Living*, 1979. (Co-developed by Butterick Publishing, New York, and Visual Education Corporation, Princeton, New Jersey.)

Johnson, Jeane:

*Teaching Clothing*, Menlo Park, California, 1977.

Landry, Lenore and Jodre, Emma:

*Creating a Tailored Garment*, College Printing and Publishing, Inc., Madison, Wisconsin, 1972.

Ledbetter, N. Marie and Lansing, Linda:

*Tailoring, Traditional and Contemporary Techniques*, Reston Publishing Company, Inc., Reston, Virginia, 1981.

Milani, Lucille:

*Tailoring the Easy Way*, Prentice Hall, Englewood Cliffs, New Jersey, 1976.

Palmer, Patti and Pletsch, Susan:

*Mother Pletsch's Painless Sewing*, Metropolitan Printing Company, Portland, Oregon, 1977.

Simplicity Paperbacks:

- ABC's of Shortcut Sewing*  
*Fuss-Free Fit Book*  
*Sewing Book*  
*Sew Something Special*

**Other Sources of Educational Literature**

Coats and Clark educational leaflets: For Leaders and Members, get order blank from county 4-H office. Check for cost of bulk order.

Singer booklets especially for 4-H:

- Know the Sewing Machine*
- Master the Sewing Machine*
- The Sewing Machine 4-H Leaders Guide*

All are available from: OKT/Coulson, 4-H Service Dept., 901 North Main Street, Paris, Illinois 61944.

The *Educational Materials Directory* for clothing and textiles is compiled annually and lists many teaching aids currently available from business and industry in the home sewing field.

Check on current cost with your county 4-H office.  
 Order from: Homesewing Trade News  
 330 Sunrise Highway  
 Rockville Center, NY 11570

**Visual Aids**

Check with your county 4-H office for information on the vast number of teaching materials available on loan from the Clothing Lab, U.C. Davis, and Visual Media, U.C. Davis. Your 4-H advisor can inform you of their availability.

**VIII. Careers**

---

The experiences of members in the 4-H Clothing Project and Fashion Revue can prepare them for an exciting future. When they apply for any job, they can write down their 4-H experiences on their resumes. Employers have often found that expertly trained employees are those with a 4-H background.

Any additional formal education 4-H members receive will help them find a more creative job. Most community colleges and state universities and the University of California at Davis have specialized courses in both clothing and textiles. Several excel-

lent trade schools also prepare one for work in the garment industry which is very big in California.

The county Cooperative Extension office has additional career information. Advise members to check with their Career Exploration advisor at the office.

Some career options are listed below. Invite people holding these positions to speak to your club about their careers. Ask them how 4-H members can qualify for a particular field:

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• Designer</li> <li>• Teacher (all levels)</li> <li>• Demonstrator</li> <li>• Model</li> <li>• Testing lab technician</li> <li>• Advertising copywriter</li> <li>• Fabric store manager</li> <li>• Color coordinator</li> <li>• Cooperative Extension advisor</li> <li>• Costume designer, theatre</li> <li>• Museum curator</li> </ul> | <ul style="list-style-type: none"> <li>• Researcher</li> <li>• Fashion coordinator</li> <li>• Buyer, merchandising</li> <li>• Fabric librarian</li> <li>• Textile designer</li> <li>• Pattern maker</li> <li>• Sample maker</li> <li>• Seamstress</li> <li>• Stylist</li> <li>• Sales representative</li> <li>• Newspaper feature writer</li> </ul> | <ul style="list-style-type: none"> <li>• Radio-TV commentator</li> <li>• Comparison shopper</li> <li>• Consumer affairs consultant</li> <li>• Home appliance repair person</li> <li>• Energy clothing consultant</li> </ul> |
|--|---|---|

## IX. Recognition

We as adults have a responsibility and privilege of providing understanding, patience, love and respect to inspire 4-H'ers to explore the unknown and to aspire to learning.

To positively interact with young people, we must be aware of and appreciate "individuality." Each person develops at his/her own speed and at different times depending upon heredity, environment, and mental, physical and emotional makeup.

Recognition should be given each club member for real effort. To youth, recognition symbolizes accomplishment, achievement, acceptance and praise.

Recognition can be given with:

- A pat on the back and a direct thank you for accomplishing assignments, goals, etc.
- A telephone call.
- A letter.
- Asking the member to participate in other club or adult programs.
- Giving the member a chance to provide leadership.
- Asking the member to help with planning.

Other forms of recognition include tangible ob-

jects—pins, ribbons, certificates, medals, scholarships or gifts.

4-H members should focus their goals on project activities, helping members of their group and sharing their experiences. The greatest rewards come from service to others and personal achievements, rather than "out-doing" fellow members for awards.

As leader of your project group, you will be responsible for creating a healthy attitude for any award or recognition that is available to those completing their project. Remember that the awards received should relate to 4-H Program basic objectives. Also, remember that these are incentives toward greater achievement but must not be the ultimate goal. When a competitive atmosphere develops, direct it toward trying to better one's own accomplishments, not toward other persons. It's your responsibility to see that attitudes developed by 4-H members are positive and healthy about receiving even the slightest recognition or award. It is what they have learned and how they have developed that are important.

## X. SUMMING IT UP

### A. Help 4-H Youth Set Standards

Standards should be high enough to provide a challenge to all, yet low enough to be attainable by the majority.

You may wish to question this statement or you may wish to modify it, but don't throw it out. In everything an individual endeavors to do there must be an expectation of accomplishment.

- What is acceptable?
- What degree of accomplishment is reasonable?
- Should each person be encouraged to establish the same standards?

4-H Youth have many opportunities to learn new skills and techniques and to evaluate critically their accomplishments. As a leader, you can help them see that they have done well and what they can try to do better. Through working closely with young people, you can observe the capabilities of each and guide members in setting standards for themselves.

Young people are more intent on achieved results than on how they reach those results. Often they want to finish the item *now*—quickly and simply done—without carrying out the many complicated steps necessary to complete an article. Perhaps the standards set during the first two years in a project

will not be as high as those set at a later date. *As you work with them on assessing their achievements, you must stress results, not methods.*

Recognize youngsters for their accomplishments. Be positive in discussing their project work with them. Ask yourself, "How well has this youngster done what he/she started out to do?"—you may be more helpful in counseling. Maybe the member had different objectives than you thought. It is important to ask members their goals.

Let the 4-H members know what expectations you have for yourself. This can be more effective at times than emphasizing your expectations of them.

### B. The Range of Acceptability

As a leader you can help members to evaluate or judge their completed projects. Consider the range of acceptability possible and desirable. Seldom will a precise point or degree be the only acceptable achievement. Somewhere, between the extremes, is an area where different results can be judged equally desirable. Personal preference can be given allowance.

We can easily recognize when a hem is too wide or too narrow; we can see at a glance when stitching is too tight or too loose. Our challenge is not to deter-

mine the one exact point of perfection but to determine the range within which we can say, "This is really good!"

### C. Factors Affecting Achievement

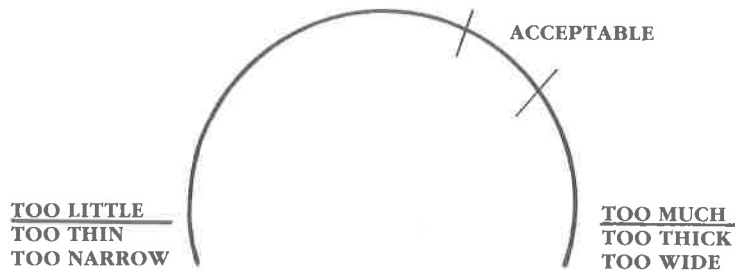
*4-H project selection is by choice:* The member chooses to do this project; it is not required.

*4-H projects are taught by volunteer leaders:* Because each leader has different training, different experience and different ability, each is encouraged to teach the methods they know best. Thus, 4-H members in different clubs may learn different ways of doing their project work. Garments and items made as part of a school project or other class project

are not to be considered for 4-H Clothing Project completion.

*4-H members work on individual projects:* Members advance at their own speed. This may be challenged by others in the group but the choice is theirs.

*Perfection of skills is not necessarily the main objective of the 4-H project program:* It is more important for a 4-H member to develop enjoyment in project accomplishments and an eagerness to try something else than to labor over perfecting a skill. It is the "end result that is most important, not the method used."



### Acknowledgments

Portions of this publication have been adapted from basic clothing textile books, current periodicals, trade publications and Cooperative Extension literature from other states.

To simplify information, trade names of products have been used. No endorsement of named products is intended nor is criticism implied of similar products which are not mentioned.

The University of California Cooperative Extension in compliance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and the Rehabilitation Act of 1973 does not discriminate on the basis of race, creed, religion, color, national origin, sex, or mental or physical handicap in any of its programs or activities. Inquiries regarding this policy may be directed to: Affirmative Action Officer, Cooperative Extension, 317 University Hall, University of California, Berkeley, California 94720, (415) 642-9300.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, Jerome B. Siebert, Director, Cooperative Extension, University of California.

**IMPORTANT!**

**COUNTY** \_\_\_\_\_

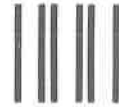
Here are my suggestions for improving this 4-H publication # \_\_\_\_\_ Title \_\_\_\_\_

---

AFTER FOLDING, TAPE THIS FLAP DOWN

PLEASE FOLD ON THIS LINE LAST

**COOPERATIVE EXTENSION**  
U. S. DEPARTMENT OF AGRICULTURE  
UNIVERSITY OF CALIFORNIA  
BERKELEY, CALIFORNIA 94720

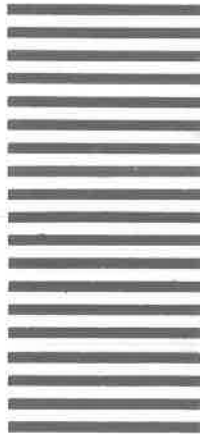


NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

**BUSINESS REPLY MAIL**  
FIRST CLASS PERMIT NO. 2983 BERKELEY, CA. U.S.A.

POSTAGE WILL BE PAID BY U.S. DEPARTMENT OF AGRICULTURE



**4-H**  
**UNIVERSITY OF CALIFORNIA**  
**Cooperative Extension**  
**1919 Addison Street, Suite 204**  
**Berkeley, California 94704**

PLEASE FOLD ON THIS LINE FIRST



# 4-H CLOTHING LEADER'S

## Teaching Outline

Congratulations on volunteering to serve as a 4-H Clothing Leader! You can make a real contribution to the lives of young people, now and in the future, by helping them to develop their interests in clothing and to achieve success within their capabilities. Teaching young people will also bring personal satisfaction as you, too, will learn much from the 4-H'ers with whom you work.

### IN THE 4-H CLOTHING PROJECT . . .

4-H members will learn not only the basics of clothing construction but also:

- Shopping skills
- Selection
- Appearance
- Science
- Care, safety, and energy conservation

Three skill levels:

#### BEGINNING UNITS:

- Have constructed at least two articles and one garment using easy-to-handle fabrics (such as cotton and cotton blends).
- Have demonstrated grooming principles; clean appearance (including hands, hair, feet, apparel) and straight posture, practiced at project meetings and clothing events.
- Have completed at least half of the *Do, Make, Learn, Explore* sections as noted on pages 4 and 5 of the *4-H Clothing Project Guide*, 4-H-4011, before progressing to the Intermediate Unit.
- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

#### INTERMEDIATE UNITS:

- Have applied construction methods in making at least three articles, two of which must be machine-made garments.
- Have demonstrated knowledge of coordinating fabric and pattern to enhance personal coloring, body proportion and fit.
- Have completed at least half of the *Learn to, Do, Make, and Explore* sections on pages 6 and 7 of the

*4-H Clothing Project Guide*, 4-H-4011, before progressing to the next unit.

- Have demonstrated understanding of the relationship between clothing and energy conservation in care and use of fabrics, colors, construction, climate adaptability, etc.

#### ADVANCED UNITS:

- Have applied results of a written wardrobe plan (which lists both clothing needed and already owned) to select project work.
- Have compared clothing costs by keeping records of all clothing made and purchased.
- Have constructed at least three garments, using tailoring construction details on hard-to-handle fabrics (such as crepe, pile and suedelike fabrics).
- Have completed at least half of the *Learn to, Do, Make, and Explore* sections on pages 8 and 9 of the *4-H Clothing Project Guide* before progressing to the next unit.
- Demonstrate understanding of the relationship between clothing and energy conservation as to use and care of fabrics, light and dark colors, construction, climate adaptability, etc.

#### FOR A SUCCESSFUL PROJECT:

- Involve members and parents in planning your program.
- Arrange for meetings in community facilities or your own home.
- Hold regular project meetings.
- Provide guidance; let members learn by doing.
- Use a variety of learning activities.
- Guide members in selection of their own supplies.
- Recognize that younger members need more individual attention.
- Emphasize good record keeping.
- Encourage members to participate in demonstrations, Fashion Revues and Fairs.
- Refer to the *4-H Clothing Leader's Manual*, 4-H-4012, Sections II, III and IV, for additional information on planning and conducting meetings.

Cooperative Extension University of California  
Division of Agriculture and Natural Resources

**AS A LEADER,  
YOUR RESPONSIBILITIES ARE TO:**

- Update your skills by attending meetings, workshops, and classes and by reading.
- Adapt project activities to age and ability levels.
- Develop leadership and responsibility in members.
- Teach something new at each meeting.
- Help members obtain information about other opportunities in 4-H.
- Help members to set standards to evaluate how much they have learned.
- Recognize members for their accomplishments.

**RESOURCES TO HELP YOU:**

- *List of Teaching Aids Available for Loan from the Clothing Specialist*, mimeographed handout from your county 4-H office.
- University of California Cooperative Extension publications from your county 4-H office.
- Additional visual aids may be available from your county 4-H office.
- *4-H Clothing Leader's Manual*. 4-H- 4012
- *4-H Clothing Project Member's Guide*. 4-H- 4011

---

For further information contact your local 4-H office:

In \_\_\_\_\_ contact  
(County)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Phone No.)

---

**DEVELOPED BY:**

**Committee Members:**

**Kathy Ferguson**, Chair, Home Economist, 4-H Youth Program Coordinator,  
Contra Costa County

**Marilyn Anderson**, Home Economist/4-H Program Coordinator, Plumas-Sierra  
and Lassen counties

**Faye Barton**, Program Representative, Family and Consumer Science, U.C., Davis

**Jan Holley**, Home Economist/4-H Youth Advisor, Merced County

**Isela Valdez**, Home Economist/4-H Youth Advisor, Sutter-Yuba counties

**Madelyn C. Williams**, Extension Clothing Specialist, U.C., Davis

**In cooperation with:**

**Kathryn Cirincione-Coles**, Ph.D., Assistant 4-H Youth Program Director,  
Curriculum Specialist, U.C., Berkeley

The University of California, in compliance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and the Rehabilitation Act of 1973, does not discriminate on the basis of race, creed, religion, color, national origin, sex, or mental or physical handicap in any of its programs or activities, or with respect to any of its employment policies, practices, or procedures. The University of California does not discriminate on the basis of age, ancestry, sexual orientation, marital status, citizenship, medical condition (as defined in section 12926 of the California Government Code), nor because individuals are disabled or Vietnam era veterans. Inquiries regarding this policy may be directed to the Personnel Studies and Affirmative Action Manager, Division of Agriculture and Natural Resources, 2120 University Avenue, University of California, Berkeley, California 94720, (415) 644-4270.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jerome B. Siebert, Director of Cooperative Extension, University of California.



