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ABSTRACT

This packet contains three 4-H projects for students beginning the sewing sequence of the textile sciences area. The projects cover basics of sewing using sewing machines, more difficult sewing machine techniques, and hand sewing. Each project provides an overview of what the student will learn, what materials are needed, and suggested projects for the area. A step-by-step plan for doing the project, with instruction sheets and line drawings is included. Also included are a project record, ideas for sharing the project with others, and suggestions for additional projects. (KC)

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4-H Textile Science Beginner Projects

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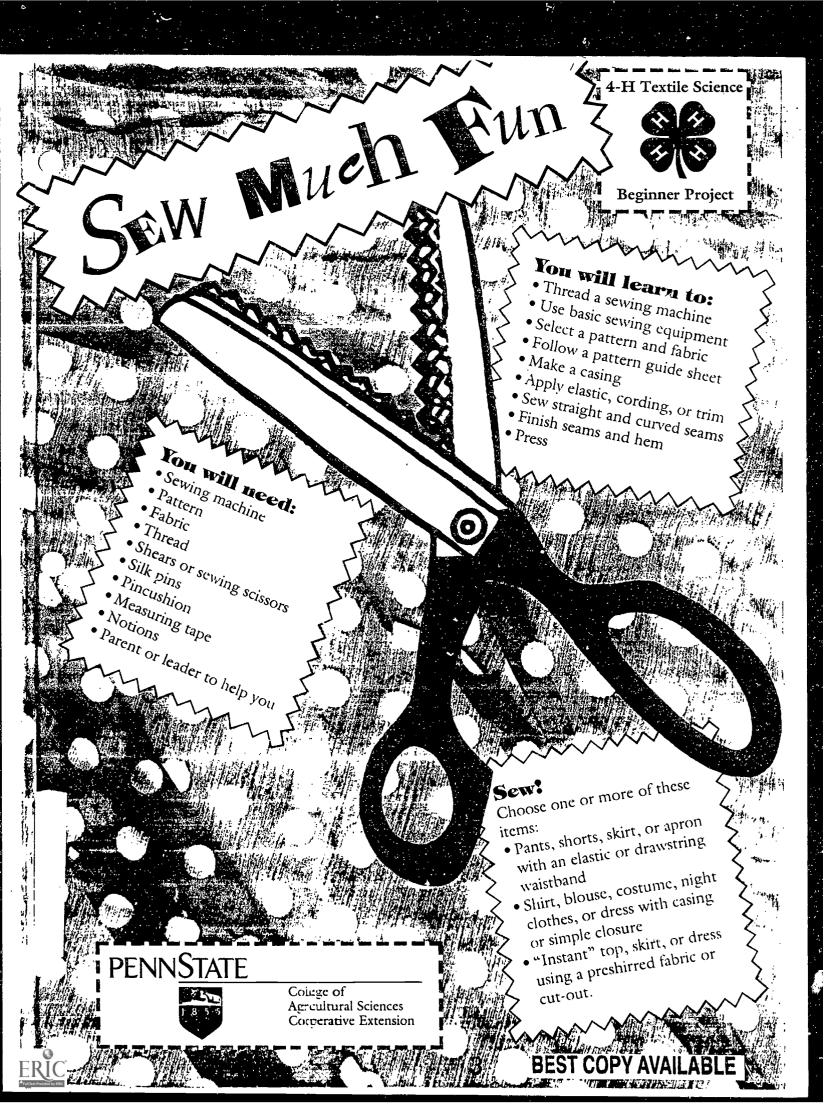
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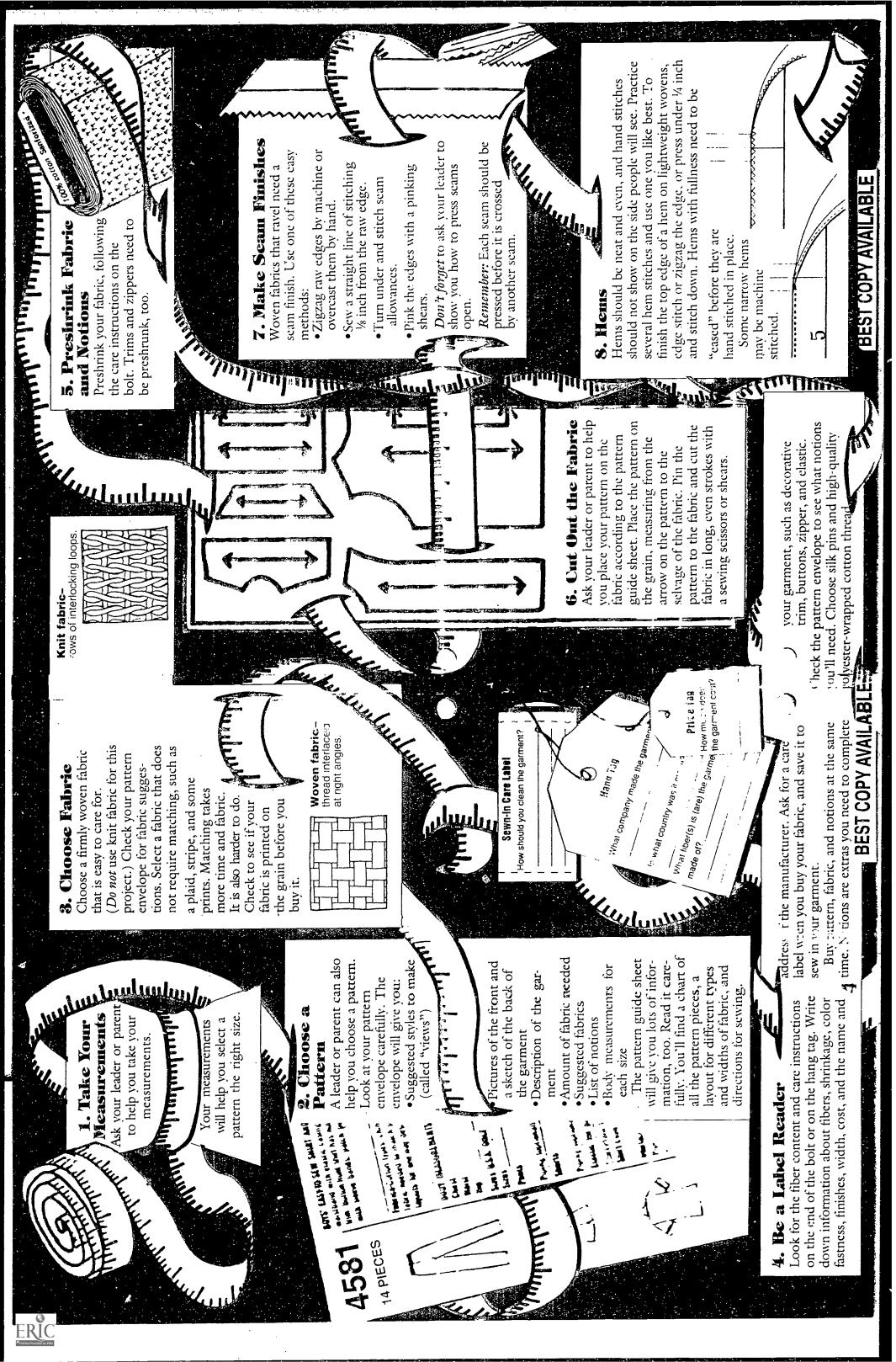


