Fashion Forward

Sewing Project Activity Guide
Thank you for helping young people develop and share their creative abilities in the sewing and textiles area. Your interest, enthusiasm, and time will help to make these experiences positive and successful.

By completing the activities in this guide, youth will:

- Gain project knowledge and skills related to beginning construction and care of textile items;
- Gain knowledge related to apparel and textile industry careers;
- Gain knowledge of technology use in the apparel and textile industry; and
- Learn how to apply their newly gained knowledge and skill to provide service to individuals and community support groups.

Sewing Expressions Series

There are three youth guides in this series. The guides include sections on creating, caring, teaching, futuring, and serving. The creating section is designed to assist youth in gaining experience in sewing; the maintaining section provides an opportunity for youth to experience caring for textile items; teaching provides experience in technology applications in the apparel and textile industry; futuring provides experiences to give participants a sampling of potential careers; and serving provides youth an opportunity to use the knowledge and skills they have experienced to help others. Participants may work at the level most appropriate for them no matter what their age.

The activities are designed to meet the Family and Consumer Sciences Education National Educational Standards for Textiles and Apparel. The “Success Indicator” listed for each activity is an excellent way to evaluate the youth’s success.

In each activity the young person has an opportunity to learn by doing before being told or shown how. Your challenge as a project helper is to “sit on your hands” while the youth explores and learns, even when things don’t seem to work the way you expected. Listen to the youth as they consider the questions and draw conclusions. At times the activity may call for you to be a resource person for content or ideas.

The fourth publication in this series, Group Activity Helper’s Guide, provides additional learn-by-doing activities that can be adapted for families, classrooms, after school programs, or other groups. You will find helpful hints about characteristics of youth, life skill development, teaching experientially, as well as club meeting ideas.

Acknowledgements

2004 Sewing Design Team: This rewrite of the four sewing and textile guides was accomplished by the 4-H Sewing and Textiles Design Team comprised of Karen Biers, UT; Coordinator; Curtia Lee, UT; Liaison; Sharlene Wolfinen, ID; Ronda Olson, UT; Debra Proctor, UT; Tara Andrews, MT; Bernice Mason, MT; Kim M. Monk, ID; Stephanie Morsch, CO; Lynda Parson, NE; Ann A. Berry, LA; Bridgette Sloan, OH; Suzie Brown, NE; Mary Forster, OH; Ila Erickson, 4-H Youth Representative.

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Sewing Project Online Website

The 4-H clothing and textiles website serves as a supplement to this project. Visit www.4-H.org/curriculum/sewing.

Your Role

- Become familiar with the material in this activity guide and the Helper's Guide.
- Support youth in their efforts to set goals and complete each achievement program.
- Serve as a resource person to help connect youth with the community, resource materials and others who are knowledgeable about the project.
- Help youth learn to evaluate their work and progress.
- Encourage the use of the experiential learning cycle.

Many techniques used in sewing are appropriate for this project. There is NOT a 4-H way of construction. Youth need to be able to communicate why an application was used and to understand that other techniques may also be appropriate, depending upon the fabric, pattern and equipment.

As you can see, the youth first attempt the activity without assistance. After the youth do as much as they can by themselves or meet together and discuss: What did they do? What was important about what they did? How does what they did relate to their lives? And finally, in the future how might they use the life and project skills practiced? Sample questions are included following each experience. Your ability to ask additional thought-provoking questions and to clarify and expand participant ideas will add to the educational experience.
Under Construction
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  Get to Know Your Machine
  Threading Your Way
  Serge the Super Highway
  On the Straight
  To Ravel or Not to Ravel
  How Do You Measure Up?
  Pattern Particulars
  Curves Ahead
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  Sort It Out
  Spot Check
Chapter 3: Teching
  Sewing Techie Savvy
Chapter 4: Futuring
  Fiber Detective
Chapter 5: Serving
  Bags to Share

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  "Out"rageous
  Tailored Treasures
  Embellish Your Ensembles
  Stretchables
  Follow the Weaving Pattern
  Ultimate Makeover—
  Bedroom Edition
Chapter 2: Maintaining
  Hold the Color, but Take
  the Wrinkles
Chapter 3: Teching
  Check It Out!
  Print Fabric, Not Paper
Chapter 4: Futuring
  Designing Your Future
Chapter 5: Serving
  Style is on Parade!
  Share Some Warmth