# 4-H CLOTHING PROJECT MANUAL



▶ **The ABC's**

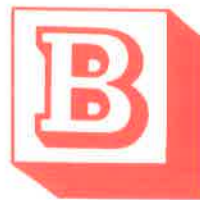
▶ **Cotton Separates**



UNIVERSITY OF CALIFORNIA  
AGRICULTURAL EXTENSION SERVICE



is for APRON—  
 Very easy to make.  
 What fun you'll have making it,  
 And how proud you'll be to say,  
 "I made it myself."



is for BAG—  
 Made for a hanger  
 Keeps your laundry in one place—  
 Makes it so easy to be neat.



is for CHOICE—  
 Of which you'll have two.  
 You'll choose to make an apron,  
 Or you'll choose to make a bag.  
 You'll learn a lot about cloth and how to use your sewing machine.

The author is Frances R. Quinn, extension clothing specialist

# START WITH THE RIGHT TOOLS

You will need:

- Sharp scissors or shears
- Small ruler
- Tape measure
- Box of pins
- Pincushion
- Package of needles (5 to 10 Sharps are the best size)
- Thimble
- Piece of clay chalk
- Very soft pencil

FIRST get the small tools you need. Mark them with your name. Keep them in a box about the size of a cigar box.

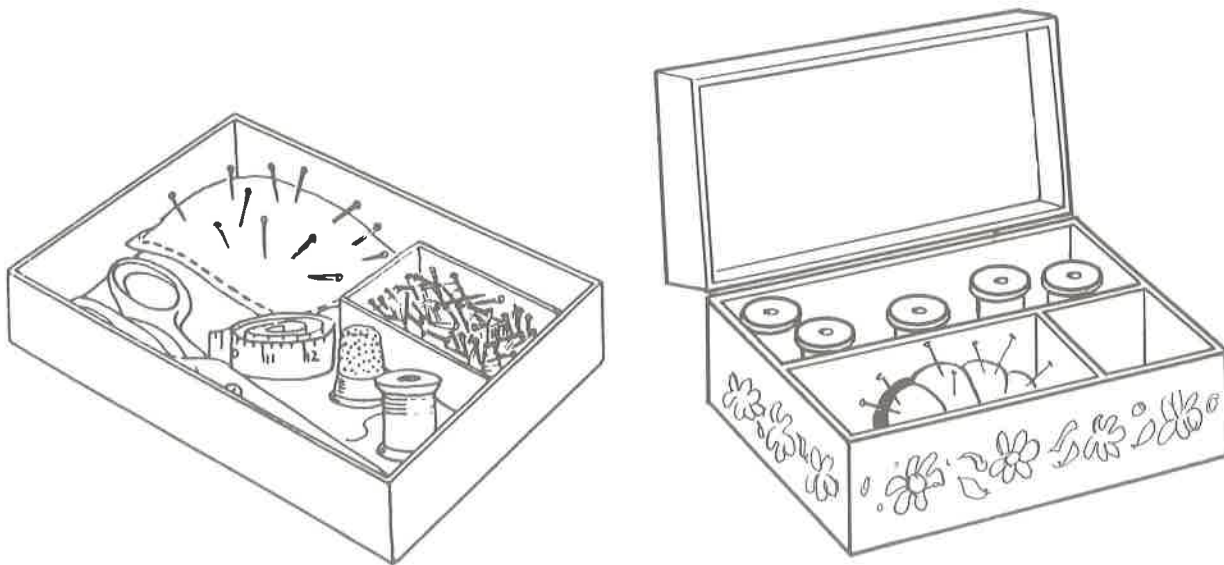


FIGURE 1—SEWING BOXES

# WHAT YOU NEED TO KNOW ABOUT YOUR TOOLS

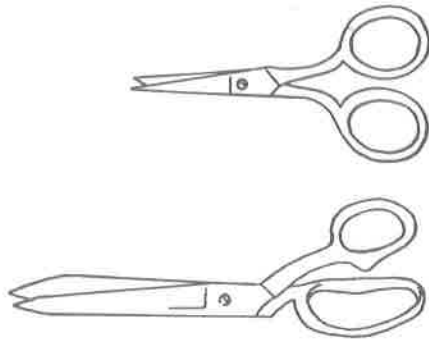


FIGURE 2

Scissors have two handles that are the same size.

Shears have one handle that is larger than the other.

It is easier to cut a large piece of cloth with *shears*.

*Scissors* are fine for cutting threads or cutting small snips in cloth.

When holding a pair of shears, put your thumb in the hole of the smaller handle and your last three fingers in the larger hole.

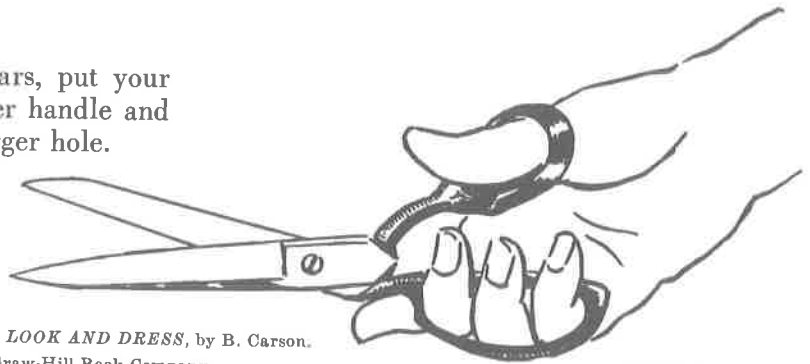


FIGURE 3

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949. McGraw-Hill Book Company.

A small *ruler* and *tape measure* will be a great help to you.

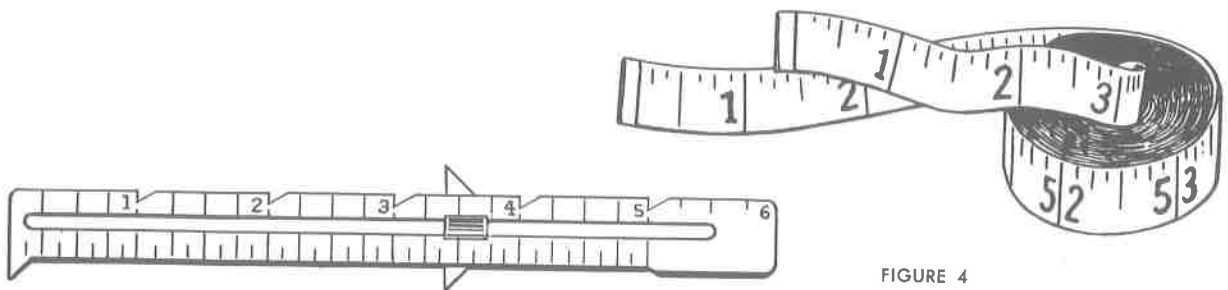


FIGURE 4

Learn these markings before you begin to make an apron or bag.

$\frac{1}{2}$  inch  
 $\frac{5}{8}$  inch  
1 inch



Buy a box of pins but use them on a pincushion you can wear.

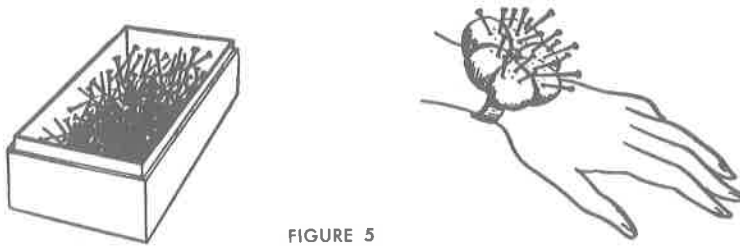


FIGURE 5

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949. McGraw-Hill Book Company.

## PINNING A SEAM

This is the way to pin two pieces of cloth together before you stitch a seam:

- Pin a seam with the cloth lying on a table—not on your lap. Point the pins toward edge of cloth. The sewing machine needle will not run over pins if the heads of the pins are about two inches away from the edge of the cloth.

- Pin the outside edges even. Follow with a pin in the center. Continue to pin between pins until pins are about every three to five inches apart. See order for pinning in Figure 6.

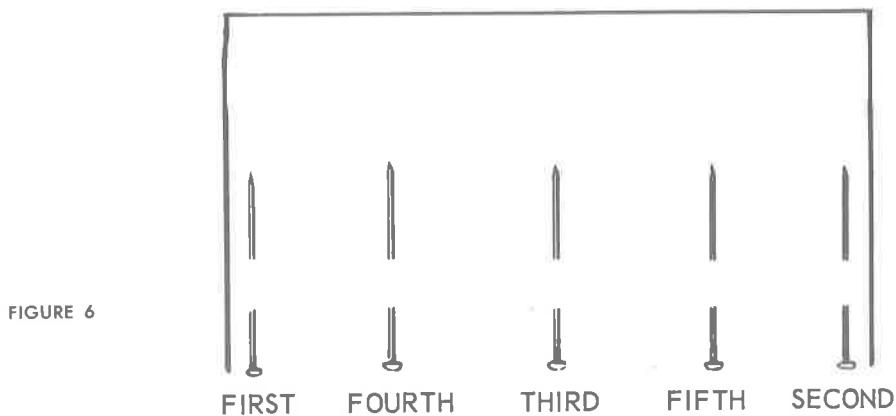


FIGURE 6

## THREADING A NEEDLE

Sharps are the needles to buy. These needles are short and have small eyes.



When you thread a needle, brace one hand against the other. This will help you keep the needle steady.

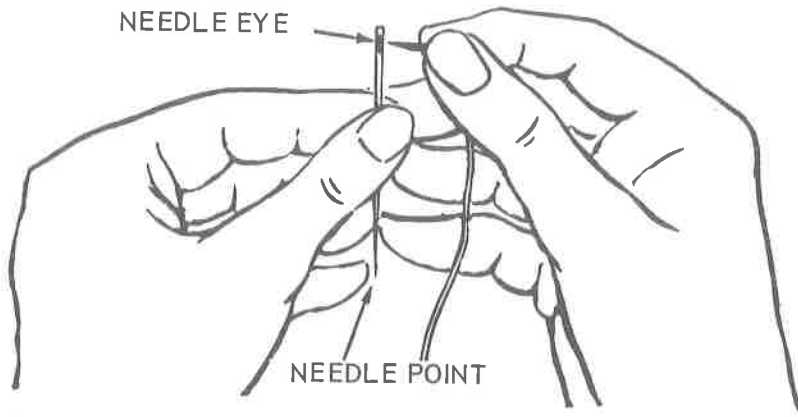


FIGURE 7

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949. McGraw-Hill Book Company.

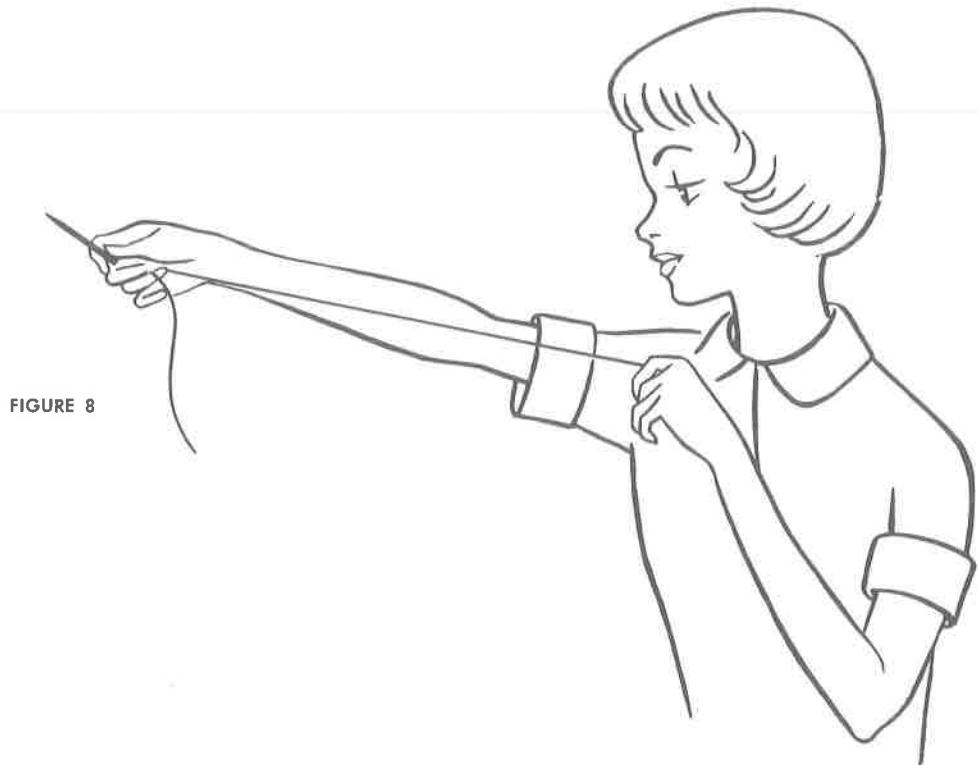


FIGURE 8

After the needle is threaded, measure the thread from your extended hand to your shoulder. This will be the right length of thread to use.

## TYING A KNOT

To tie a neat knot that comes to the very end of the thread, study the pictures. Follow these steps according to the numbers on the drawings.

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949. McGraw-Hill Book Company.

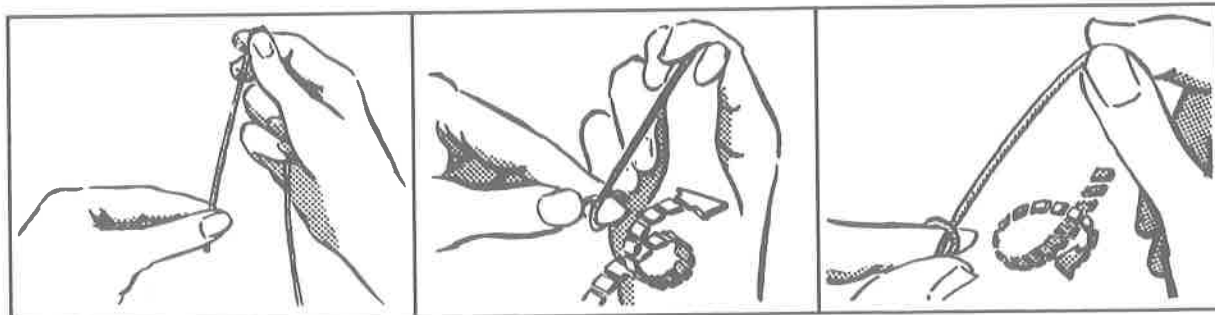


FIGURE 9

FIGURE 10

FIGURE 11

- Hold the thread between the thumb and first finger of the right hand. Hold the end of the thread that was cut from the spool between the thumb and first finger of the left hand.
- With the right hand bring the thread around the end of the first finger of the left hand. Cross it over the end of the thread. Hold the thread in place by putting the thumb against the first finger.
- Tightly roll the end of the thread forward between the thumb and first finger.