Chart Your Progress **Color** in the progress you have made in learning to sew a garment. put in a hem make four different seam finishes cut out fabric on grain preshrink fabric straighten fabric locate care information on a store garment locate fabric information on a bolt choose a fabric printed on grain read a pattern envelope start take measurements

Show and Tell

Share what you've learned with others! Give a talk on one of the following, or use an idea of your own:

- Information on a pattern envelope
- Information on a pattern guide sheet
- Information in the back of a pattern catalog or magazine
- Information on a care label
- Types of fabric grains: lengthwise, crosswise, and bias
- What you've learned in thisproject and hope to learn next year

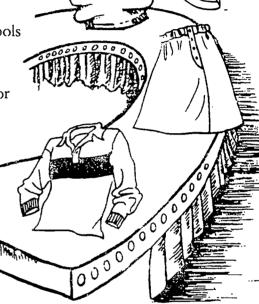
Or demonstrate how to:

- Check if a fabric is printed on the grain
- Place a pattern on the grain
- Straighten fabric edges

- Make a sewing box
- •Thread a sewing machine and wind the bobbin
- Make a casing
- Put elastic in a casing so that it doesn't twist
- Cord a casing
- Change stitch widths and lengths
- Press open a seam
- Finish seams
- Care for your sewing machine and sewing tools
- Use three different sewing tools

 Put in a hem by hand or machine

- Preshrink fabric and trims
- •Pin a pattern on fabric
- Fold a pattern for storage
- Prepare a garment for an exhibit
- Take measurements



Want to Know More?