Sewing Helper's Guide
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Developing Life Skills
Teaching and Learning Experientially
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  Sewing Skill/Action Exercise
  Fabric Scavenger Hunt
  Conducting a Sewing Quiz Bowl
  Tic Tac Sew
Chapter 2: Embellishments
  Fiber Bingo
  How Fast Can You Get Wet?
  Fun with Sewing Pyramid
Chapter 3: Weaving Patterns
  Bust Your Buttons
  Be a Wise Judge
  Experimenting with Textiles
  Clothing Exchange
  The Laundry Game
  Sewing Project Meeting Ideas
  Sewing Expressions Answer Key

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Welcome to Fashion Forward

Fashion Forward is Level 2, Intermediate, of the Sewing Expressions series. Sewing Expressions offers you challenges and opportunities to explore a wide range of activities in the sewing and textiles areas. You’ll have fun expanding your interests and working individually or in groups to complete activities and projects.

An achievement program is included to guide your efforts and provide you an opportunity to be recognized for meeting your goals.

Sewing Expressions is divided into three project levels including Level 1, Beginner, Under Construction; Level 2, Intermediate, Fashion Forward; Level 3, Advanced, Refine Design.

Sewing Project Guidelines

- Do at least seven Fashion Forward activities and/or More Challenges each year.
- Complete this project level within three years.
- Keep the planning guide up to date by setting project goals and recording highlights.

Fashion Forward Youth Activity Guide

The activities will challenge you to explore areas of the project you perhaps haven’t experienced before. Do your best to complete each activity and answer the questions. Work with your helper to complete each learning experience. You may need additional resources to do some of the activities. Sewing magazines, books, videotapes, Internet sites, and information from fabric stores and manufacturers are good sources. The library will also have resources to help you. Supplemental and reference materials for the Sewing and Textiles project can be found on the Sewing Project Online website at www.4-H.org/curriculum/sewing. Remember, this is your own personal project activity guide. As you complete the activities, answer the questions, and record your project highlights, you’ll realize how much you have accomplished in the project. Have fun!

Your Project Helper

The choice is yours! The person you choose to be your project helper needs to be willing to support your efforts to complete Fashion Forward. Your helper will meet with you to help you set goals, plan activities, suggest resources, talk over each activity and date and initial your achievement program each time you have completed an activity. Write the name, and phone number and email address of your helper here.

Helper’s name: ____________________________
Phone: ____________________________
E-mail: ____________________________
### My Project Goals

1. 
   
2. 
   
3. 

### Project Highlights

Your sewing experiences are worth remembering! Write down the important and exciting things you do and learn, along with the date.

<table>
<thead>
<tr>
<th>Fashion Forward</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify three methods of fabric construction</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify natural and man-made fibers</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify two types of fabric coloration</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Make a patch pocket</td>
<td>1 2 3</td>
<td>1 2 3</td>
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<tr>
<td>Insert a lapped zipper</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Sew buttonholes</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Identify fit and design case</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Sew three different seam finishes</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Use three pressing tools</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Thread a serger</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Read International Care Symbols</td>
<td>1 2 3</td>
<td>1 2 3</td>
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<tr>
<td>Describe the purpose of three different laundry products</td>
<td>1 2 3</td>
<td>1 2 3</td>
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<tr>
<td>Identify advantages and disadvantages of electronic fabric purchase</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Set a price for textile products</td>
<td>1 2 3</td>
<td>1 2 3</td>
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<tr>
<td>Plan and organize a community service project</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>
To Complete
1. Do at least seven of the required and optional activities each project year.
2. Complete at least 21 activities/experiences/challenges within three years to complete this level.
3. Have your project helper’s date and initial each activity as you complete it.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Date completed</th>
<th>Helper’s initials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 1: Creating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric Construction Facts</td>
<td></td>
<td></td>
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<td>Taming the Serger</td>
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<td><strong>Chapter 2: Maintaining</strong></td>
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<tr>
<td><strong>Chapter 4: Futuring</strong></td>
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<tr>
<td>Sewing Business Cents</td>
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<tr>
<td><strong>Chapter 5: Serving</strong></td>
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<td></td>
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<tr>
<td>Sharing Polar Fleece Fun</td>
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</tbody>
</table>

Optional activities are included under the “More Challenges” heading. Select and complete any of them. Record the activity and date below and have your helper, leader, or parent initial each one. If you’ve thought of some not listed, write those in too.