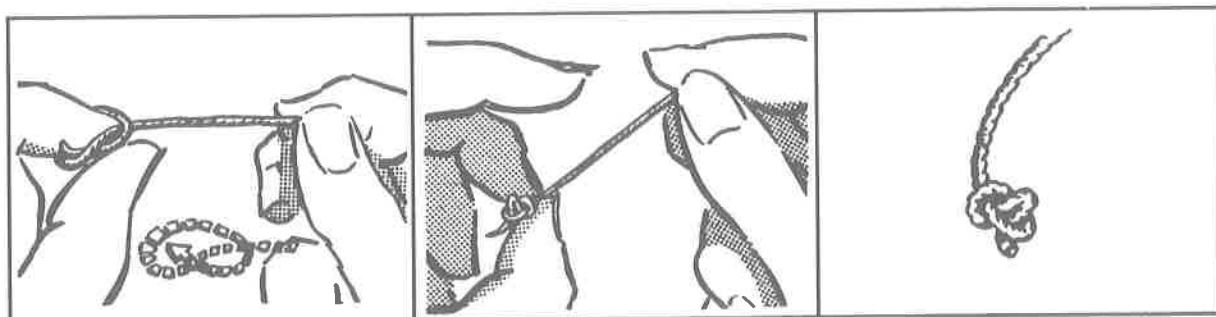


FIGURE 12

FIGURE 13

FIGURE 14

- Keep rolling the thread until you push the loop off the end of the first finger.
- Pull the loop into a knot by drawing the thread down between the ends of the thumb and middle finger.
- Pull the knot tightly down to the end of the thread.

## USE A THIMBLE

You'll need one to push a needle through cloth. Wear it on the third finger of the hand you use in sewing.

- Hold the needle between the thumb and the first finger so that the eye end of the needle is resting against the side of the thimble (Figure 15).

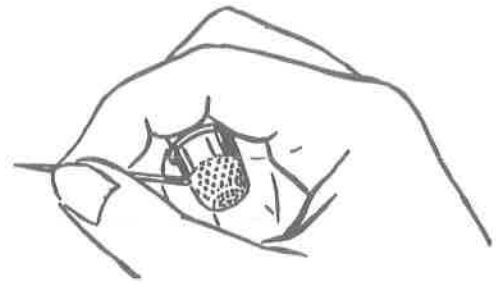


FIGURE 15

- Push the needle with the side of the thimble until the thimble is against the thumb and first finger (Figure 16). Practice pushing the needle with the side of the thimble until you can do it with ease.

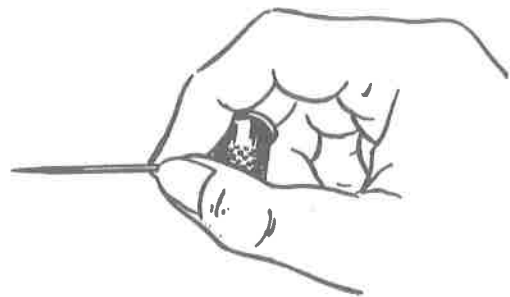


FIGURE 16



FIGURE 17

- To push the needle through the material with the end of the thimble, hold the needle between the thumb and the first finger so that the eye end of the needle is resting against the end of the thimble (Figure 17).



FIGURE 18

- Hold the needle as shown in Figure 17, then insert it in the material about  $\frac{1}{2}$  inch from the edge. Now push the needle through the material with the end of the thimble (Figure 18). Pull the needle through the material with your thumb and first finger.



## BASTING



FIGURE 19

Basting is the only hand stitch you will use in making an apron or bag. The knot holds the thread when starting to baste. Three small stitches will keep the thread from pulling out at the end of your basting.

## GOOD WORK HABITS

Sew with clean hands.



FIGURE 20

Always wear your thimble.



FIGURE 23

Sit where the light is good and comes over your left shoulder—never with it shining in your eyes.

FIGURE 21



Sit in a comfortable chair with feet on the floor or on a box the right height.

FIGURE 24



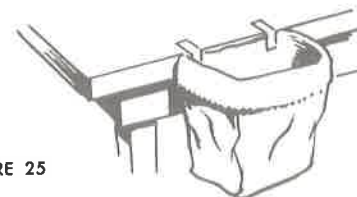
Work on a table, not in your lap.

FIGURE 22



Keep scraps in a paper sack attached to the table with adhesive tape or in a waste basket.

FIGURE 25



# KNOW YOUR SEWING MACHINE

## HOW TO STITCH PROPERLY

- Run the machine with the presser foot up, without cloth or thread. Make the machine go very fast, then slow down and see how slowly the needle will go.
- With the machine unthreaded, lower the presser foot and stitch on two thicknesses of paper. Keep your eye on the edge of the fabric, not on the needle. Do not push or pull the paper as you sew. Guide it gently, with your left hand lying on top of the paper and your right hand guiding the edge three or four inches in front of the presser foot.
- Learn to start and stop smoothly.
- Now, using two strips of cloth, practice to see how slowly and evenly you can stitch, using a seam guide (Figures 26 or 27).

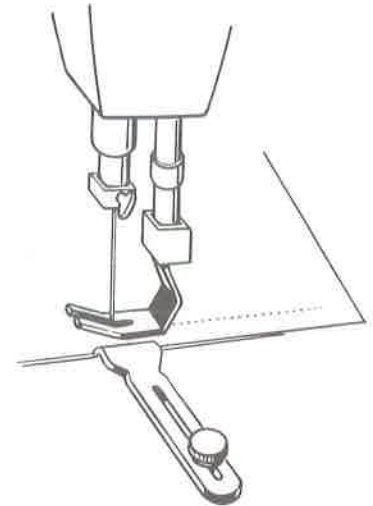


FIGURE 26—SEAM GUIDE

## HOW TO USE A SEAM GUIDE

Put the tape measure under the presser foot, placing the needle on the  $\frac{1}{2}$ -inch mark, if you wish to make  $\frac{1}{2}$ -inch seams. Then place the seam guide across the end of the tape measure, with the slot opening over the hole for the screw. Screw tightly in place. Remove the tape measure. Place the edge of your cloth against the seam guide and begin stitching.

If your sewing machine doesn't have a seam guide attachment, you can make one, using adhesive tape (Figure 27).

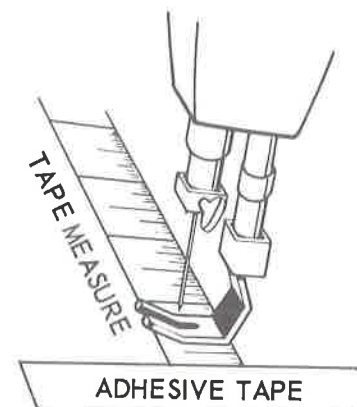


FIGURE 27—SEAM GUIDE

## STITCHING WITH THREAD

Your leader or your mother will show you how to thread your sewing machine.

- Working with thread on your machine, stitch a straight seam through two thicknesses of cloth.
- Remove the cloth from the machine, without breaking the thread or unthreading the needle. To do this, turn the hand wheel until the needle is up and takeup lever is at the top. Now lift the presser foot.
- Be sure top thread is between the toes of the presser foot. Pull the cloth out and back, at the left side of the needle, and cut the threads. When you are ready to stitch again, place the cloth under the presser foot, leaving the threads out under the foot at the left side, so the threads at the beginning of the next seam will not tangle. (See Figure 28.)

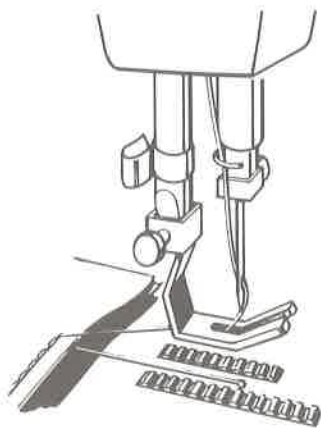


FIGURE 28

**WARNING**—Always have threads to the back out of the way before you start to sew!

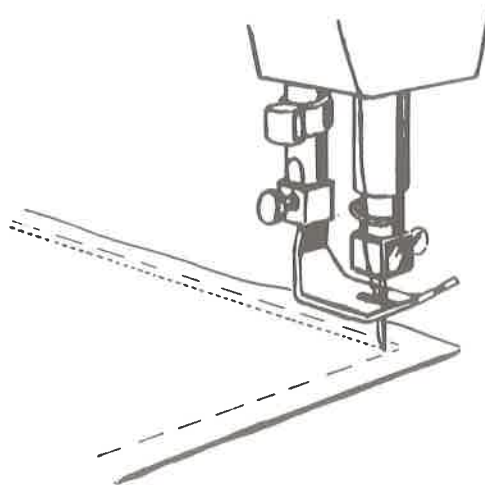


FIGURE 29

## HOW TO TURN CORNERS

Stitch the seam to corner, following a marked line. Stop at corner with the needle down. Raise the presser foot and turn the paper or cloth. Lower the presser foot, and continue stitching (Figure 29).

# BUYING FABRIC

Buy cloth that is labeled  
Pre-shrunk or Sanforized

There are many different kinds of cloth. Each has a name. How many names of cotton material do you know? Can you tell the difference between Indian Head, broadcloth, percale, and denim?

Let's start with a few of the cotton fabrics that you might use in a beginning 4-H Club project. Find a sample of each kind of material listed here and mount it in the proper space.



FIGURE 30

*Percale*—One of the first fabrics you will use. It is made with a firm, plain weave. It may be plain color or it may have a printed design.

PERCALE

*Indian Head*—Plain weave cotton with coarse threads. It can be plain color or print.

INDIAN HEAD

*Cotton Broadcloth*—Woven with crosswise threads that are heavier than the lengthwise threads. It will not be easy to tear lengthwise.

COTTON BROADCLOTH

*Denim*—A firm cloth with a twill weave. As the cloth is woven, diagonal lines are formed on the material. Most denims have white crosswise threads. It will need to be cut rather than torn lengthwise.

DENIM

## THINGS TO KNOW ABOUT THE CLOTH YOU BUY

When cloth is woven, one set of threads goes up and down or lengthwise of the cloth. These threads are called *lengthwise grain*.

Now pull away some threads at the end of the cloth. These threads go across the lengthwise threads. If you keep pulling the thread or yarn you'll see that it goes back and forth across the cloth. This is called the filling thread or *crosswise grain* of the cloth.

The tightly woven threads along the sides are called the *selvage*, which means self-edge. The selvage is always the lengthwise edge of the cloth.

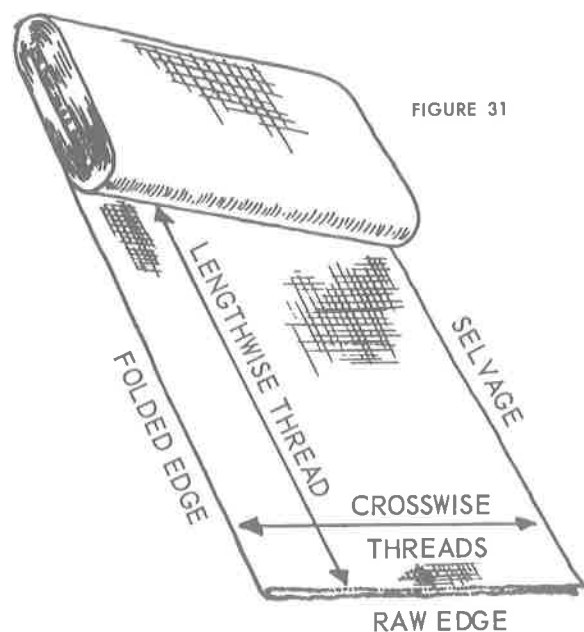


FIGURE 31

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson. Copyright, 1949. McGraw-Hill Book Company.

## PREPARE CLOTH FOR CUTTING

Before you start to cut the cloth, be sure to straighten the uneven ends. To do this, pull a crosswise thread of the cloth and cut along the pulled line. Another way to keep cloth straight for cutting is to clip through the selvage edge and tear across the width.

*On the grain* means that the crosswise threads of the fabric form right angles with the lengthwise threads.



FIGURE 32

Sometimes you need to pull cloth as in Figure 32 to make the crosswise and lengthwise threads lie at right angles.

Printed designs on cloth are not always placed straight with the grain. When you select your fabric, make sure the grainline and design of the fabric are in perfect position.

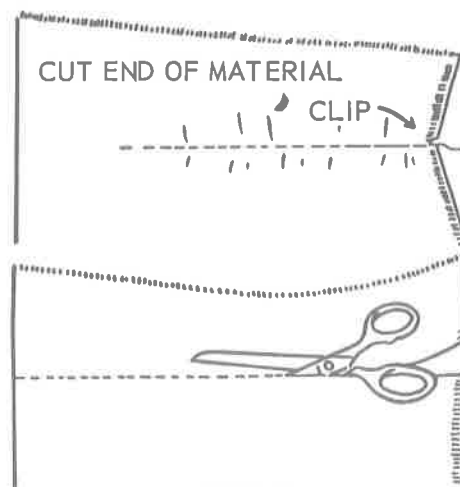


FIGURE 33

# AN EASY-TO-MAKE APRON

You will need:

**¾ yard (27 inches) of plain or printed cloth**  
**1 spool of matching thread**

- Tear off strips of cloth for the drawstrings.
- Press the strips and the cloth for the apron smooth and flat.
- Make a row of stitching ½ inch from raw edge, using seam guide.
- Turn and press a ½-inch fold at each of the torn ends along this row of stitching.
- Turn again and pin and baste a 2-inch hem at each end.
- Stitch hems close to the turned edges.
- Set a seam guide on sewing machine for 1 inch, and machine stitch a row 1 inch from the top.

Two sides of your apron are already finished! That is, if you leave the selvages on your cloth.

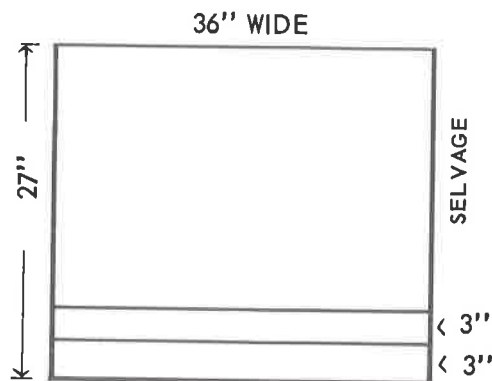


FIGURE 34

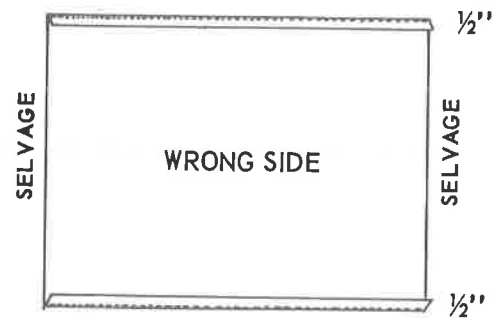


FIGURE 35

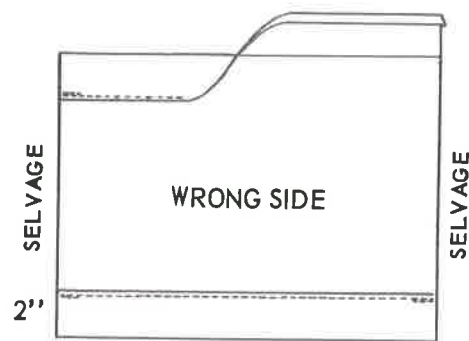


FIGURE 36

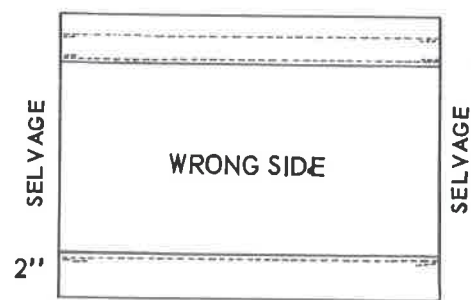


FIGURE 37

**By retracing machine stitching at the beginning and end of each line of stitching, you can snip off threads close to the stitching. No need to tie threads!**

## HOW TO MAKE THE DRAWSTRINGS

- Sew the two 3-inch wide strips of cloth together with a  $\frac{1}{2}$ -inch seam. Press seam open.

