

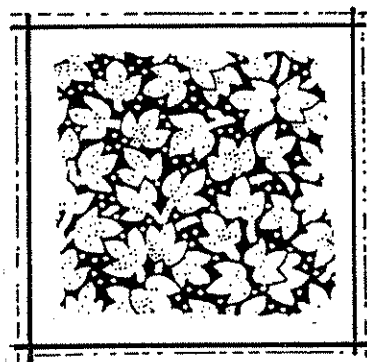
LESSON 14

TOPIC

Fabric Printing

TIME

30 minutes



MATERIALS FROM TRUNK

Quilt (full-size)
Quilt Blocks (in manual)
Rubber Stamps

OTHER MATERIALS

Plain colored cotton or cotton/polyester blend fabric cut into 15-inch squares
Stamp pads
Additional rubber stamps

OBJECTIVES

- 1) Students will understand the basic principles of how fabric is printed.
- 2) Students will understand the concept of repetitive design.

HISTORICAL BACKGROUND

Fabrics can be printed in many ways. Prints have changed over time depending on the tastes and technology of the times. Fabric can be painted by hand, tie-dyed, ikat (the warp and/or weft threads are dyed in patterns before woven), and printed. Perhaps the most common method is to print patterns using a repetitive technique. The most common method of printing fabric today is the roller or cylinder method. This method is two hundred years old. Before this method was developed, wooden blocks or copper plates were used to press color onto cloth.

In 1783, it was discovered by Scotsman Thomas Bell that a copperplate could be curved around a roller. This allowed printers to print a continuous roll of fabric. The roller printer saved labor and allowed for expansion of design. In the beginning, only one-color patterns could be printed because it was difficult to line up the design when printing. Second colors could be

added by painting on the fabric or using small wooden blocks in combination with the rollers. By the end of the eighteenth century, printers could print eight colors. Today, up to sixteen colors can be printed.

Quiltmakers today often use what they term calico fabrics. By calico, quiltmakers mean a small-scale print that is repeated. This print can be either abstract or figurative. In the nineteenth century, calico meant a type of cloth with a specific weave. In the 1820s and 1830s, American calico, inexpensive roller printed cotton, began to be printed in the East.

Source: Brackman, Barbara. *Clues in the Calico: A Guide to Identifying and Dating Antique Quilts*, (McLean, Va.: EPM Publications, 1989).

PREPARATION

Students can print on fabric in many ways. Using rubber stamps, as suggested here, is probably the easiest. Other methods are suggested under extended activities. Most of the printing methods need adult supervision. Any of the options for printing fabric require basic preparation.

- 1) All fabric should be prewashed, dried, and ironed before it is used. Each student will need fabric. Be sure fiber content of fabric is what the paint or method requires (instructions appear on bottles). Consider buying several different light colored plain fabric rather than just white. For each group of twelve children you will need a yard and a half of 45-inch wide fabric which you should cut into twelve pieces 15-inch square. Prewash this fabric to eliminate the sizing BEFORE you cut it.
- 2) Suggest students wear old clothing because some paint or inks may not come out of clothing.
- 3) Cover work space so as not to damage permanent surfaces such as table tops.
- 4) Provide a drying area for printed fabrics.

VOCABULARY

Calico Used today to identify fabric with a small-scale repetitive pattern.

Repetitive Pattern A design used over and over to create an overall pattern.

ACTIVITIES

- 1) Show the students the full-size *quilt*. Introduce the activity by pointing out the repetitive pattern on some of the cotton prints in the quilt, noting that the same design is repeated over and over on the fabric. Ask the students how they think fabric might be printed? Explain that today fabric mills use rollers to print the designs.
- 2) In the manual is one example of a quilt *block* made from hand-decorated fabric. Share this *block* with the students and explain that they can print fabric using such things as *rubber stamps*.
- 3) Give each student a square of fabric and have each student stamp the fabric with the *rubber stamps*. The fabric stamped with stamp pad ink will not be washable. If you expect to wash the finished quilt made from the fabric the students design, you will want to do some kind of permanent fabric painting. See extended activities for ideas.

ASSESSMENT

Levels of Achievement

For Objective 1

- a) Students demonstrate an understanding of how fabric is printed.
- b) Students can tell others how fabric is printed.

For Objective 2

- a) Students demonstrate an understanding of the concept of repetitive design.
- b) Students produce a repetitive design.

EXTENDED ACTIVITIES

1) PAINTING ON FABRIC:

The craft stores (such as Ben Franklin), fabric stores (such as Hancock Fabrics and SoFro), and general discount stores (such as Wal-Mart and KMart) stock many paints that are permanent on fabrics. These are fairly inexpensive, easy to use, and colorfast even when washed. A few things to notice when choosing paints:

- How long do they take to dry? Some take up to three days before you can set them with an iron.
- What fiber do they work on? Some require synthetic fibers to be colorfast since cotton is harder to dye.

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- How much do they stiffen the fabric? You might want to experiment and dilute the paint so it is not so stiff.

Materials needed:

Paint
Stencils
Fabric (see instructions on paint for type of fabric)

Optional materials:

Sponges cut in shapes
Other kinds of stamps (e.g., potato stamps)
Strings
Leaves

Any other items used for stenciling or printing on paper, such as leaf spatter painting, will work if paint is of right consistency.

Suggestions:

- Rather than dipping stamps into paint, sponge paint directly onto stamps. This saves paint and is not as messy.
- Combining painting techniques and paint types is most effective (i.e., outlining stenciled forms with squeeze bottle puffy paints).
- It is not necessary to use only light colored fabrics. Light paint colors work well on darker fabrics.
- Have each student decorate a larger piece of fabric than necessary. The best parts may be cut down to fit the size needed.
- Although paint may claim to be washable and permanent, the students' techniques may not fit the criteria to be permanent. Please assume that fabric and quilts made from fabric will not be washed after painting.

2) FABRIC CRAYONS:

This technique is less messy than painting on fabric. Fabric crayons are fairly easy to find in craft and fabric stores or in craft sections at discount department stores. The price for eight crayons runs approximately \$2. In general, they look like regular crayons so make sure the package says they are for use on fabric. The student draws a picture or design using the crayons

on a piece of paper. This design or picture is transferred to the fabric by using an iron. Follow the directions on the package.

Materials needed:

Fabric crayons (such as "Crayola Fabric Colors" from Dritz)

Fabric (manufacturer recommends synthetic fabric if permanency is desired)

Paper to draw on

Iron and ironing board

Newspaper or other paper to absorb wax

Suggestions:

- Some students may be more comfortable with this technique of drawing first on paper rather than painting directly onto fabric. Designs will be reversed when ironed on so writing will not work to transfer.
- This technique requires less supervision than fabric painting, except for the ironing procedure.
- Crayon colors will be muted, so lighter colored fabrics work best.
- Children may draw directly onto fabric, especially if the design includes words so letters will not be reversed.

3) MARKING PENS:

For the minimum of fuss, buy an assortment of permanent marking pens (laundry markers) or look for markers especially designed for crafts on fabric. Markers run about \$2 each, therefore, an array of colors can be expensive. No preparation or clean up, however, is required and the fabric and markers can be left at a work station where kids work independently.