<table>
<thead>
<tr>
<th>Page</th>
<th>Activity number</th>
<th>Date completed</th>
<th>Helper’s initials</th>
</tr>
</thead>
</table>

Describe your own activity here:

Date  Helper’s initials

Describe your own activity here:

Date  Helper’s initials
Fashion Forward
Completion Certificate

I certify that

____________________________________________________________________

has completed all the requirements in the Fashion Forward Achievement Program.

Helper’s signature ____________________________

Date ____________________________

Pin-Up: Attach a photo of you and your project here.
Chapter II Creating Fabric Construction Facts

The fabric store is full of different fabrics. Which fabric should you choose for your next project? The success of your projects depends a great deal on selecting the right fabric for each project. As a beginning sewer you may have selected a woven fabric for your early projects. As you continue your sewing experiences, you may want to try using knit fabrics. Selecting the right fabric for a sewing project takes a little practice. Refer to the back of your pattern envelope for ideas. In this activity you will identify different methods of fabric construction.

Cutting Edge

You may be familiar with woven fabrics but fabrics are also constructed using a knitting process and a felting process. In this activity, you’ll learn the difference between types of fabric construction. Go to your favorite fabric store and explore several fabrics. Look at the cut edge. Can you pull a loose thread across the grain? Gather information from the end of the fabric bolt. Ask the store manager if you can have samples for your project. Ask your helper to gather sample fabrics with you.
Fabrics are constructed in a variety of ways. They are grouped by how they are made. The most common types of fabric construction are woven, knit, and non-woven.

**Woven Fabric Construction**
The weaving of fabric consists of interlacing yarns at right angles to one another. Interlacing is the point at which a yarn changes from one side of the fabric to the other side. The basic weaves include plain weave, twill weave and satin weave. In a plain woven fabric, weft yarns (crossgrain) pass over one and under one of the warp yarns (lengthwise grain). The plain weave varies in strength based on the weight of the yarn used and the closeness of the weave.

The number of warp yarns that the weft yarns pass over creates different type weaves. The simplest twill woven fabrics are created when the warp yarn crosses over two weft yarns, then under one, over two, etc. In the next row, the sequence is repeated, but begins one yarn over creating a diagonal line. When weft yarns pass over several warp yarns, this is called a float. Satin weaves have floating yarns and are easily snagged.

**Fabric Count**
Fabric count is the number of warp and weft yarns per square inch as the fabric comes from the loom. The count number may be given as the total of the weft and warp yarns. When written as two numbers the warp number is written first. The higher the count, the better the quality of the fabric.

**Knitted Fabric Construction**
In the knitting process, needles are used to form a series of interlocking loops from one or more yarns or from a set of yarns. Instead of two sets of yarns crossing each other as in the weaving process, the single knitting yarn is looped through itself to make a chain of stitches. Knitted fabrics have a wide range of stretch ability. This stretch may be in either one direction or both directions. Swimwear fabrics typically have two-way stretch.

**Non-woven Fabrics**
Although woven and knitted fabrics comprise the largest amount of fabric produced, there are other forms used to create fabric. These fabrics are referred to as non-wovens. Felt is an example of non-woven fabric. Several types of interfacing are also non-woven.

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**More Challenges**

1. Give a demonstration on different types of fabric construction to your friends or to 4-H club members.

2. With your helper, take several patterns to the fabric store and practice choosing appropriate fabric for each of them.
Denim jeans may be your choice for school wear. Have you wondered why your jeans are so comfortable to wear? When you touch different fabrics, either in a fabric shop or when shopping for ready-to-wear, you have probably noticed a difference in how they feel. Oh, by the way, what is the fiber content of your jeans? In this activity, you will collect fabric samples that contain different fibers.

**Cutting Edge**

Visit a store that sells a variety of fabrics. Collect samples of at least six different fabrics. You can find the fiber content on the label attached to the end of the fabric bolt. Attach a one inch sample of each fabric in the space provided. If you select a blend, write the percent of each fiber's content. As you search for fabrics with different fiber content, feel and note the differences in the fabric's hand.