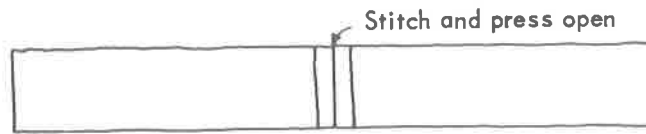


FIGURE 38

- Fold this strip lengthwise as shown below and sew together.

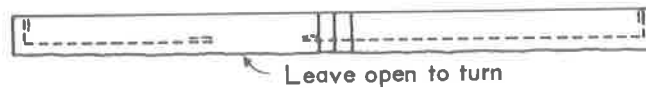


FIGURE 39

- Turn the drawstring right side out. Push the corners out square and press. Sew opening together either by hand or machine.

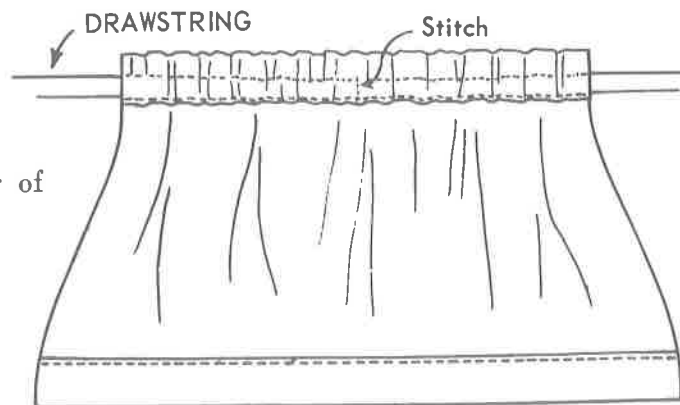


FIGURE 40

## COMPLETE YOUR APRON

- Pull drawstring through the lower half of the top hem of apron using a safety pin to pull it through.

FIGURE 41



- Fasten drawstring in place at center of apron to keep it from pulling out.

- Give your apron a final pressing. Arrange the gathers and wear!

# TO MAKE A LAUNDRY BAG

You will need:

5/8 yard (30 inches) of plain  
or printed cotton  
1 spool of matching thread  
1 wooden clothes hanger



- Bring selvages together with right side inside.

- If necessary, baste a 1/2-inch seam.

- Measure 18 inches from the top corner along the selvages for side opening.

- Set machine guide to 5/8 inch. Stitch a 5/8-inch seam. (See Figure 29 for turning corner.) *Retrace stitching about 1/2 inch at beginning and end of seam.*

- Pin the remaining selvages together and across lower edge to make a bag.

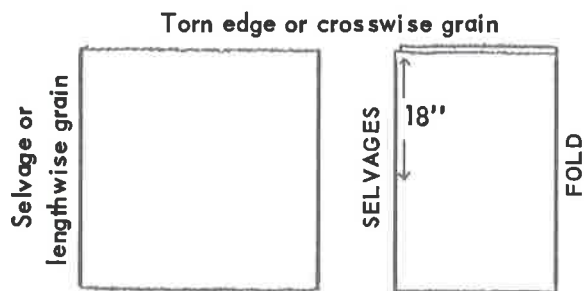


FIGURE 42

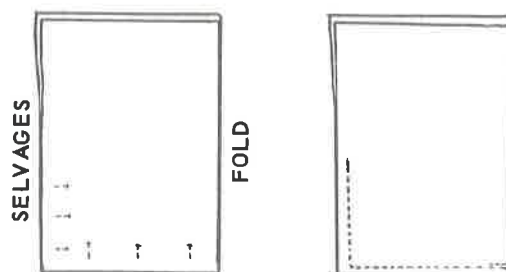


FIGURE 43



- Press side seam open.
- Turn, press and pin a  $\frac{5}{8}$ -inch fold on each side of opening.
- Stitch along selvage edges to hold seam allowances around opening.
- Mark the center of the top edge with pencil. Measure  $\frac{1}{2}$  inch from each side of the center and mark with pencil.

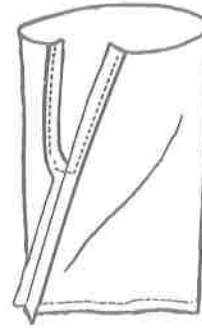


FIGURE 44

- Lay a wooden hanger along top edge of bag with the hanger hook lying on the center mark. Mark around the top curve with pencil, leaving a 1-inch opening for the hanger hook.

- Cut on these lines.
- Pin top seam and, if necessary, baste a  $\frac{1}{2}$ -inch seam.
- Stitch  $\frac{5}{8}$ -inch seam across the top by starting at folded edge of bag and stitching to the center opening for hanger hook. *Retrace at beginning and end of seam.* Repeat on other side of the 1-inch center opening.

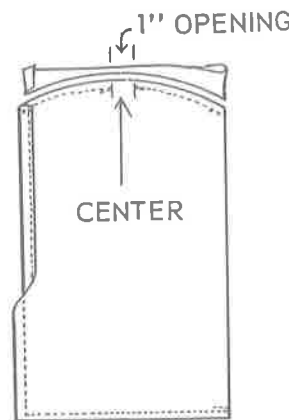
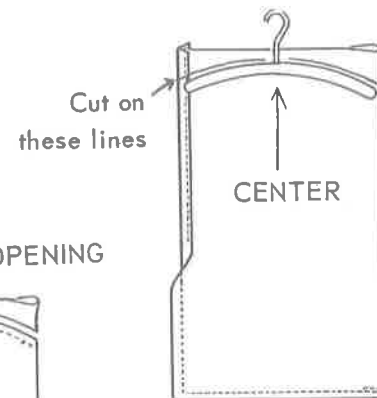


FIGURE 45

- Press open the seam allowances around the hanger hook opening. Reinforce with several rows of machine stitching.

- Reinforce upper and lower ends of side opening with extra stitching or sew in a piece of material ( $1\frac{1}{4}$ -inch square, folded in half). Stitch neatly.

- Remove basting threads. If you have retraced the stitching at the beginning and end of seams, the threads need not be tied. Cut off machine threads close to the stitching.

- Turn right side out. Press and insert hanger.

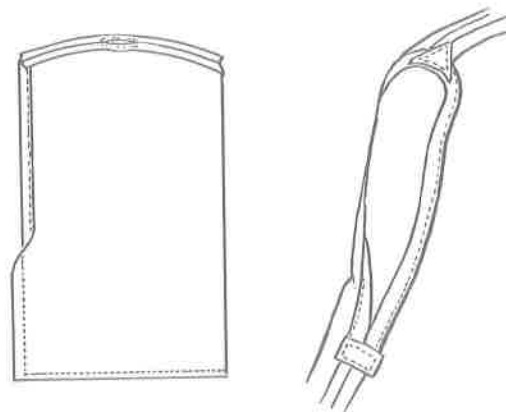


FIGURE 46

# GATHERED SKIRT

If you choose to make a skirt, this is how you can make a gathered skirt on a waistband without a pattern.

## TAKING MEASUREMENTS

To find out how much cloth you need:

- Measure the length of one of your skirts. .... inches
- Add 5 inches (for seams and a 4-inch hem). .... inches
- Total ..... inches
- Multiply this total by 4, or by 3, or by 2, depending on how full you want your skirt to be. These directions are for 4 widths. Your leader will help you make adjustments for a narrower skirt.

## BUYING CLOTH

Choose plain cotton or a print that has no pattern which must lie in a certain direction or which needs to be matched.

You will need:

..... yards of cloth (To find how many yards you will need, you divide the total number of inches by 36—the number of inches in a yard.)

2 spools matching thread

1 spool of white thread No. 20, to be used as bobbin thread for machine gathering.

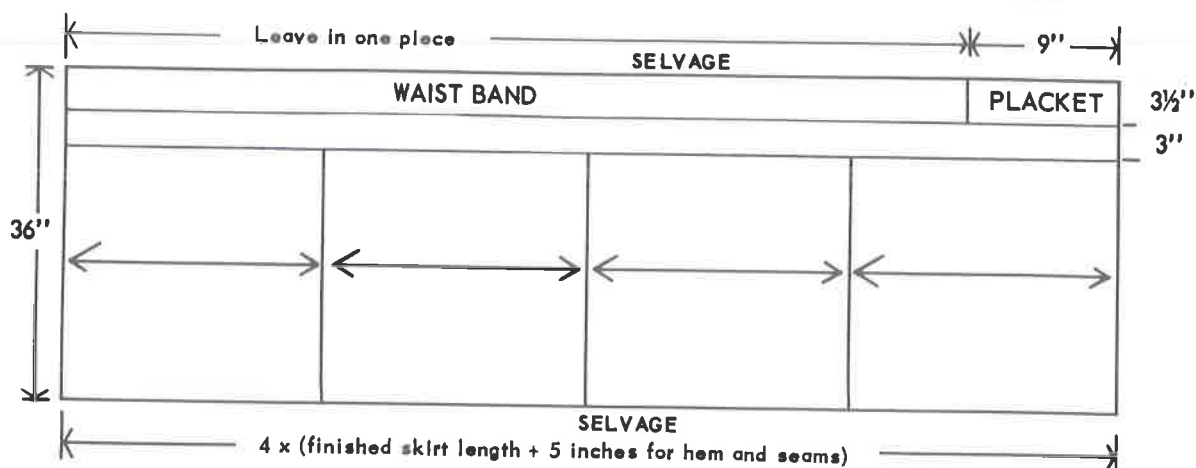


FIGURE 47

## TO PREPARE CLOTH

• Tear off a 3½-inch strip along the selvage the full length of your material. You will use this strip to make the simple placket and the waistband. (Optional: Tear a 3-inch strip to cover machine-stitched hem, page 19.)

- Divide the rest of your material in four equal lengths and tear apart.
- Press all the pieces so they lie flat and straight.
- Remove all loose threads caused by tearing.

• Arrange your pieces as pictured below, with selvages at the side seams when you join the front to back.

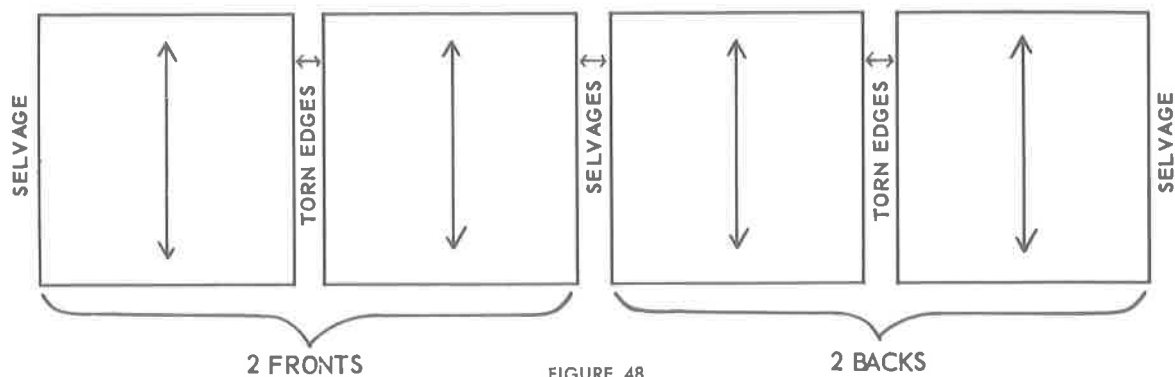


FIGURE 48

• Pin and stitch fronts together with  $\frac{3}{4}$ -inch seam.

• Press seams open.

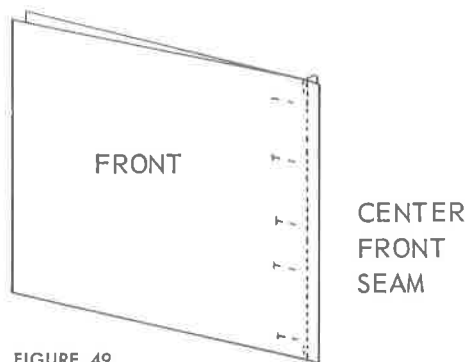


FIGURE 49

• Measure and mark  $7\frac{1}{2}$  inches from the top along the selvage on left side for placket opening.

• Join the front and back skirt sections with  $\frac{3}{4}$ -inch seams.

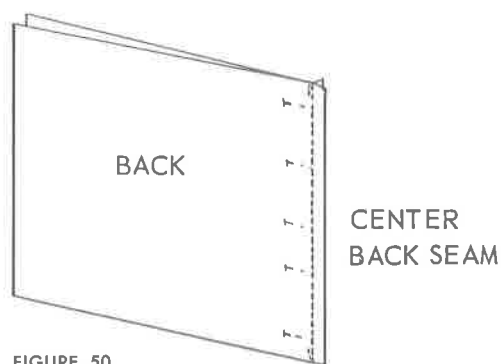


FIGURE 50

• To leave marked seam open for left side opening: On left side of the skirt, begin stitching at the lower edge and end  $7\frac{1}{2}$  inches below waistline. (See Figure 51.) Retrace stitching one inch to prevent ripping.

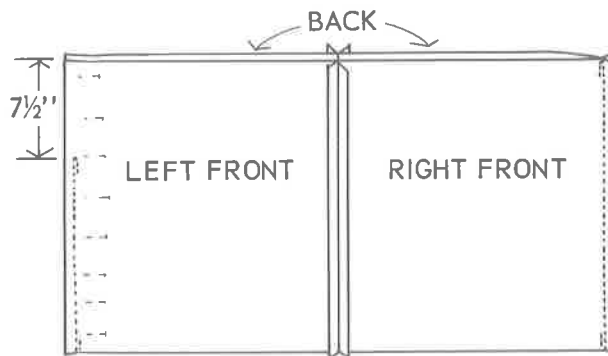


FIGURE 51

• Pin and stitch backs together with  $\frac{3}{4}$ -inch seam.

A simple underlapped placket is a single thickness of matching cloth stitched to the back of the skirt along the left side opening.

## TO MAKE A PLACKET

- Take the 3½-inch wide strip of cloth and cut off a piece 9 inches long on the selvage.

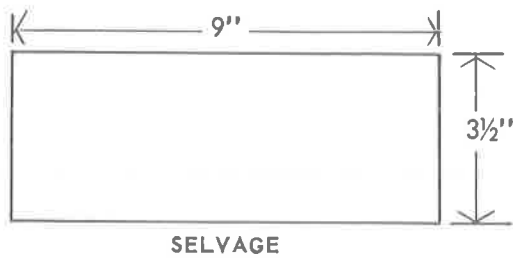


FIGURE 52

- Pin the raw edge of this strip to the back of skirt along the 7½-inch opening. Stitch ½-inch seam.

