Quilting is sewing three layers of fabric together to make one piece. The top layer is pieced together by hand or machine to form a pattern. The middle layer is batting, and the bottom is called the backing.

Quilts do more than keep us warm. Today, quilting can be used to decorate a room or garment, or commemorate a special event such as a wedding or birth. Quilting also is a great way to bring friends and family together for a fun, intergenerational activity.

**Project Objectives**

- Youth will explore the world of quilting by learning about fabrics, patterns, tools and quilting techniques.
- Youth will use quilting to create items for decorating a room or garment.
- Youth will combine design principles and sewing skills to create an attractive and durable project.

**How Your Quilt Project Will Be Evaluated**

Quilts or quilted items will be judged on general appearance, workmanship, finishing and presentation.

Youth must incorporate appropriate materials and construction techniques to create a project that exhibits high-quality design and workmanship.

**Tools Needed**

- **Rotary ruler** – A clear, hard acrylic ruler thick enough not to be damaged by a rotary cutter. Select one with ¼-inch horizontal and vertical lines; 24 inches by 6 inches is a good size.
- **Rotary cutter** – Cutters come in a variety of sizes; 45 millimeter is a useful blade size. Blades can become dull and should be changed as needed. Cutters are dangerously sharp and should be kept away from young children and stored in a closed position.

- **Cutting mat** – Self-healing plastic; 18 inches by 24 inches is a good size with which to begin. Do not store by heat or in direct sunlight. Store flat, if possible, to prevent warping.

- **Sewing machine** – A basic straight-stitch model is sufficient. Many quilters use a walking foot for piecing the quilt top and machine quilting.

- **Needles** – For machine sewing, 70/10 or 80/12 is best. For hand stitching, use Sharps, and for hand quilting, use Betweens in sizes 7 to 10.

- **Pins** – Long, glass-headed ones for piecing and quilting. For machine quilting, use lots of 1-inch rust-proof safety pins.

- **Iron and ironing board** – A single pad and cover are adequate.

- **Scissors** – Paper variety for plastic templates and paper; shears for fabric only; thread snips or embroidery scissors for snipping threads.

- **Markers** – Do not use a regular pencil. Use a wash-out marking or silver pencil. Use a white pencil or chalk on dark fabrics.

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Seam ripper

16-inch round quilting hoop
(not an embroidery hoop)
or floor frame if hand quilting.

Thimble – One made just for quilting.

Fabrics

100 percent cottons are easiest to handle. Look for lightweight, closely woven, on-grain, colorfast fabrics. (On-grain means the lengthwise and crosswise threads are at right angles to each other.) Polyester fabrics are harder to cut.

Blends may be used, but you need to use extra care in cutting and pressing. For best results, combine fabrics of different color intensities – light, medium and dark colors. If using prints, select a variety of pattern scales and designs.

Fabric Preparation

Prewash to preshrink, test for color fastness and remove excess dye. Remember to wash light and dark fabrics separately. Some quilters choose not to prewash, but be aware that a spill may cause dark-dyed fabrics to “bleed” into lighter ones.

Press and fold fabric lengthwise so it is ready to cut if using a rotary cutter.

Thread

For machine sewing, high-quality cotton thread is a must. Use a light, neutral color (light gray or ecru) for light fabrics when piecing. Use a dark, neutral thread for darker fabrics. For hand quilting, use a slightly stronger thread that is labeled for hand quilting.

Batting

Use low-loft (thin) cotton batting for machine quilting. Keep stitching lines no more than 4 inches apart to prevent the batting from shifting when washed. Use a high-loft (thick) or low-loft batting for tied quilts.

100 percent polyester batting is bonded, so it needs to be less closely quilted. It can creep through the fabric and create little tufts that are especially visible on dark fabrics.

A good starting batt is an 80 percent cotton/20 percent polyester blend.

Batting does not have a right or wrong side. If the batting is not large enough, it can be pieced by butting the edges together and whip stitching them.

The batting should be a little larger than the pieced top in case the quilt moves during tying or quilting.

Backing

Most quilters use the same type of material for the back of the quilt as the top. This fabric also should be pre-washed and pressed before using. If several widths need to be seamed together, remember to cut off the selvage edges before sewing.

Making Your Quilt

Cutting

Pieces and strips can be cut using templates, rulers and scissors. Use extreme care to measure and cut accurately.

Rotary cutting methods also can be used.

– Remove selvage edges.
– Place on cutting mat, matching horizontal and vertical grid lines.
– Place ruler on fabric in line with horizontal mat markings.

Pressing

Pressing, not ironing, should be done on a hard surface. Press seams toward the darker fabric from the right side unless told to do otherwise by the pattern. Many patterns will have arrows to indicate the desired pressing direction.

Assembling the Quilt

Assembling a quilt is a step-by-step process. Some quilt blocks need to be pieced in a certain order. Be sure to follow any piecing directions included with your pattern.

