

Twines from Plants & Shell Ornaments



Audubon Center
of the North Woods

Purpose: The materials used to make rope and twine have changed dramatically over time. In this class students will experience a method used by Native Americans and voyageurs using natural resources making utilitarian items, such as rope or twine. Each student will make a piece of basswood twine for a bracelet or necklace, and fashion a freshwater mussel or wooden ornament to decorate it.

Concepts:

- Woodland Indian peoples used natural resources for food, shelter, clothing, tools, and other articles of every day life.
- Humans and the environment are interrelated.
- Plants and animal parts with fibrous properties may be used to make cordage (twine).
- The tensile strength of the plant or animal fibers is increased when they have been transformed into cordage.

Learning Outcomes: Students will be able to

- Name three plants and how they were utilized by Woodland Indian peoples.
- Describe and demonstrate the twine making process.
- Create a bracelet or necklace made of basswood twine.
- Operate a pump drill and pieces of sandstone to make an ornament.

Minnesota Academic Standards:

Science:

- 5.4.1.1.1: Describe how plant and animal structures and their functions provide an advantage for survival in a given natural system.
- 8.1.3.2.1: Describe examples of important contributions to the advancement of science, engineering and technology made by individuals representing different groups and cultures at different times in history.

Social Studies 4-8th grade:

I. U.S. HISTORY

A. Prehistory through 1607: The student will understand that large and diverse American Indian nations were the original inhabitants of North America.

II. MINNESOTA HISTORY

- A. Pre-Contact to 1650: The student will demonstrate knowledge of Minnesota's indigenous peoples.
- B. Contact and Fur Trade 1600-1810: The student will demonstrate knowledge of early explorers and fur traders in Minnesota and the impact of the fur trade on both European and Native societies.

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CLASS LENGTH: 3 HR

AGES: Grades 4-12

SEASON: F, W, SP, S

GROUP SIZE: 15-17 students

SAFETY: Hand and finger dexterity and eye hand coordination may be a challenge for some people, esp. elders. If the instructor chooses to go outside to look at plants, walking on uneven ground may be a challenge, as well.

MATERIALS: PREPARED BASSWOOD FIBER, PIECES OF FRESHWATER MUSSEL SHELLS, WOODEN BEADS, ACORN CAPS, YARN TWINE EXAMPLE, TWINE SAMPLE CARDS, SANDSTONE ABRADERS, PUMP DRILLS, WOODEN BOARDS, MN FRESHWATER MUSSEL POSTER, FIELD GUIDES TO MN MUSSELS, EXAMPLES OF MN FRESHWATER MUSSELS, HOOP AND STICK GAME, STICK DICE GAME, ANIMAL PART AND CARD MATCH SET

PRE-CLASS PREP (20 MIN): The work space must be set up ahead of time. Drills may need to be sharpened. Shells need to be broken in to pieces and put in several baskets. It is convenient though not entirely necessary to separate basswood in to thin strips that are ready for the students to use. A tarp may be laid on the floor under the work space to help keep the carpet clean.

CLASS OUTLINE:

I. Ten Minutes to Teaching

II. Introduction

III. Class Experience

A. Learning Stations (30 min)

B. Twine from Basswood (10 min)

1. Specific Uses of Plants
2. Basswood Identification
3. Obtaining the basswood inner bark
4. Twine Making Activity (30-45 min)

C. Ornaments- freshwater mussel, birch bark medallions, acorn caps, wooden beads (45-60 min)

1. Freshwater mussels
2. Making a shell ornament
3. Birch Bark Medallions
4. Wooden beads

IV. Conclusion

V. Authentic Assessment

VI. Reflection

VII. The Sending

VIII. Clean-up