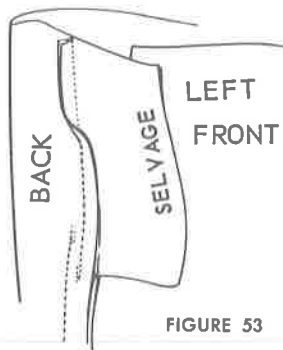


FIGURE 53

- To reinforce the end of the placket, pin the underlap to front seam allowance of skirt and stitch a small triangle with several rows of stitching.

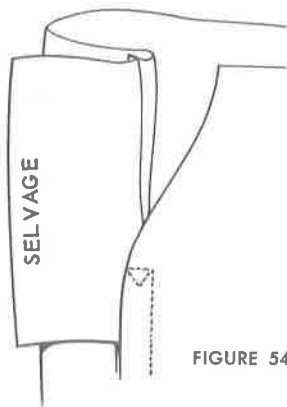


FIGURE 54

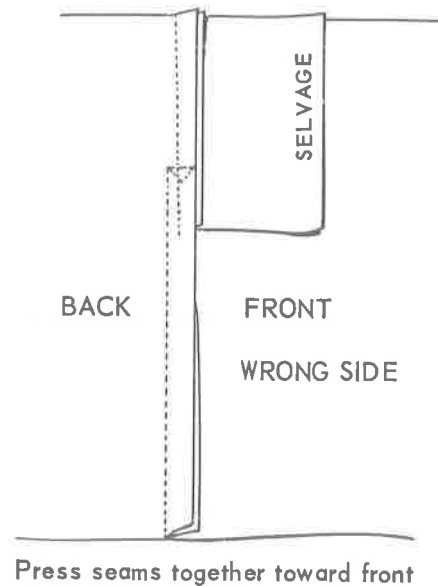


FIGURE 55

- Press seams together toward front (Figure 55).

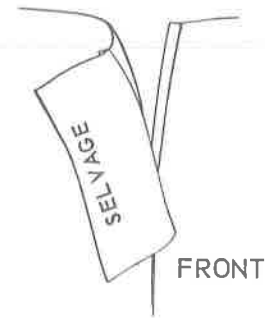


FIGURE 56

- Hem the ¾-inch seam allowance to front of skirt along the placket opening. If the edge of the skirt placket opening is selvage, hem to skirt. If a raw edge, turn under ¼-inch fold, and make the hem. The outer edge of the hem is in line with the side seam.

## TO TURN A HEM

- Stitch by machine  $\frac{1}{2}$  inch from torn edge, using seam guide.
- Turn and press on this line for an even  $\frac{1}{2}$ -inch turn for hem.
- Set your small ruler at 4 inches. Measure and pin a 4-inch hem.
- Press hem edge. Baste, if necessary, close to pressed hem edge.

• To hem by machine, stitch close to turned edge. If your cloth is printed, the stitching will hardly show. You may want to cover this row of machine stitching on the right side with rick-rack or braid or a fold of cloth. In that case, use a long machine stitch to sew your hem. Long stitches will be easy to take out if you later want your skirt longer.

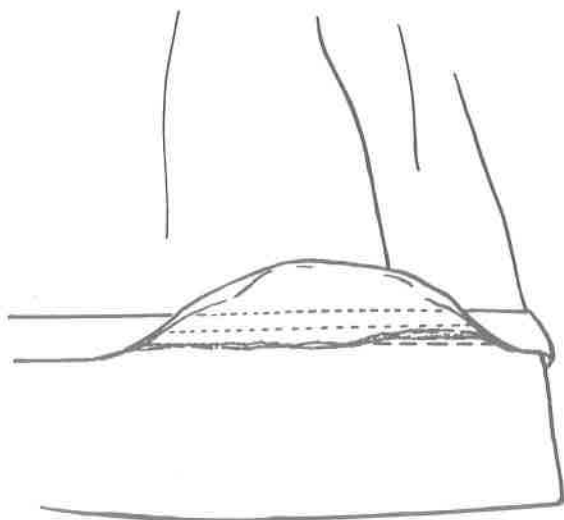


FIGURE 57



## TO COVER MACHINE STITCHED HEM WITH CLOTH

- See optional tear line on page 16. The 3-inch wide strip of cloth should be 1 inch longer than the stitched hemline.
- Stitch the ends of the strip together with a  $\frac{1}{2}$ -inch seam.
- Fold the strip in half lengthwise with right side out.
- Pin raw edges together and machine stitch  $\frac{1}{4}$  inch from edge.
- Using the machine-stitched hemline as a guide, stitch the band to the right side of the skirt with a  $\frac{1}{2}$ -inch seam (Figure 57).
- Press the band toward the hem.

## MACHINE GATHERING TOP OF SKIRT

- Use coarse white No. 20 thread in bobbin and matching thread on top.
- Loosen top tension slightly.
- Adjust the machine for 8 to 10 stitches to the inch.
- Two rows of continuous stitching on each of the front and back sections of the skirt will be easiest to pull up.
- Begin stitching along the seam line and return with a second row of stitching, about  $\frac{1}{8}$  inch above the first row within the seam allowance.

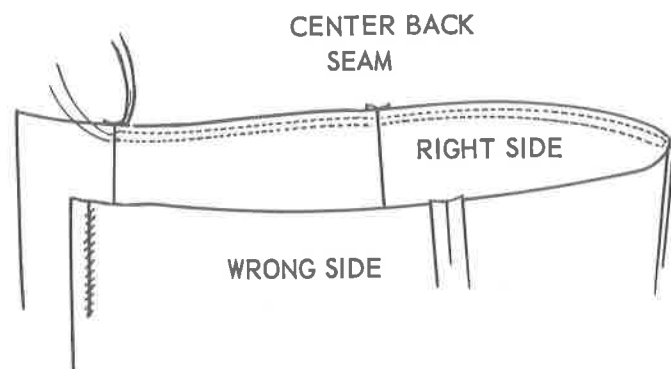


FIGURE 58

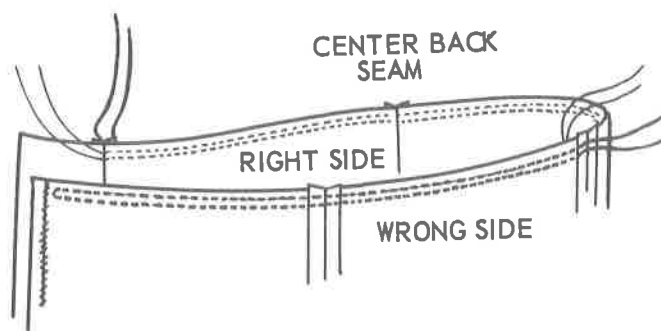


FIGURE 59

- Pull heavy white bobbin threads, to gather as tightly as possible.
- Straighten and stroke gathers. Press gathers between the fingers.

## TO MAKE WAISTBAND

FIGURE 60



- Fold the long 3½-inch wide strip of cloth as shown.
- Mark your waist measurement.
- Add the width of the placket extension and mark.
- Add ½ inch for seam.
- Tear off remaining cloth.
- Stitch a ½-inch seam to finish end.

FIGURE 61



- Turn right side out and stitch selvages together.

FIGURE 62



- Fold waist length in half and crease.

FIGURE 63



- Fold in half again and crease.

FIGURE 64



- Unfold and mark crease lines as shown above.

## TO JOIN WAISTBAND TO SKIRT

- Pin waistband to skirt, matching marks on waistband to seams in skirt, raw edges together.
- Loosen gathers to fit. Pull the upper and lower threads to keep the gathers from slipping.
- Baste a  $\frac{1}{2}$ -inch seam, keeping the raw edges of the skirt and waistband even (Figure 65).
- Stitch a  $\frac{1}{2}$ -inch seam with the gathers on the underside, using seam guide.

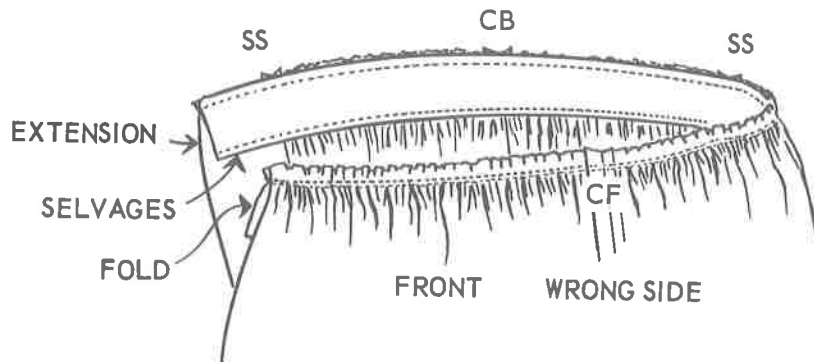


FIGURE 65

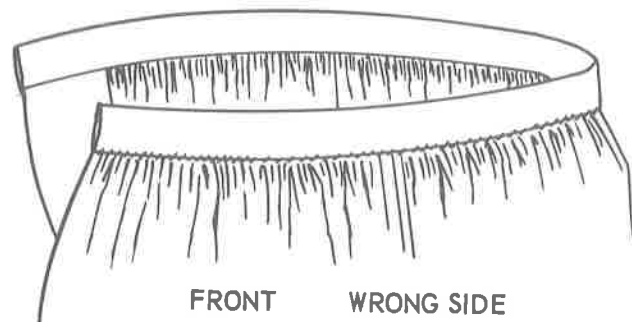


FIGURE 66

- Fold waistband to wrong side and finish by handsewing selvages to seam line (Figure 66).



## SEWING ON HOOKS AND EYES

- Place a hook at the top and one at the bottom of the band. If a third one is needed, place it in the middle.

- Place the ends of the hooks about  $\frac{1}{8}$  inch from the edge of the band. Place the eyes  $\frac{1}{8}$  inch from the line of the placket closing.

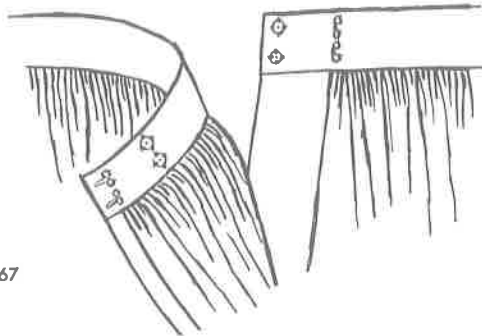


FIGURE 67

- Make three little stitches where the first hook will be placed to anchor the thread. Do not use a knot at the end of the thread.

- Bring the needle up through the ring for the first stitch.

- Sew the hooks on, using the over-and-over stitch. Sew several stitches across the hook end to hold it in place.

- Fasten the threads with several over-and-over stitches.

- Do not break the thread between each hook, but slide the needle between two thicknesses of cloth on to the next hook.

- Pin the band in place to close the placket.

- Place the eye directly under each hook and sew in place with several over-and-over stitches.

- The little hump in the middle of the straight eye is turned up so that the hook can easily catch under it.

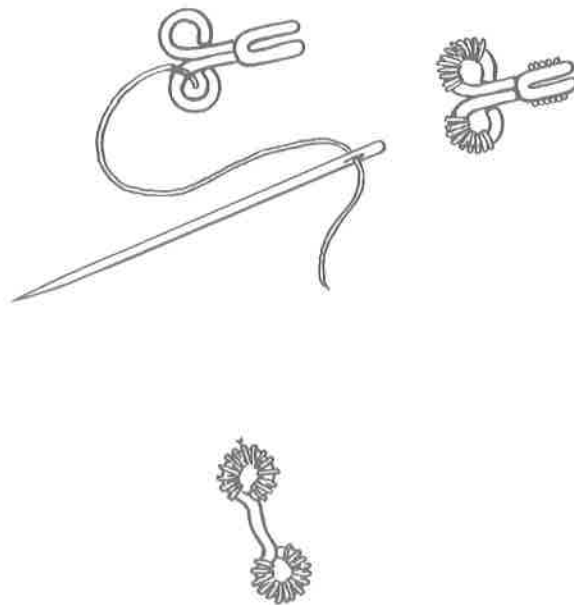


FIGURE 68

## SEWING ON SNAPS

- Place two ball parts of the snaps  $\frac{1}{2}$  inch from the end of the belt underlap.

- Place two snap sockets on the inside of the front band, opposite the ball parts.

- When the ball part of the fastener has been sewed on, rub the ball part with chalk and press the opposite side of the waistband closing against the ball. This will help you to find the correct spot to sew the socket part of the fastener.

BALL PART



SOCKET PART



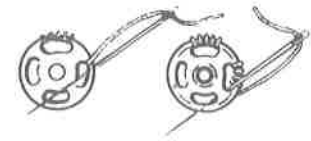
FIGURE 69

- Sew ball parts first.

- Make three little stitches where the first snap will be placed to anchor the thread. Do not make a knot in the thread.

- Bring the needle up through the first hole in the snap.

FIGURE 70



- Sew the snaps on, using the over-and-over stitch, making several stitches through each of the four holes.

- Fasten the thread with two or three back stitches.

# SLEEVELESS BLOUSE

This is how you can make a blouse with no collar and no sleeves.



FIGURE 71



FIGURE 72

Choose a *very* simple pattern (no more than four pattern pieces).

You will need:

A pattern  
Cloth  
Matching thread

## CUTTING AND MARKING

Your leader will show you how to lay the pattern on the cloth and cut it out. She will show you how to mark stitching lines and notches.

To get your cloth ready for cutting, follow directions on page 11.

Your leader will have some patterns to choose from and will help you choose your size.

## ORDER OF WORK IN MAKING A BLOUSE

1. Back and Front Units
2. Shoulder Seams
3. Finish Neck
4. Side Seams and Armhole Edges
5. Hem

### 1. Back and Front Units

- Set a tape machine guide at  $\frac{1}{2}$  inch.
- Stitch the neck and shoulders on both the front and back of blouse. This is called “stay stitching.”
- A line of stitching  $\frac{1}{2}$  inch from raw edge at bottom of blouse front and back will make it ready for the hem turning.
- Stitch in darts. To end darts securely without tying threads, start stitching in the  $\frac{1}{4}$ -inch snip marking the outside edge of dart. Stitch back  $\frac{1}{2}$  inch on folded edge from the point of dart (Figure 75).

### 2. Shoulder Seams

- Pin outside edges of shoulder seams with edges exactly even. Now pin the center.
- Continue pinning to ease in the fullness of the back shoulders to the front shoulders.
- Baste if necessary.
- Stitch a  $\frac{5}{8}$ -inch seam, using seam guide.
- Press seams open.