Check your local library or bookstore for sewing books and ideas! In Pennsylvania, lists of helpful books may be found on PENpages at your county extension office.

Exhibits and Fashion Revue

Ask your leader about exhibits and fashion revue guidelines. Garments to be exhibited should include a handstitched fabric label near the inside hem. The label should be printed with your name, age, 4-H club, and county.

Taking the Project Again

You may take this project again if you select a different garment and try different activities to help you learn new skills.

Prepared by Jan Scholl, assistant professor of agricultural and extension education.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature, L. F. Hood, Director of Cooperative Extension, The Pennsylvania State University.

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You can also make something out of an item that has already been made for another purpose. For example, you might make a garment out of placemats or a garment cover îrom a pillowcase. Other possibilities are an article made from a preprinted panel or a "torn" project. So . . . let's get sewing!

Getting to Know the Sewing Machine

First, vou will need to learn the parts of the sewing machine and what they do. All sewing machines are pretty much alike. There may be a little lever here or there that's different, but most machines work the same way.

Before learning to thread the machine, practice stitching your own designs on envelopes or heavy paper. This will teach you how to control the machine and where to put your fingers. You may want to try

following the outlines or mazes in simple coloring books, or draw your own outlines.

Practice sewing very slowly. If your machine has a "sew slow" feature, be sure to use it. It will help you sew more evenly.

Practice going forward and backward, and around curves. When you get to a corner, stop there and use the wheel to make the last few stitches. With the needle down, raise the presser foot and adjust your paper to form a new line of sewing. This step is called a "pivot."

Now let's work with thread

and fabric. First, wash your hands and fingernails, and dust off vour work area. That wav you won't have to worry about removing dirt or stains from your project.

Threading is done almost the same way on every machine. To help you remember how, try giving each hook or spindle a name that is familiar to you. Then make up a poem or story about it. ---

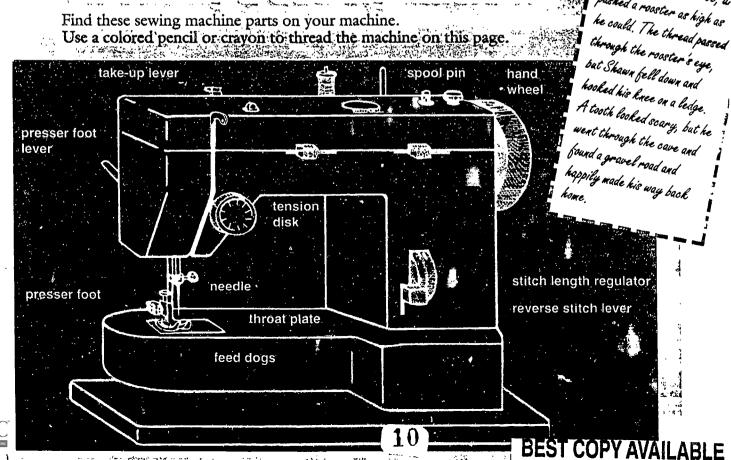
Have someone show you how to wind the bobbin, put the bobbin into the machine,

Shawn dropped his spool the spindle and carried. thread through a small cave. He jamped off the hill, saddled a harse, a

pushed a roaster as high as

and pull up the bobbin thread. Practice this several times.

Find these sewing machine parts on your machine. Use a colored pencil or crayon to thread the machine on this page.



Stitching for Practice

Begin stitching on notebook, graph paper, or coloring book pages printed with simple designs. Stitch on paper mazes or draw your own designs! When you have practiced, take your road test and get your sewing machine license (see next page).

Then stitch on a single layer of polyester-cotton fabric printed with a large geometric design or stitch on stripes. Using a plain stitch, cut and stitch several short lengths of

fabric (10 to 18 inches), printed side together. Use a few pins to hold the fabric together while stitching. Practice using a pinking scissors.

