

ACTIVITY IDEA:

FABRIC IMPRESSIONS

Lesson Overview

Students will examine cords and fabrics made by prehistoric Native Americans by making casts of pottery sherds, or making casts of modern-day fabrics, to explore one of the methods archeologists use to learn about prehistoric fabrics.

Objectives

Students will

- learn about Native American fabrics;
- compare different prehistoric weaves, and compare prehistoric and modern weaves.

Subjects/Skills

- social studies, art
- compare, contrast

Age Level

Grades 5 and up.

Time Required

Two or more class periods.

Materials

- Sculpey© Modeling Compound, enough so each student has several pieces
- prehistoric pottery sherds, 3-5 per student group, and/or
- modern fabrics, cords, string, braids, basketry

Background

Because fragile materials like clothing rarely survive in the ground, archeologists must use other ways to learn about prehistoric fabrics. One way is by studying the impressions preserved on pottery. Native Americans often finished the outside of their pots with textures made from fabrics and cords to both decorate them and make a surface easier to hold. Fabrics could be wrapped around paddles and pressed into the clay as the pot was shaped and finished. Cords—twisted, braided, and knotted—would be wrapped around sticks, which were then rolled over the soft clay. After the pots were fired (or baked), the impressions of the fabric and cords would remain.

Archeologists study the fabrics and cords of prehistoric peoples through the impressions left on their pottery, which is a negative image. By making casts of the pottery sherds with modeling compounds like Sculpey©, archeologists reverse the image into a positive one, which reveals the actual shape of the original piece of fabric or cordage.

Archeologists study the different weaves, twists, and knots, and learn about the craftsmanship of these prehistoric weavers. The impressions can indicate whether thick or thin plant fibers were used, or if the materials for strings or cords were made from plants, fur, feathers or other materials. Impressions

also may reveal weaving techniques no longer practiced or ones that were unique to a particular geographic area. Depending on the twist of the cordage, archeologists can even determine if the weaver was right- or left-handed.

Preparation

Sculpey© Modeling Compound can be used to make impressions of fabric, textiles, and cordage. It comes in a block form. It can be shaped and rolled easily by hand and pressed into an object to make a positive impression. It will not stick to or damage the item being used. It is excellent for making impressions of decorations on pottery, modern fabric such as burlap, and basketry, cordage, or matting.

Sculpey© can be baked permanently hard in an oven, 15-20 minutes at 275 degrees. (Do not use a microwave oven.) Use ventilation when baking. Once the impression is baked, it can be labeled or painted. Water-based acrylics work best. It will stay pliable indefinitely until baked. Sculpey© is available at hobby stores.

Prehistoric pottery sherds (*cord-marked* or *fabric-impressed* varieties) will need to be borrowed from a professional or amateur archeologist or a museum. The Arkansas Archeological Survey has Research Stations throughout Arkansas, and the Arkansas Archeological Society has members throughout the state. To locate the Survey Research Station nearest you, check the Survey website at www.uark.edu/campus-resources/archinfo/stations.html. To locate a Society member, check the website at www.uark.edu/depts/4society/index.html. Many museums have archeological collections; check with the curator.

If prehistoric pottery sherds are not available to borrow, casts also may be made of modern fabrics and cordage. Select samples of fabrics with different weaves, especially coarse fabrics like burlap or knits, which can be pressed into clay. Cordage can be rolled over soft Sculpey© to make patterns; try wrapping the cordage around a stick and rolling the stick over the clay. Use various thicknesses of twine or package string; try twisting together or braiding multiple strands or adding knots along a string for different effects. Netting or baskets also may be used. Students can compare the results of the different weaves and look for similarities on sherds pictured in books.

Procedure

1. Using the Arkansas Archeology Week 2000 clothing handout (available at www.uark.edu/campus-resources/archinfo/activities.html), read or summarize the information for the students.

2. Let students work in small groups. Distribute several pieces of Sculpey© for each student. Have them knead the clay and form it into small, flat disks.

3. Have a selection of prehistoric pot sherds and/or a variety of fabrics, cords, nets, and baskets set up at different stations, so that each student can make casts of several different items. Or give each group of students a selection of items, with different items for each group.

4. Have students press their clay disks firmly onto the fabrics to make impressions. Names can be scratched onto the backs of their disks. Collect up the disks and harden by baking.

5. Subsequent activities with the clay disks can vary depending on the age of the students.

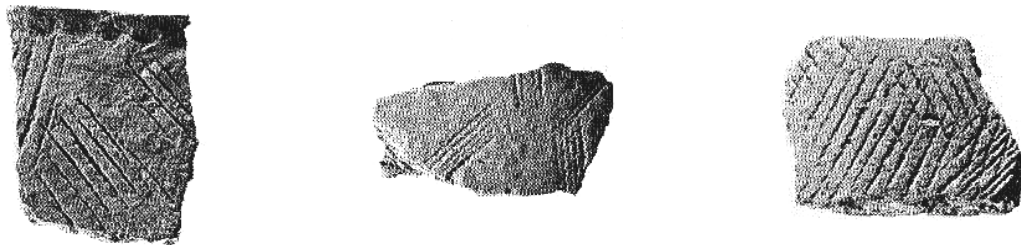
Students should compare the various disks, and examine the differences in appearance of different weaves or cordage. How similar is the impression to the original item? Do prehistoric and modern impressions look similar or different? Can threads in a weave be counted? Can knots be seen? Can the direction of the twist in cordage be determined?

If different groups impressed different items, let the students compare the groups of impressions with the groups of items. How easy or difficult is it to match items with their impressions? If the students twisted their own cords, did right- and left-handed students twist in different directions? If so, can the direction of the twists be seen in the impressions?

Older students can research the history of weaving. Drawings or illustrations of various kinds of weaves can be made into a poster or scrapbook. Weavings of unusual materials, like feathers, beads, or hair, can be examined. Students can compare clothing styles from several cultures throughout the world, or can compare modern and prehistoric clothing styles. Students can also research how archeologists study weaving and other ways they learn about prehistoric fabrics.

Closure/Assessment

Discuss other kinds of Native American clothing and how it was decorated. Talk about how weaving is still used today to make clothing and how cordage is used to make ropes and nets.



Credits

The images of the Mulberry Creek Cord Marked pottery sherds are from *Powell Canal*, by John H. House, Arkansas Archeological Survey Research Series No. 19, Fayetteville, Ark., 1982, p. 49. Directions on using Sculpey© Modeling Compound for making impressions of prehistoric fabrics was provided by Kathleen H. Cande, archeologist, Sponsored Research Program, Arkansas Archeological Survey.

This educational flyer was written and designed by Mary L. Kwas and produced by the Arkansas Archeological Survey, University of Arkansas System, 2475 N. Hatch Ave., Fayetteville, AR 72703, 501-575-3556. Visit the Survey web site for more information about archeology, Indians, and historic and prehistoric Arkansas sites: www.uark.edu/campus-resources/archinfo/.