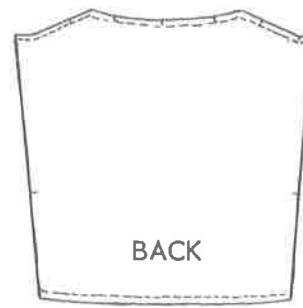


FIGURE 73

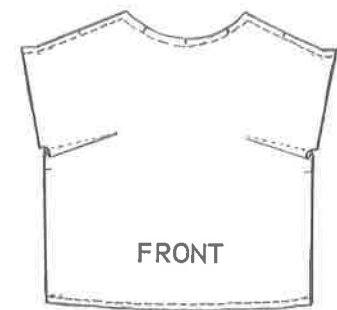


FIGURE 74

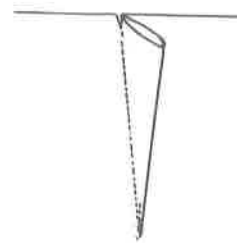


FIGURE 75

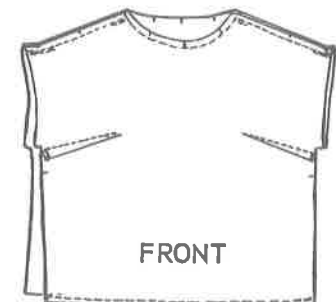


FIGURE 76

### 3. Finish Neck

- Join front to back neck facing at shoulder seams. Machine stitch  $\frac{1}{4}$  inch from edge as shown in Figure 77.

- Press edges to wrong side along stitching and stitch again to hold the turned edge (Figure 78).

- With right sides together, pin facing to neck, matching centers at both front and back and shoulder seams as shown (Figure 79).

- If necessary, pull stay-stitching on blouse to make the facing fit exactly.

- Baste and stitch a  $\frac{5}{8}$ -inch seam. Overlap the stitching an inch at the end of the seam.

- Trim the seam allowance of facing to  $\frac{1}{4}$  inch.

- Trim seam allowance of blouse to  $\frac{3}{8}$  inch.

- Clip the seam about every  $\frac{1}{2}$  inch, almost to the stitching.

- Pull facing up; press seam toward facing.

- Top-stitch close to seam through facing and seam allowances (Figure 80).

- Turn facing to inside; press.

- Tack facing to shoulder seams (Figure 81).

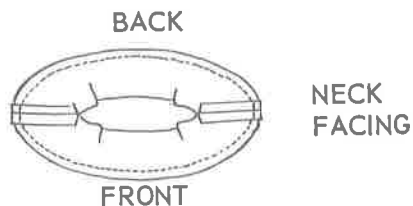


FIGURE 77

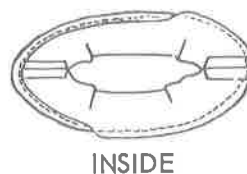


FIGURE 78

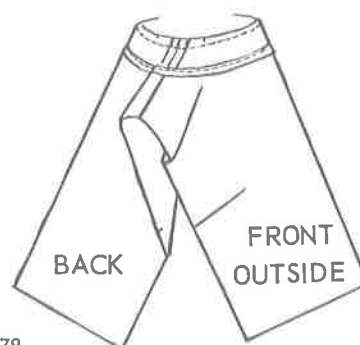


FIGURE 79

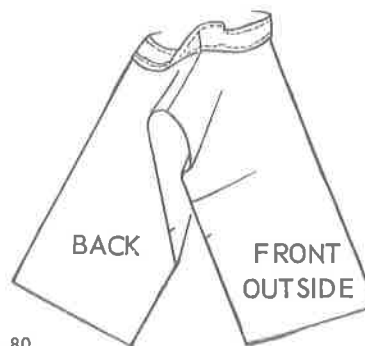


FIGURE 80



FIGURE 81

#### 4. Side Seams and Armhole Edges

- With right sides together, pin front unit to back unit at side seams. Stitch from lower edge of blouse to underarm marking. Retrace stitching to reinforce.

- Press seam open, pressing armhole edge to wrong side, forming hem.

- Stitch hem in place by hand.

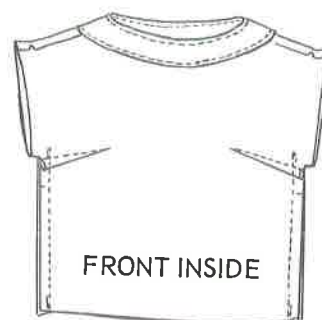


FIGURE 82

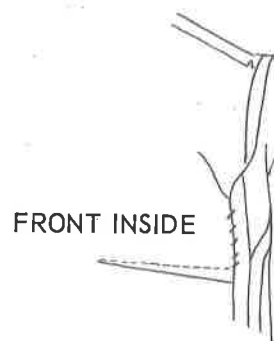


FIGURE 83

#### 5. Hem

- Press  $\frac{1}{2}$  inch on lower edge of blouse to wrong side along the machine stitching.

- Turn this fold once again to wrong side, forming hem. Press. Stitch hem in place by hand or by machine.

You are finished. Press blouse thoroughly and wear!

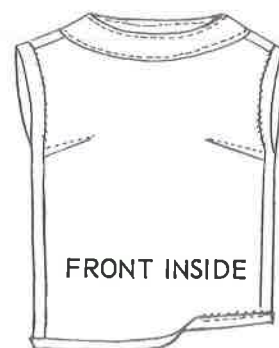


FIGURE 84

Some patterns will have a facing at neck and hems at armholes as we have described. Other patterns may have facings for armholes with hem at neckline. Still other patterns may need a placket opening at the back of neck as shown in "Cotton Separates," page 47.

**COTTON**

**SEPARATES**

# COTTON SEPARATES

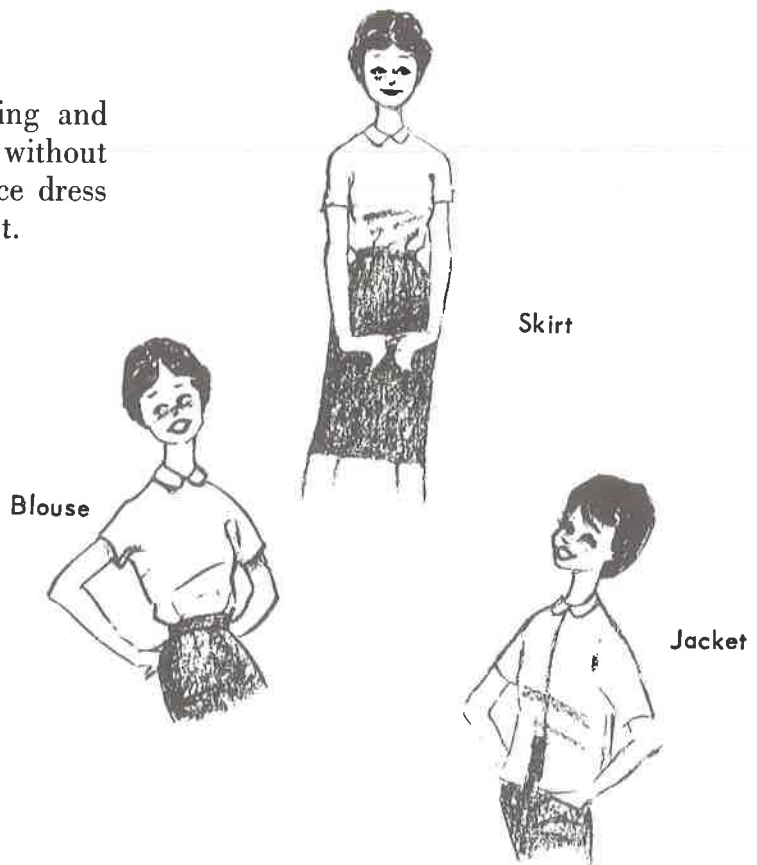


Two-piece dress  
simple jacket

## MAKE ANY TWO

You are ready to make more cotton clothes to practice all you learned in ABC's.

You will learn more about buying and using a pattern to make a blouse without sleeves, a simple skirt, a two-piece dress without sleeves, or a simple jacket.



Blouse

Skirt






Jacket



# WHAT PATTERN TYPE ARE YOU?

Patterns are made for different figure types, based on your height and your body development. The figure types illustrated below are in size 10 or the size nearest 10 in that particular type.

Your figure is probably one of these types. Have your leader or mother help you *decide which type is most like you* before you buy a pattern.

GIRL 7 - 14	CHUB-DEB 8½ - 14½	SUB-TEEN 6S - 14S	TEEN 10 - 16	JUNIOR 9 - 17
28 BUST 24 WAIST 30 HIP 12¼ BACK WAIST LENGTH	31½ BUST 30 WAIST 34½ HIP 12¼ BACK WAIST LENGTH	29 BUST 24 WAIST 32 HIP 13¾ BACK WAIST LENGTH	30 BUST 24 WAIST 32 HIP 13¾ BACK WAIST LENGTH	30½ BUST 23½ WAIST 32½ HIP 15 BACK WAIST LENGTH
				
SIZE 10	SIZE 10½	SIZE 10S	SIZE 10	SIZE 9

GOOD FOR MANY GROWING GIRLS

GOOD FOR GIRLS ON THE CHUBBY SIDE

GOOD FOR GIRLS STILL GROWING BUT BEGINNING TO "SHAPE UP"

GOOD FOR GIRLS WHO ARE MORE DEVELOPED AND TALLER

FOR A GIRL WITH A HIGH, FIRM BUST BUT NOT AS TALL OR LONG-WAISTED AS THE GIRL WHO TAKES A MISSES OR WOMEN'S PATTERN

## LEARN WHAT SIZE PATTERN TO BUY

Your leader will help you take measurements and *decide which size you need*.

# USING YOUR PATTERN

## LEARN TO READ YOUR PATTERN ENVELOPE

Check the view you plan to make.  
 Check the amount of cloth you need.  
 Check the other supplies needed.

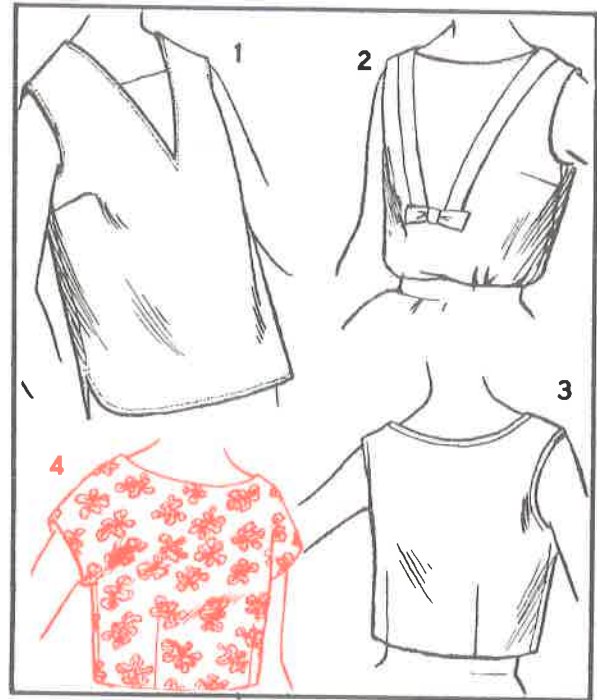


FIGURE 85

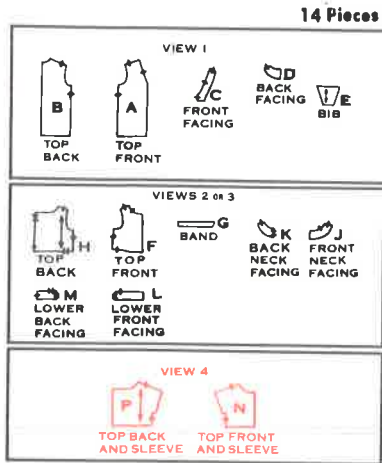


FIGURE 86

## GETTING YOUR PATTERN READY TO USE

Select pieces for the view you are making.  
 Return other pattern pieces to the envelope.  
 Write your name on each pattern piece.  
 Press the pattern pieces flat with a cool iron.

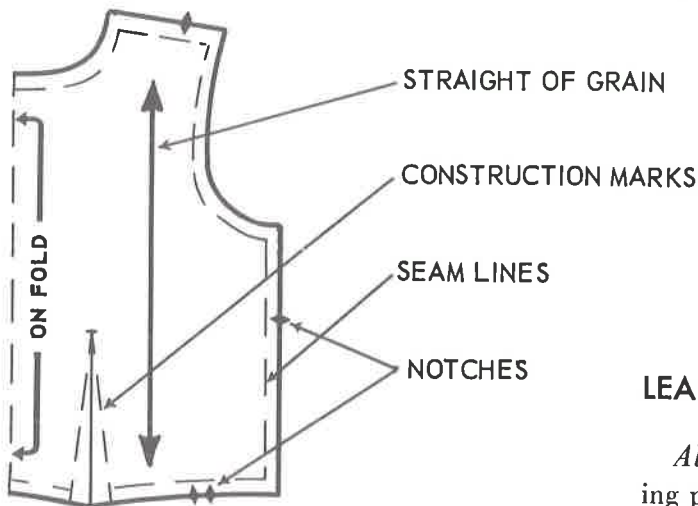


FIGURE 87

## LEARN THE GUIDE MARKS

*Always fold right sides together before laying pattern on cloth for cutting. This makes it easier to mark after cutting.*

## MARKING THE GARMENT

As each piece of the garment is cut, mark notches, darts, and sewing lines.

Mark with  $\frac{1}{4}$ -inch snips:

- a. All notches
- b. Seam edges of darts
- c. Center fronts and center backs

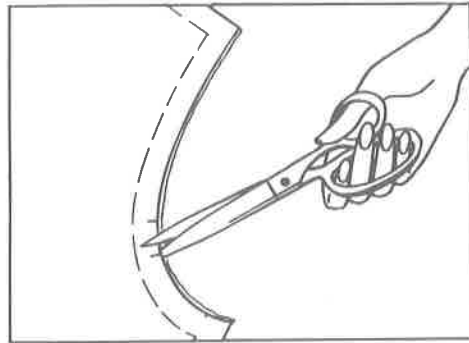


FIGURE 88

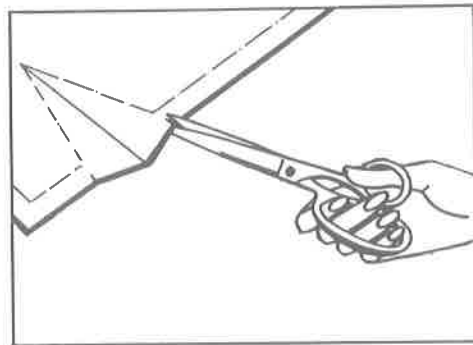


FIGURE 89

## TO MARK SEWING LINES FOR DARTS

- Put a pin straight through pattern and cloth at the point end of the dart.
- On the under side, put a pin at the place where the top pin comes through.
- Remove the pattern.
- Mark sewing lines by placing a ruler along the pin heads and connecting them with a straight chalk line from pin to snipped dart ends (Figure 90).
- Mark a line across the point to make sure that the darts will be stitched the same length (Figure 90).
- It is also helpful to mark a line through the center of the dart. This becomes the fold line you press before sewing the dart (Figure 91).

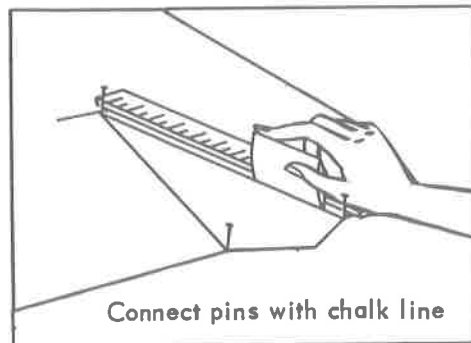


FIGURE 90

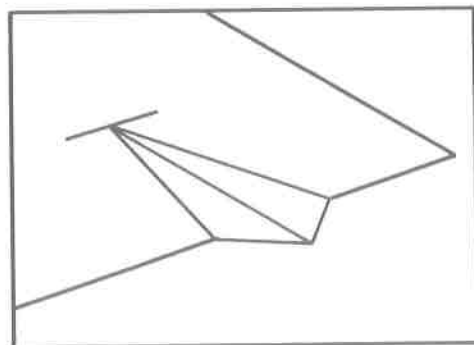


FIGURE 91

# MORE ABOUT CLOTH

In the ABC's you learned to buy cloth that would be easy to use. You know the best cloth is colorfast, will not shrink, and has the crosswise and lengthwise threads at right angles.