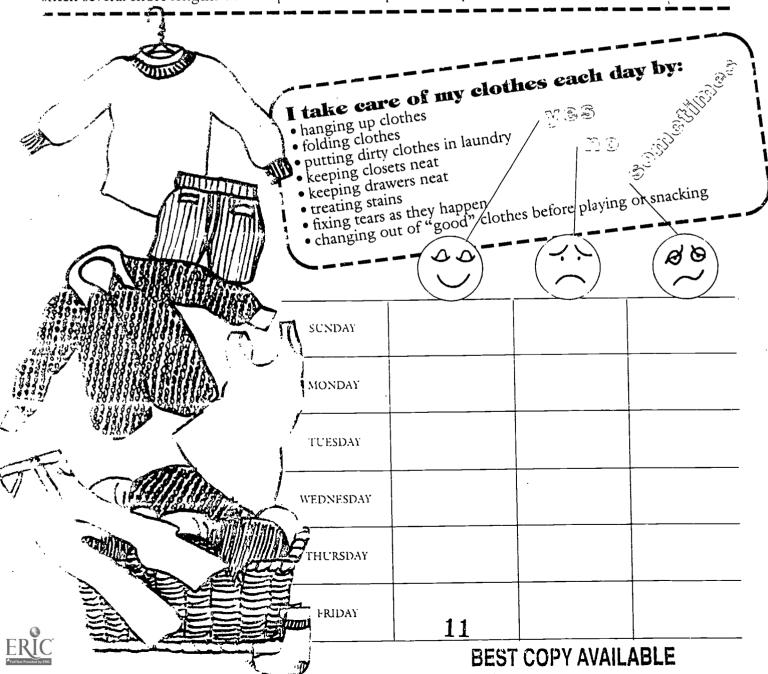
Idea: To practice seam finishes, try several different finishes on a few scraps of the same fabric. Wash the fabric scraps a few times to see how they come out. Then select the seam finish that is right for your project!

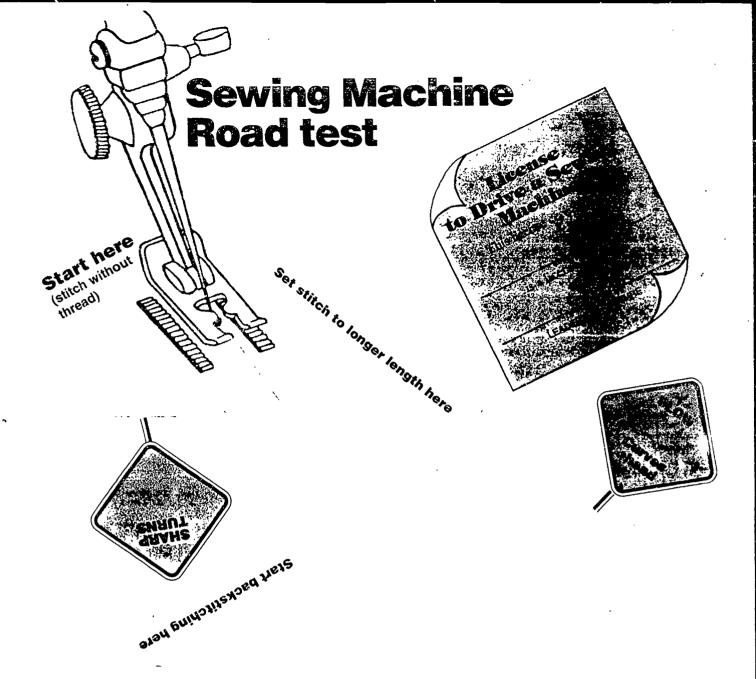
Press the seam by moving the iron in an up-and-down motion. First press one side of the seam and then another, then press the seam open. Use a press

cloth to press from the right side (the printed side of the fabric).

Have your leader check the stitch tension. The tension is the amount of "give" in the stitch. If the thread is too tight, the seam will pucker. If the thread is too loose, the threads will be loopy. The tension is good when stitches form the same way on both sides of sewn fabric. You can adjust the tension (upper tension) on the machine. Different fabrics may need different tension settings.

The second second





Driver has shown the ability to:

- thread machine
- use hand wheel
- wind bobbin
- replace needle
- adjust tension
- back stitch
- change stitch length
- control speed
- use lint brush
- pivot
- keep fingers away from needle
- let feed dogs move paper

End here

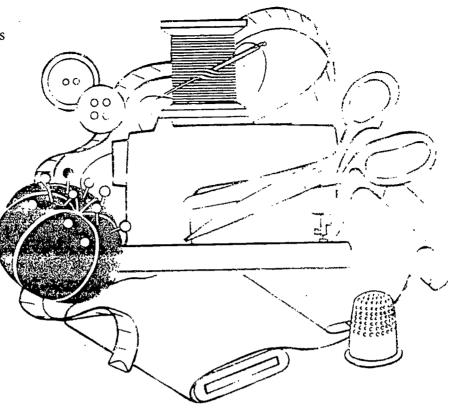
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Show and Tell

Tell what you learned in this project. You may show something you made or demonstrate one of the following:

- Parts of a sewing machine
- Threading a sewing machine
- Backstitching
- Stitching around a curve
- Pressing a seam
- Pivoting around a corner
- Checking and adjusting tension
- Making a label for a fair exhibit
- Or come up with an idea of your own.