– Piece the blocks together.
– Assemble blocks into rows, matching points if necessary.
– Stitch rows together, aligning corners and points as needed.
– Attach borders, if used.
– Lay backing wrong side up and hold taut with masking tape, large paper clamps or T-pins, depending on the work surface.
– Smooth the batting over the backing and trim if needed to match edges.
– Center the quilt top, right side up, over batting.
Hand Quilting

- Place the hoop or frame in the center of the quilt. It should be stretched tightly to avoid puckers.
- Begin stitching in the center of the hoop and work toward the edges.
- Move the hoop as needed, doing the center section first and then completing each side separately, using the same center-to-edge technique.

Tied Quilts

- Instead of sewing, you may tie your quilt. Using yarn, heavy embroidery thread or even narrow ribbon, mark the surface of your quilt at regular intervals no more than 4 inches apart. Sew once through all layers, tie the ends on top of the quilt and cut to length.

Caring For Your Quilt

- Keep quilts out of direct sunlight so the colors will not fade. Washing usually is better than dry cleaning for 100 percent cotton quilts that are made of prewashed fabrics. Fill a bathtub with warm water and thoroughly dissolve a mild soap in the water. Stir the quilt into the water with your hands. Rinse well. Let as much water as possible drain from the quilt, but do not wring it. Lift the quilt out of the tub and dry on the line.
- To store quilts, roll in a clean, 100 percent cotton sheet and store in a cool, dark place. Do not fold a quilt if possible, but if you must, refold it occasionally to reduce permanent creases.
- Display your quilts by using them on beds, as lap blankets or on a quilt rack. If you choose to hang your quilt, make a hanging pocket on the back of it. Cut a 4-inch-wide strip of fabric the width of the quilt and press a %-inch hem along both long edges of the strip. Hand sew the strip to the back of the quilt at the top. On your wall, hang a special quilt hanger or window curtain rod, or attach a narrow wood strip or dowel to the wall with brackets. Slip the pocket of the quilt over the rod or dowel. Try to hang your quilt where it will be out of direct sunlight.

Explore Quilting

- Quilts have a long and interesting history. Families brought quilts from many countries and cultures when they settled in North Dakota. Once here, they continued making quilts using materials at hand.
- Making quilts with friends, or quilting bees, long has been popular. The hostess of the bee would have the quilt bottom, batting and pieced top already fixed into a large frame, and many women would get together for a day of quilting and socializing. The hostess often would end the day with a completed quilt.
- Many families have special quilts that have been handed down from grandparents, aunts and uncles. Ask your family members if they have any of these heirloom quilts and what they know about the quilts’ history. You even could design your own quilt block to commemorate a special family event and start your own heirloom.
- You have other ways to learn about quilting and the history of quilts. Visit a local historical society, museum, quilt shop or show; take a quilting class; or check out books from your library. You might be able to find an experienced quilter in your hometown who would help you get started.
- Learn by doing. Enlarge the 4-H clover pattern on the next page, or find a simple block pattern in a book and try it. You’ll learn a lot about choosing fabrics, cutting, piecing and quilting. You can use your block for a pillow, apron bib or the front of a tote bag.
Suggested Project Ideas

Quilts:
- hand or machine pieced
- hand or machine quilted
- tied
- embroidered
- crazy quilt
- appliquéd

Wall hangings
Quilt block sampler
Table runner or place mats
Tote bags and purses
Jackets, vests or other clothing
Pictures
Pillows
Paper foundation quilting project

Most popular quilting Web sites have lots of free projects and ideas. Fabric stores also carry quilt books and patterns.

Books About Quilting

Alex Anderson. “Start Quilting with Alex Anderson: Six Projects for First Time Quilters.” Watson-Guptill Publications

www.palmerpletsch.com/childrenbooks.htm

Mimi Dietrich. “Basic Quiltmaking Techniques for Hand Applique.”
Martingale and Co.

Carol Doak. “Your First Quilt Book (or it should be!)” That Patchwork Place


Jane Townswick. “Easy Machine Quilting.” Rodale Books

Patricia Wilens. “Quick and Easy Scrap Quilts.” Oxmoor House

Quilting Websites

- The Internet has thousands of websites about quilting. For the most up-to-date sites, do a search using the keywords “quilting,” “quilt history,” “appliqué” or whatever you’re interested in, and follow the links. Here are a few to get you started.

Quilting History
www.womenfolk.com/historyofquilts/

From the Smithsonian’s National Museum of American History:
http://americanhistory.si.edu/collections/subjects/textiles

Story Quilts
www.litcircles.org/Extension/storyquilt.html

Quilting Techniques
Lots of quilting links
http://quilting.about.com

More Links
www.missouriquiltco.com
www.alpeoplequilt.com/
www.modabakeshop.com/

The AIDS Memorial Quilt Story
www.aidsquilt.org

Visit North Dakota 4-H on-line at www.ndsu.edu/4h

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