Sometimes you have to straighten cloth before using so it will have the crosswise and lengthwise threads at right angles. Check the bolt of fabric to see that the torn edges are both even, and that one is not shorter than the other.

If cotton cloth is not labeled "pre-shrunk," you can shrink it at home.

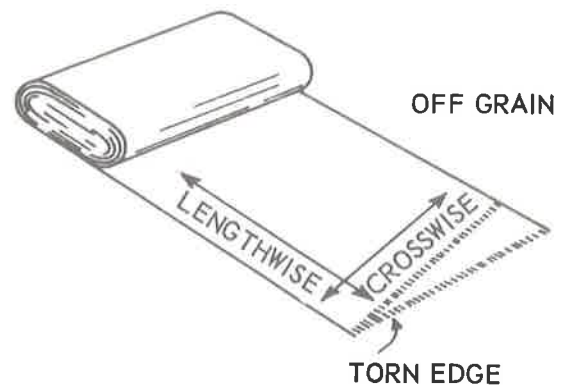


FIGURE 92

## HOW TO SHRINK COTTON CLOTH

- Without unfolding the cloth, soak it in cool water until it is completely wet.
- Drain off water. Press the folded cloth between towels. Do not wring.
- Straighten. Pull wet cloth into shape.
- Let cloth dry until damp enough to iron. Press straight with the grain.



FIGURE 93

## TRUE BIAS

You will learn that "true bias" is found by folding your cloth as shown in Figure 94. A strip cut along this fold will be very stretchy. "True bias" is useful to finish raw seams around necklines or armholes or along any other curved line.

Use the *selvage* wherever possible as a seam finish.

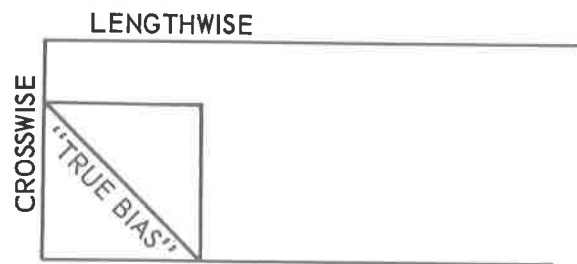


FIGURE 94

## SPECIAL FINISHES

You may want to buy cloth that has a finish that keeps it neat and fresh looking. Some cloth will need very little ironing after washing. Ask the store clerk if the cloth you want to buy has an easy-care finish.

## PRINTED DESIGNS

You may want to avoid a print that has a one-way design. Every piece of your pattern must be cut in the same direction on this cloth (Figure 95).

Avoid buying cloth with the design printed off-grain along the torn edge or crosswise threads (Figure 96).

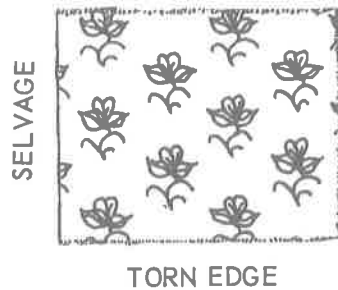


FIGURE 95

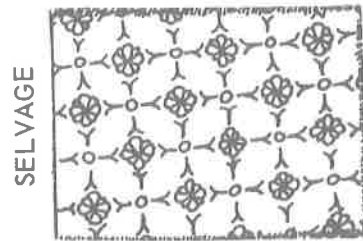
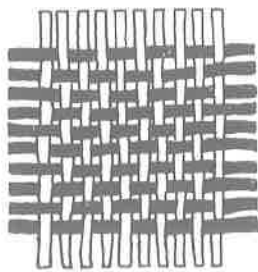


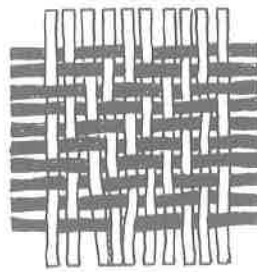
FIGURE 96

## WEAVES



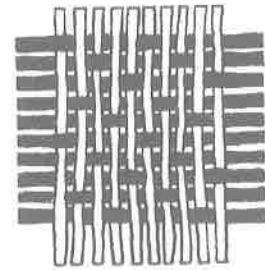
PLAIN WEAVE

CROSSWISE THREADS PASS OVER AND UNDER LENGTHWISE THREADS EVENLY IN BOTH DIRECTIONS



TWILL WEAVE

A VARIATION THAT FORMS DIAGONAL LINES



SATIN WEAVE

A VARIATION THAT GIVES CLOTH A SMOOTH, SHINY LOOK BECAUSE OF THE LONG FLOATING THREADS LEFT ON THE SURFACE

Learn to recognize the weave of the cotton you buy for your separates.

# SIMPLE SKIRTS

For full, gathered

follow directions in ABC's



For slim

or gored



add extension plackets at *both side seams*  
and PRESTO! — False pockets!  
*No zipper needed!*

## FALSE POCKETS

- Two shorter plackets at both side seams give you room to get into your skirt and will look like side-seam pockets.

- Pin and baste a strip of cloth 4 inches wide and  $6\frac{1}{2}$  inches long to each side of skirt back with right sides together.

- Stitch together with  $\frac{1}{2}$ -inch seams (Figure 97).

- Turn plackets and press as in Figure 98.

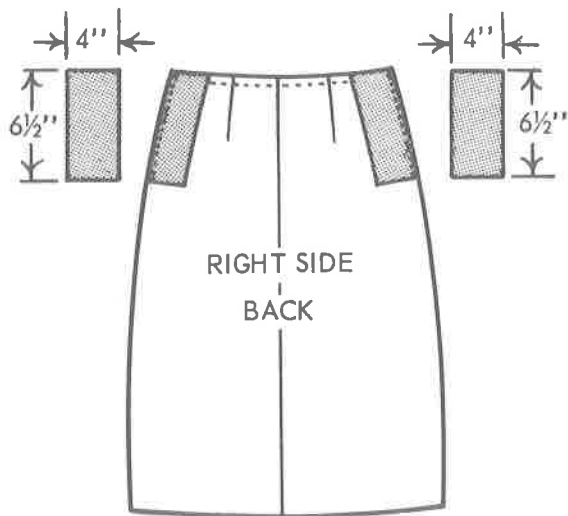


FIGURE 97

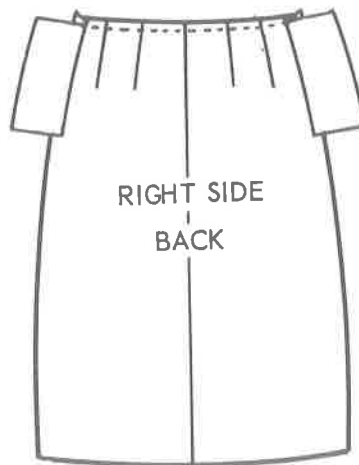


FIGURE 98

- With bias tape cover the raw edges on each side of the skirt front from waistline down 6½ inches (Figure 99).

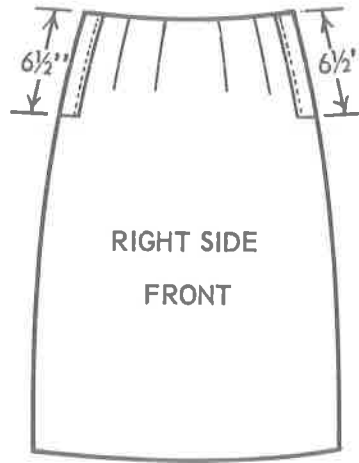


FIGURE 99

- Pin front and back units, with right sides together, matching edges and notches.

- Stitch a 5/8-inch seam from bottom to 5½ inches from top of skirt.

- Stitch a small triangle across seam allowances to reinforce end of plackets (Figure 100).

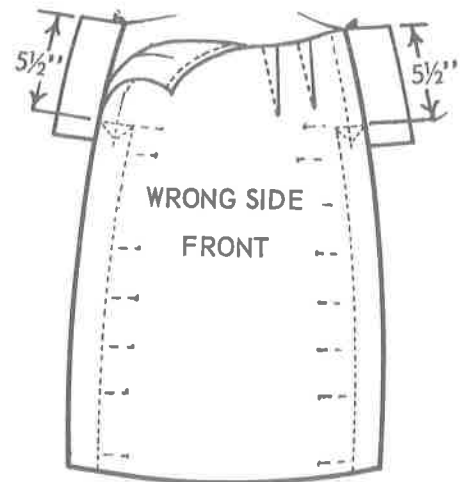


FIGURE 100



• Now press the placket extensions and side seams together toward front of skirt (Figure 101).

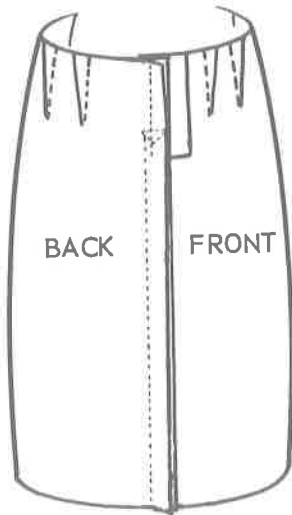


FIGURE 101

## WAISTBAND

Fit and finish the waistband for front of skirt. Notice that the back waistband extends across the two placket extensions as in Figure 103.

• Hand hem the bias taped edge to front of skirt as in Figure 102.

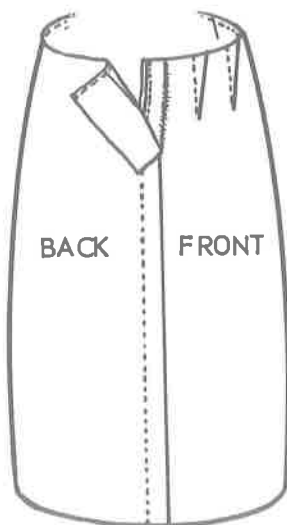
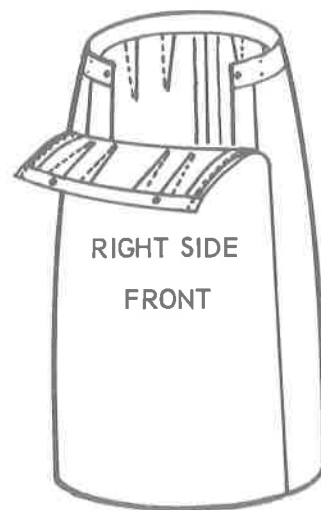


FIGURE 102



The finished skirt

FIGURE 103—THE FINISHED SKIRT

## CURVED HEMS

If your skirt is a four-gored skirt with pattern pieces that look like this



the hem will be curved and not straight on the crosswise grain line.

- Turn up hem the correct length (Figure 104).



FIGURE 104

- Fold the hem on the line of pins which were put into skirt when it was marked for the correct length.

- At each pin, place another pin that is perpendicular to the fold (Figure 105).

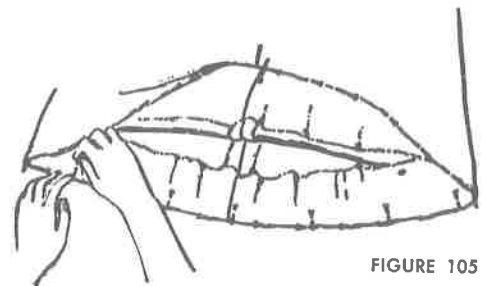


FIGURE 105

- Baste  $\frac{1}{4}$  inch from the folded edge of the hem (Figure 106).

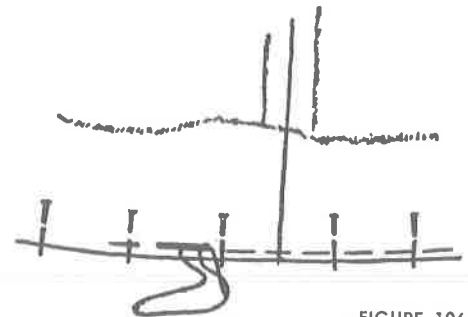


FIGURE 106

- Place the edge of a hem guide on the folded edge of the skirt. Mark the width of the hem with pins or a pencil (Figure 107).

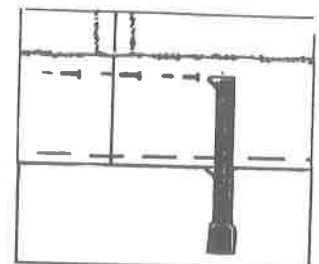


FIGURE 107

- Cut along this line of marks (Figure 108).

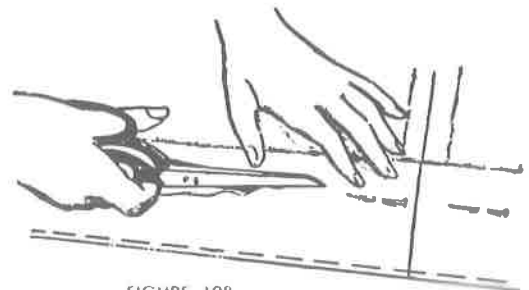


FIGURE 108

Figures 105 and 106  
By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949 McGraw Hill Book Company.

- Using your seam guide, make a row of machine stitching  $\frac{1}{2}$  inch from the raw edge of the hem.

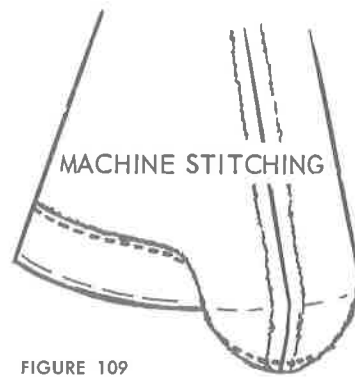


FIGURE 109

- If there is fullness at the top of the hem, make small gathers by pulling the stitching (Figure 110) so that the top edge fits the skirt smoothly but loosely.

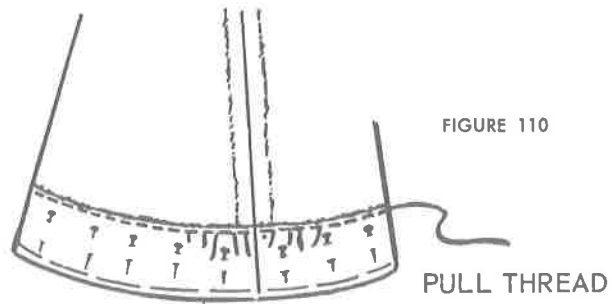


FIGURE 110

- Press as much fullness out of the hem top as possible (Figure 111). Press from the hem line toward the top of the garment, *never around the edge*.

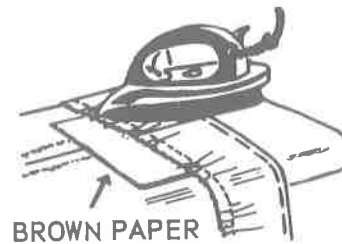


FIGURE 111

- Turn the raw edge of the hem under on this machine-stitched line.