Want to Know More?

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This project was not designed to be modeled at a fashion revue. But have your leader check guidelines at the county, regional, and state levels.

Taking the Project Again

You may want to take this project for more than one year. If so, choose something that will help you develop skills you haven't learned before.

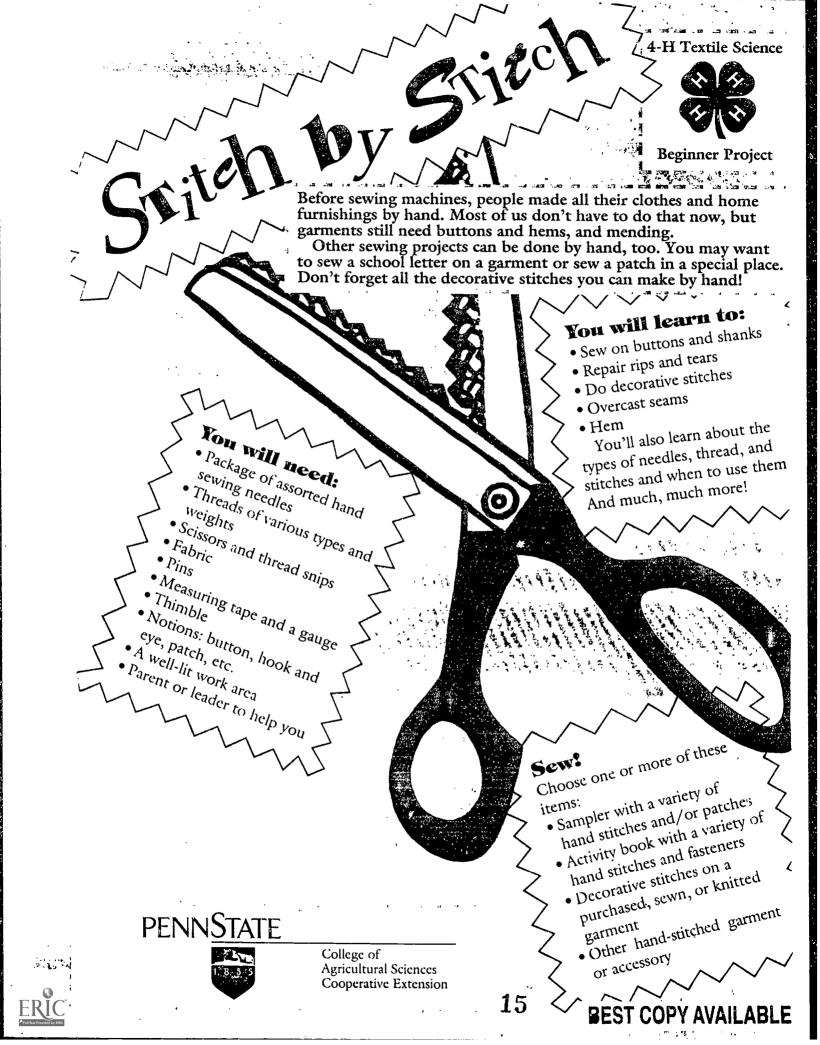


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Set Up Your Work Area

Before you start, think about your work area. You'll need good light, a comfortable chair, and a clean table to work on. Be sure your hands and nails are clean, too.

If you haven't hand stitched before, you may want to try using a sewing card or a sewing block first, just to get the hang of it.



Thimbles

Thimbles come in many shapes and sizes for various types of sewing. They are designed to protect your fingers as you push the needle through the fabric. Choose one that fits snugly without cutting off your circulation!

A thimble is usually worn on the third finger of your right hand (if you are right handed) or the third finger of your left hand (if you are left handed). Some people use thimbles on both hands or several thimbles on the same hand to protect their fingers.

Thimbles take a little practice to use. Don't give up on them!





Needles come in all sizes and are used for different tasks. In choosing a needle, the rule is to choose one by the length that matches the stitch you'll be making.

A quilting needle, for example, is very short because the ideal in quilting is to have 8 stitches to an inch. By contrast, a running stitch is very long, and you'll need a longer needle in a larger size. Choosing the right length of needle for the job will make your sewing task easier.

Also choose the needle that works best with your fabric. Use a fine one for delicate fabrics and a thicker one for loosely woven or heavier fabrics.