**Sewing Project Skill:** Knowledge of natural and man-made fibers

**Life Skill:** Acquiring and evaluating information

**Educational Standard:** Evaluate fiber and textiles materials

**Success Indicator:** Describe the difference between natural and man-made fibers.
Sewing Circle

Dying to Know

- What were some of the fabric blends you found in the fabric shop?
- Which of the four common natural fabrics did you find?

Unravel What Is Important

- Why is it important to know the fiber content of the fabric you select for your projects?

Fit It to Your Life

- What impact does the fiber content of fabric have on the environment when used clothing is sent to landfills?

Pin Down What You Have Learned

- Why is it important to select fabrics suitable for the style of your pattern?

Did you know?

Flax (linen) is considered the oldest natural textile fiber with its earliest use estimated at 5000 BC. Rayon is the oldest man-made fiber with production beginning in 1910 and Lyocell is the latest man-made fiber with production beginning in 1992.

Textile Fibers

Fabric is constructed from fibers. Fabrics are made from two kinds of fibers: natural or man-made, sometimes referred to as manufactured fibers. Some terms used to describe fabrics include soft, stiff, fluid, crisp, rough, etc. The feel of fabric is referred to as the "hand".

Natural Fibers

The most common natural fibers come from plants or animals and include cotton, wool, silk and linen (flax). The mercerization process can increase cotton’s strength. Linen is one of the strongest of the natural fibers. Linen fabric may feel stiff as the fibers have a high resistance to bending. Wool is a weak fiber, however, wrinkles will hang out of wool fabrics. It also has excellent insulating qualities.

Man-made Fibers

The term ‘man-made fibers’ refers to all fibers that are not found naturally. Man-made fibers can be subdivided into two categories. Those made from chemicals, such as petroleum, are referred to as synthetic fibers. The other category is referred to as regenerated fibers as they are made from natural occurring materials that cannot be used for textiles in their natural occurring form. For example, rayon is made from wood pulp. Man-made fibers include polyester, nylon, acetate, lyocell, spandex, and many others.

Fabric Blends

Many fabrics are a blend of two or more fibers. Through the blending process, characteristics of each fiber enhance the characteristics of the other fiber(s). For example, polyester is blended with cotton which incorporates ‘ease of care’ with the ‘cool’ cotton feature.

More Challenges

Present a demonstration on the differences between natural and man-made fibers.

Acknowledgements: Activity written by Karen Biers.
When you purchase fabric, do you ever wonder how that wonderful plaid or flower design is created? Is it made with pre-dyed fiber yarns and then woven together to create the design? Or is it woven together as un-dyed fiber yarns and then printed with the design? Can you tell the difference?

### Cutting Edge

In this activity you examine several fabrics to determine how the color and design were applied. Gather some fabric pieces and examine them closely, using a magnifying glass if needed. Decide how the color of the design was applied to the fabric. Is the color the same on both sides of the fabric? For printed-on fabric designs evaluate whether or not the design is printed on grain. Does it follow the crosswise and lengthwise yarns? Label your printed samples as ON or OFF grain. Now have fun completing the fabric chart!

Attach at least four woven fabric samples; include a front and back view of each.

<table>
<thead>
<tr>
<th>Yarn-dyed Woven-in Design</th>
<th>Printed-on Design</th>
<th>Grain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall design, like plaids, stripes, etc.</td>
<td>Front of fabric</td>
<td>Front of fabric</td>
</tr>
<tr>
<td></td>
<td>Back of fabric</td>
<td>Back of fabric</td>
</tr>
<tr>
<td>Picture design, like flowers, animals, etc.</td>
<td>Front of fabric</td>
<td>Front of fabric</td>
</tr>
<tr>
<td></td>
<td>Back of fabric</td>
<td>Back of fabric</td>
</tr>
<tr>
<td>Solid color fabric</td>
<td>Front of fabric</td>
<td>Front of fabric</td>
</tr>
<tr>
<td></td>
<td>Back of fabric</td>
<td>Back of fabric</td>
</tr>
</tbody>
</table>
More Challenge

Did you know?

You can tell a printed textile from a dyed textile by the color saturation. In most cases, printed colors are clearer on the face side of the fabric whereas dyed printing is when the color or design is applied to the reverse side of the fabric. The design is reversed when the woven or knit before printing or after printing. You can tell the difference by the handle of the fabric. Printed fabrics are softer and more flexible, whereas dyed fabrics are stiffer. There are two different ways to design a piece of fabric: digital or physical. Colors are added in Phthalates or fabric and will dye.