- Pin the hem to the skirt with the pins perpendicular to the edge of the hem. The first pins should be placed at the side seams and center front and center back of the skirt.

- Baste the hem near the turned edge and remove the pins.

## REMOVE BASTINGS

To remove basting stitches, cut the thread every two or three inches, as shown in Figure 112. Then pull out the short threads, as shown in Figure 113.

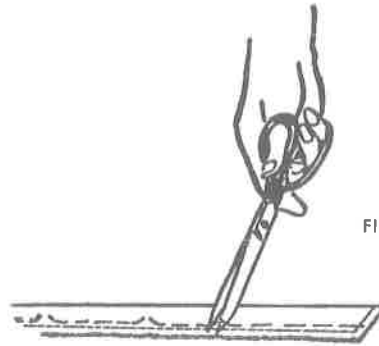


FIGURE 112

## HAND HEMMING

A well-sewn hem will hardly be seen on the right side. Make the stitches about  $\frac{1}{2}$  inch apart, picking up one or two threads of the skirt. Hemming stitches should be a little loose. If they are drawn tight, a puckered line shows.

Start and end with several small stitches taken over each other through the hem fold. Start and end the hemming about every 12 inches. This makes it easy to keep the hem in repair.

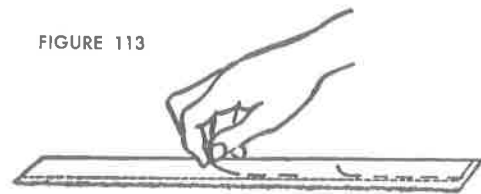


FIGURE 113

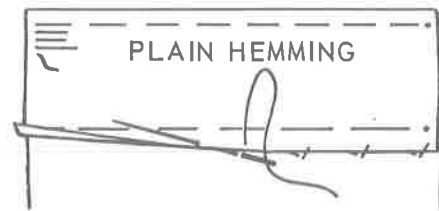


FIGURE 114

## SEWING ON BUTTONS

You may want to fasten your waistband with a button, as in Figure 115. Choose a flat two- or four-hole button.

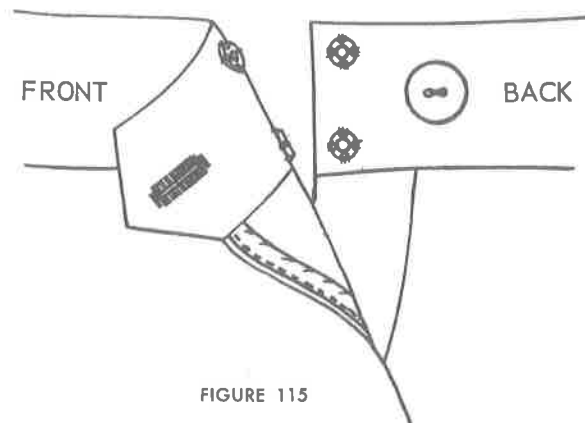


FIGURE 115

Figures 112 and 113  
By permission from *HOW YOU LOOK AND DRESS*, by B. Carson.  
Copyright, 1949. McGraw-Hill Book Company.

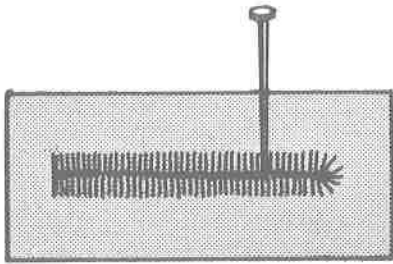


FIGURE 116

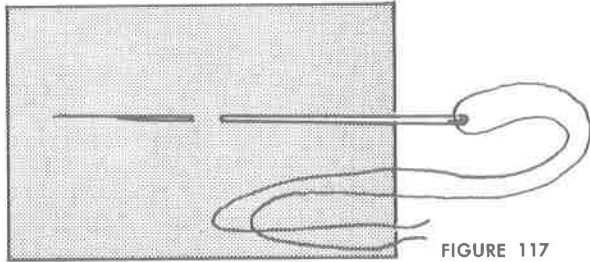


FIGURE 117

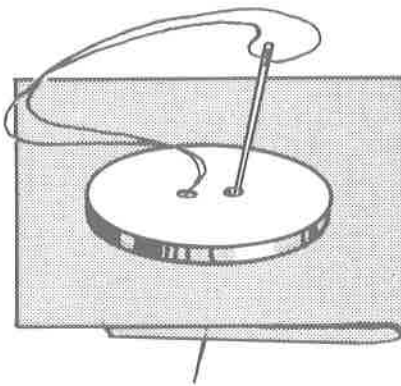


FIGURE 118

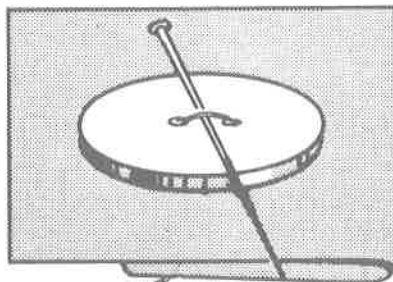


FIGURE 119

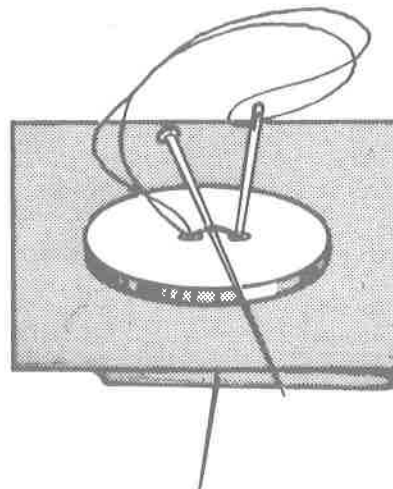


FIGURE 120

Mark the place for the button with a pin stuck through the finished buttonhole. The center of the button usually comes about  $\frac{1}{4}$  inch back from the edge of the buttonhole, as shown in Figure 116.

Use a double thread so that you will not need to make so many stitches. Fasten the thread by taking several small stitches on the right side where the button is to be placed (Figure 117).

Put the needle through one hole in the button, back through the other hole, and through the cloth onto the wrong side (Figure 118).

Place a pin under this stitch. Sew over the pin and down through the cloth three or four times (Figures 119 and 120).

Bring the needle up through one hole of the button and down through the second, but not through the cloth.

Remove the pin. Pull up the button as far as the slack thread will let it come.

Wrap the thread from the needle around this slack thread several times without putting the needle through the cloth. This is called making a "shank" for the button. Bring the needle to the wrong side, putting it through the cloth close to the shank. Take three little stitches on the wrong side in the same place to fasten the thread (Figure 121).

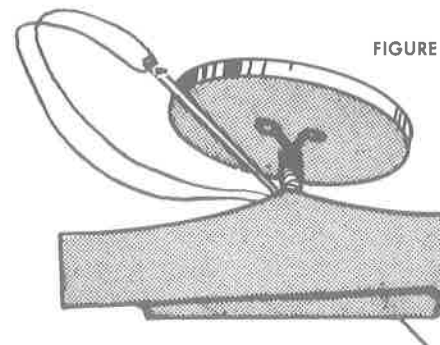


FIGURE 121

If you choose a simple blouse without sleeves that needs no neck placket and has no collar, follow directions on pages 25–28 in ABC's.



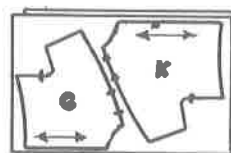
Or, you may choose one that has curved cap sleeves. See page 45 to reinforce.



Or, one that has a collar. See page 46 for directions.



Or, one that has need for a neck-placket opening. See page 47 for a way to use the selvages for your placket.



## SHOULDER SEAMS

You will notice that the back shoulder length is sometimes almost one-half inch longer than the front (Figure 122). This extra amount is held in as fullness to allow room for movement across the back.

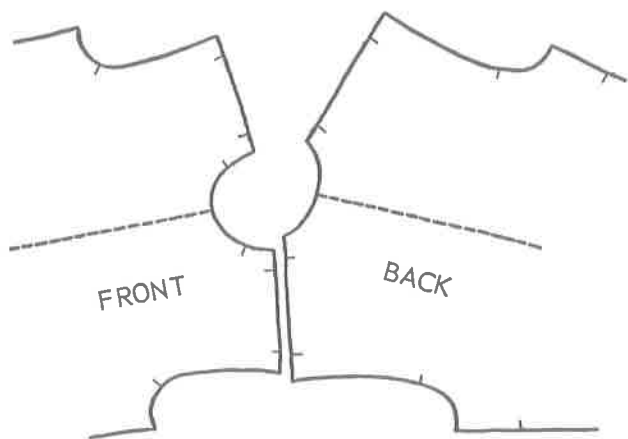


FIGURE 122

By permission from *HOW YOU LOOK AND DRESS*, by B. Carson. Copyright, 1949. McGraw-Hill Book Company.

- Pin the shoulder back and front together by matching neck and armhole edges and notches.

- Continue to pin, dividing the fullness, as shown in Figure 123.

- Then baste near the seam line, holding the fuller side on top, and easing in the fullness as you baste.

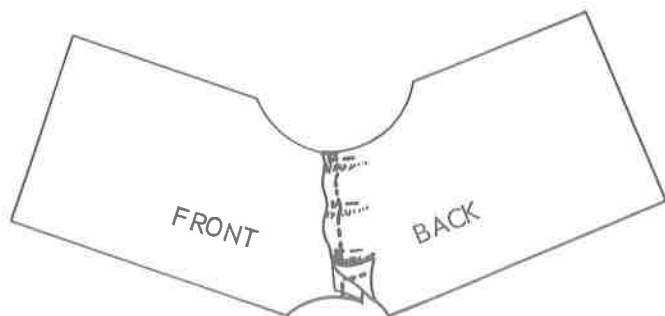


FIGURE 123

## HOW TO REINFORCE A CURVED CAP SLEEVE

To reinforce the curve at the underarm of a blouse or jacket, baste center of a 1¼-inch wide bias strip of fabric or ribbon seam binding along the curve of the seam on *wrong side*. On *outside* stitch close to each side of the seam (Figure 125).

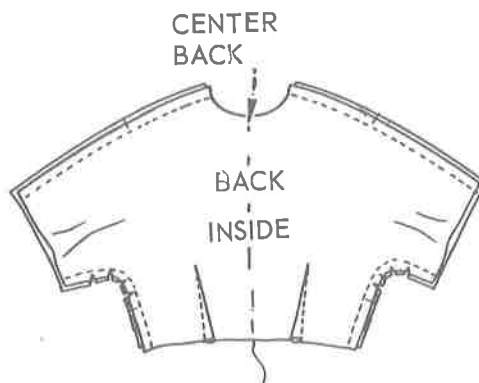


FIGURE 124



FIGURE 125

## TO MAKE A COLLAR

- With right sides together, pin the top and under parts of the collar together.
- Baste  $\frac{1}{2}$  inch from edge around the outer edges and stitch on seam line.

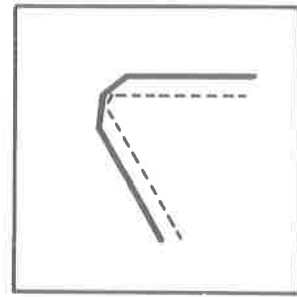


FIGURE 126

## TO TRIM SEAM TO REMOVE THE BULK

- Trim the seam to  $\frac{1}{4}$  inch.
- Clip the corners of pointed collars (Figures 126 and 127).

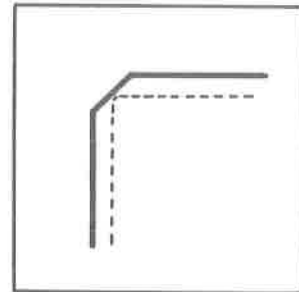


FIGURE 127

## TO COMPLETE COLLAR UNIT

- Turn collar right side out.
- Press on underside.
- Be certain stitching line is at the outside edge of collar.
- If there are two collar sections, hand sew them together at the center front (Figure 128).
- Stay-stitch the inside curve  $\frac{1}{2}$  inch from raw edges (Figure 129).
- Clip the collar edge almost to the stay-stitching.

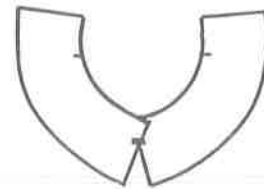


FIGURE 128

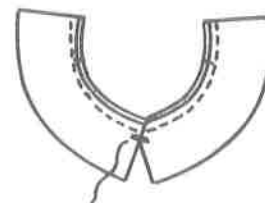


FIGURE 129

## TO PIN COLLAR AT NECK EDGE

- Clip the blouse neck edge almost to the stay-stitching.
- On outside, pin collar to neck edge, matching notches and center front and center back.
- Machine baste  $\frac{1}{2}$  inch from edge (Figure 130).



FIGURE 130



## TO FINISH RAW EDGES

Follow the directions enclosed with your pattern to finish the raw edges with a facing.

Or, cover the raw edges with bias tape or a

bias strip cut from your cloth. Your leader will show you how to press the bias in a curve before you sew it to the neckline.

## PLACKET FOR NECK OPENING

You can use the selvages instead of making a placket for the back neck opening of your blouse.



FIGURE 131

## CUTTING

For a blouse like Figure 131, cut the back along selvages (Figure 132).

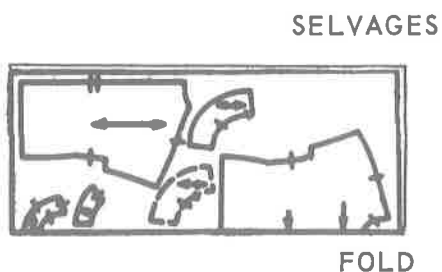


FIGURE 132

## REINFORCING

Reinforce the end of the opening by stitching a piece of selvaige across the seam allowances (Figure 133).

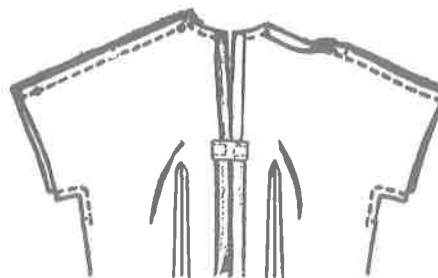


FIGURE 133

## PRESSING WITH A REGULAR OR STEAM IRON

When pressing on the wrong side with a regular iron, moisten your cloth with a sponge, or press through a dampened cloth. A steam iron can be used directly on the dry cloth.

Underpressing is done on the wrong side of the garment to open the seams and press the darts. The point of the iron goes exactly along the line of stitching (Figure 134).



FIGURE 134

Where cloth might show a ridge on the right side, cut a strip of wrapping paper and slip it under the seam allowance before pressing flat (Figure 135).



FIGURE 135

### DIRECTIONS TO PRESS

Underarm dart—fold downward (Figure 136).



FIGURE 136

Waistline dart—fold toward center (Figure 137).

Side waist seam—open from underarm to waist.

Side skirt seam—open from hem to waistline.



FIGURE 137

# DO CARE FOR YOUR CLOTHES

Uncrowd your closet.



Keep your clothes hung properly on hangers.  
Fold sweaters neatly in dresser drawers.



Keep all buttons and fasteners sewn on firmly.



Keep your clothes clean and pressed—  
ready to wear when you  
want them.



Proper care of your clothes makes a big difference in how you look!