Some packages of needles contain needles all the same size; others contain a range of sizes or types. You'll also find packaged needles specifically for cross-stitching, quilting, embroidery, upholstery, darning, and beading.



EMBROIDERY

Assorted sizes

5 needles

NICKLE PLATED STEEL TARNISH PREVENTIVE PACKAGE





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Just as there are many kinds of needles and thimbles, there are many types of thread. Use the type that matches the fiber content of your fabric and its use.

- Rayon thread is smooth and shiny. It works well for topstitching and for use with stretchy fabrics.
- Cotton-wrapped polyester is a common thread for general use, as is mercerized cotton thread.
- Quilting thread is a bit heavier than most threads.
- Embroidery floss comes in brightly colored yarns for embroidery and duplicate stitching work.
- There are buttonhole and upholstery threads, basting threads that dissolve in water, and nylon threads that are nearly invisible.

The best way to tell whether you're getting a good-quality thread is to look at two spools of thread with the same content. The bargain brand often gives off lint and seems uneven. Lower-quality threads also tend to tangle and break.

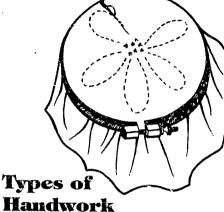
A great way to strengthen and reduce tangling in thread is to apply beeswax. The wax smooths out the thread and helps it glide through the fabric more evenly. It's better not to use beeswax on embroidery floss or varn.

For most projects, you'll need to use a single thread. To thread your needle, find the end of the thread on the spool. Use a pair of scissors to cut the thread past the point where it is damaged. A diagonal cut will make it easier to thread. Send the thread through the eye of the needle.

A needle threader can be helpful if the needle eye is very small. Once the thread is through the eye, pull it so that you have a total of about 18 inches on the needle. If your thread is too long, it will tangle.

Clip the thread coming off the spool shorter than the thread that has gone through the needle, and fasten the long end.

Now you're ready to sew! Try these stitches and the activities that follow.



Look in the library for references on how to do other types of handwork. On a separate sheet of paper, write a short description of five or more of these:

- quilting
- embroidery
- trapunto
- cross stitch
- latch hook
- needlepoint
- hair pin lace
- tatting

Can you think of others?



Fasteners

Fasteners hold two pieces of a garment together. Some fasteners overlap, while others just meet.

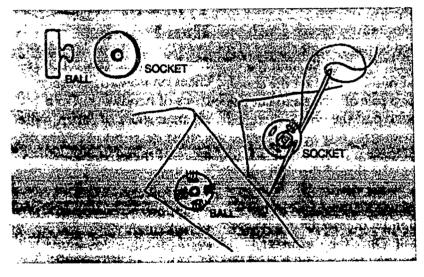
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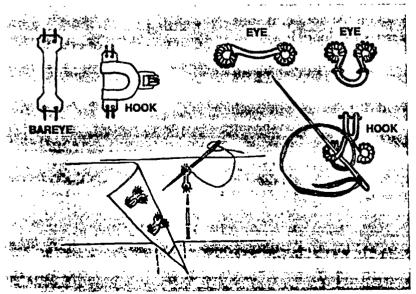
Snaps are used to hold two pieces of fabric together where there is little strain. Like hooks and eyes, they come in different sizes for different weights of fabric. They also come in different colors (silver for light fabrics and black for dark ones).

Sew the ball part of the snap on the overlap first. Using a double thread, anchor the snap in place by taking two tiny stitches. Bring the thread up through one of the holes and use the overhand stitch to sew it onto the fabric.

Slip the needle between the fabric layers to each of the other holes and fill each space. Anchor the thread. Check the right side of the waistband to be sure your stitches don't show through.

Secure the socket section of the snap onto the underlap using the same method.





Hooks and Eyes

Hooks and eyes come in several sizes and are used for high-stress areas like waistbands. Dark fasteners are used with dark fabrics, and metal-colored or white fasteners are used with light fabrics.

Small hooks and eyes should be used on lightweight fabrics for low-stress areas. Large ones are for skirts, pants, and shorts. Bulky, heavy fabrics need larger hooks and eyes.

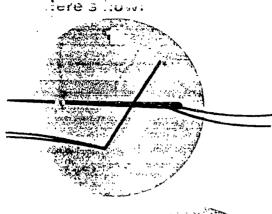
The type of eye you will use depends on the type of opening. The straight "bar" eye is probably the easiest to use.

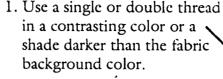
Attach the hook to the upper side of a waistband, placing it slightly back from the edge. Using a double thread, anchor the thread on the reverse side with tiny stitches. Bring the thread up through a loop and take the thread over the loop. Take a small stitch down under the loop and come up through the middle, being sure the stitches do not show on the right side. This is called an overhand stitch. Keep your stitches close together as you stitch around the loop. You can also use a blanket stitch.

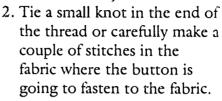
Just slip the needle between the fabric layers and make a loop. Repeat. Place the eye so that the waistband edges are in a straight line and connect properly with the hook. Attach the eye in the same manner as the hook.

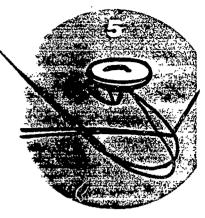


Learn to sew on a button

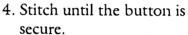


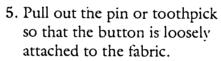


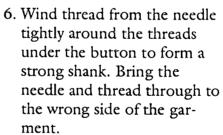


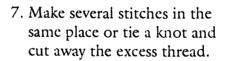


3. Draw the thread through the holes in the button, one at a time, placing a pin (for lightweight fabrics) or toothpick (for heavier fabrics) across the top of the button to hold the thread for the shank.

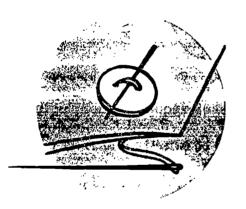






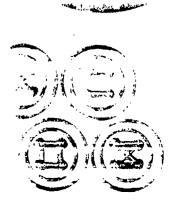


Practice sewing on buttons by repairing your own garments; or decorate hats, baskets, or tennis shoes. Usually a button is sewn so that the threads are parallel to the floor, but you can make a button look decorative by sewing threads in different directions. Some garments have different buttons of the same size down the front. You can experiment with button covers, too.





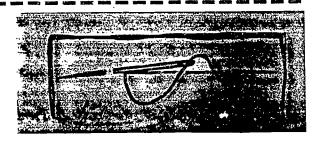




Hand Stitches

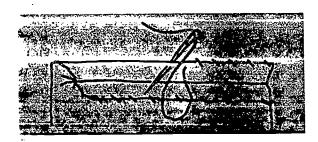
Running Stitch

A running stitch is used for basting, easing, tucking, gathering, quilting, and sewing seams that will not be under a great deal of strain. The simplest stitch of all is done by taking small, straight, even stitches 1/4 to 1/16 inch long.



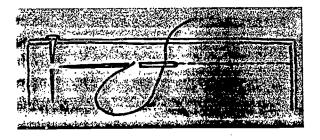
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An overcasting stitch is used for finishing the raw edge of a seam or a hem. Stitch diagonally across the raw edge of the fabric. Practice spacing your stitches evenly.



Backstitch

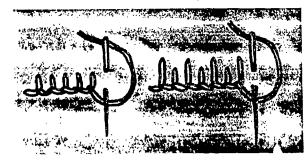
Backstitching is used to repair machine-stitched seams and to fasten thread ends tightly. Start with one small running stitch. Your needle will come out a small distance past the place where your stitch appears to



end on the underside of the fabric. Send the needle an equal distance past the place it came out and bring it out through the fabric. Repeat the process over and over again. The stitches on the underside will be twice as long as those on the top side.

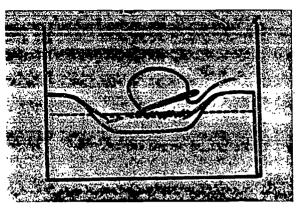
A backstitch tack is used to securely fasten facings, belt loops, and pant cuffs. Sew a small number of back stitches close together in a seam allowance or other place that doesn't show on the outside of the garment.

Use a blanket stitch for making belt loops, thread loops, handworked buttonholes, and eyes for hook and eye closures. You can also use this stitch to decorate an edge of a project or when a bar tack is needed. Hold the fabric edge toward you. Point your needle through the right side of the fabric and come up over the thread as you pull it securely.



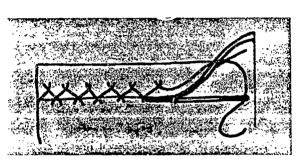


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Blind Stitch

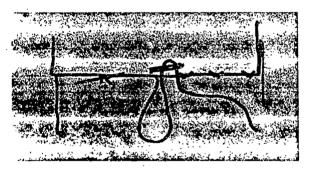
Use a blind stitch for hemming and holding facings in place. A blind stitch prevents puckering caused by pulled threads. Fold the hem or facing back about 1/2 inch, catching only one or two threads. Sew a stitch in the garment, then stitch diagonally above it in the facing or hem, forming a zigzag effect. Leave the stitches loose to allow for movement.



Carch Stitch

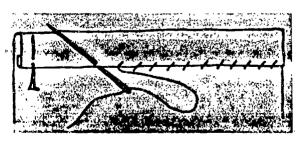
Use a catch stitch when you want to attach two fabrics together and allow some ease in the material. It's a good stitch for hemming stretch knits and attaching interfacings. Working from left to right, take a small horizontal stitch in a single layer

of fabric near the edge. Take another horizontal stitch diagonally to the right and just over the edge on the other layer of material. A criss-cross pattern will form between stitches.



Slip Ritch

Use a slip stitch for attaching a folded or rolled edge to another piece of material. Hems and pockets often call for a slip stitch because it is nearly invisible. Insert the needle through the inside of the fold. As the needle exits the fold, pick up a few threads of the fabric. Run the needle back into the fold for about 1/4 inch before picking up a few more threads.



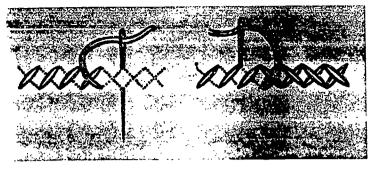
Whip Stitch

A whip stitch is used for attaching hems and for turning under an edge. Take a small stitch in the fabric and bring the needle diagonally up through the garment and the folded or bound edge. Repeat around the hem until complete. Secure the hemming with a tack stitch.

Pross-Stiten

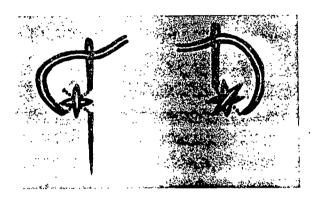
Cross-stitching is often used for decoration, but you can also use it to hold lavers of material together, on a facing edge or the center pleat of a lined jacket. Make a num-

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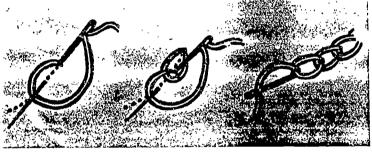


ber of evenly spaced horizontal stitches about 1/4 to 3/8 inch wide. This will form a diagonal pattern. Then reverse your stitches and go back, turning the slashes into X's.

The cross-stitch tack, used for keeping facings in place, is done like this: Take one horizontal stitch, catching only the facing and seam allowance, then reverse and make the stitch into an X. Remember to catch only the inside of the garment. Go over this X a number of times to be secure.



A chain stitch is used for thread loops, eves, and carriers. For this stitch vou need a double thread. Fasten 🐧 the thread with a number of overlapping stitches on the



underside of the fabric. Take a short stitch to form a loop on the right side. Use your thumb and fingers to reach through and catch the thread to form a new loop. Pull the new loop through the first loop and tighten, forming a knot at the base of the thread chain. Attach the chain to the fabric with a series of small stitches on the wrong side of the fabric.

Now that you have mastered these stitches, try these activities: Try these activities

- Help someone by basting or overcasting a seam.
- Repair several garments that have worn-out seams.
- Secure a facing, belt loop, or pants cuff by making a Once you have the skills for repairing items, practice at backstitch tack. home by helping with repairs.

Stitch by Stitch Project Record 4-H Textile Science Name _____ Address _____ What I made for my project Beginner Project Age as of January 1____ Club _____ Leader's signature What I shared with others (show and tell, helping other members, community service) Be a cost counter . . . · eep track of all your sales slips and add it all up Pattern Notions____ Tax____ TOTAL Cost of similar garment..... SAVINGS What I learned in this project

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Show and Tell

Share something you've learned in this project. Show how to do one of the following, or present an idea of your own:

- Sew on a button
- Sew on a patch
- Sew a hem
- Make a blanket-stitch edging
- Make a cross-stitch clover
- Duplicate stitch a sweater
- Mend!
- Use a thimble
- Thread a needle

Want to Know More?

Many craft books and magazines containing information about stitching are available in your library or local bookstore. Check PENpages at your county extension office for other ideas. There may be resource people in the community who can help you for little cost, or you may want to join a church, community, or needlework guild.

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Name	Kelly Tarve
Age _1	0
4-H clu	b Socks and ties
County	Snippet
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Prepared by Jan Scholl, assistant professor of agricultural and extension education.

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