Lesson 2.9

LOOKING AT AN OBJECT

Clay pipe from Cherokee County, North Carolina, ca. AD 1500.

Subjects: science, social studies.
Skills: analysis, evaluation.
Strategies: observation, classification, writing.
Duration: 45 to 60 minutes.
Class Size: any.

Objectives

In this exercise, students will analyze unfamiliar objects in order to:

- observe the attributes of an object;
- infer the uses of objects;
- discover how archaeologists use objects to learn about the past.

Materials

For the teacher, an unfamiliar object to be shown to the class and a "Looking at an Object" activity sheet for projection. For each student, "Looking at an Object" activity sheets and a plastic or paper bag containing (*a*) an object brought from home and (*b*) a sealed envelope containing an explanation of what the object is.

Vocabulary

Hypothesis: a proposed explanation or interpretation that can be tested by further investigation.
Inference: a conclusion derived from observations.
Observation: the act of recognizing or noting a fact or occurrence; or the record obtained by such an act.

Background

Sometimes archaeologists find objects whose use or meaning is not obvious. For example, archaeologists working in the American Southeast were not always sure how different types of pottery were being used by Native Americans. Through studying the shapes and sizes of pots and the use and wear marks on them, however, archaeologists have been able to determine the ways many were used. A pot that had been used for cooking usually showed soot on the outside where it had been set in the fire, and often it showed scrape marks inside where food had been stirred. Vessels used for storing solid and liquid foods were typically large with wide mouth openings, so that contents could be easily scooped out. Some vessels were even made especially to hold and carry fire when people went on hunting trips or moved around to different villages.

Unfamiliar objects make us curious to know what they are. To make a proposed explanation —a *hypothesis*—about something unfamiliar, archaeologists use the skills of *observation* and *inference*. When analyzing an artifact, for instance, the archaeologist first handles and explores the object. Then he or she attempts to identify and investigate its function using physical

properties, construction techniques, design, and other characteristics. Questions that guide the archaeologist include, "What is it made of?" "Is this object worn, and if so, how?" and "Was this object made by hand or machine manufactured?" The material an object is made from can reveal clues about its use. For example, gold is a costly and precious metal, and it is typically used for jewelry and other expensive items. Gold would not be used to make a vacuum cleaner nozzle or food processor blade because it would be too expensive and the metal too soft.

Setting the Stage

On the day prior to the exercise, instruct students to bring into class the next day a small object from their home. This object should be an item whose function or identification is not immediately apparent, such as a strange kitchen implement or some other tool, part of a toy or game, or a container. Suggest that searching through junk drawers or toy chests in their homes might yield items that are perfect for this exercise. Stress that it is okay if the item has been broken off of some larger object, as long as sharp edges do not present a safety hazard. The student is to place this item in a bag along with a separate sheet of paper containing an explanation of what the object actually represents. This explanation is to be taped or stapled closed or placed in a sealed envelope. It may be a good idea for the teacher to create and have on hand several "artifacts" in case some students neglect to bring one.

On the day of the exercise, collect the "artifacts" from the students. Begin by showing the class the item you brought from home. Project the "Looking at an Object" activity sheets and go through the questions with the students to help them arrive at a use or identification of the unfamiliar item.

Procedure

1. Redistribute the "artifacts" among the students, making sure no one receives the artifact he or she brought. Distribute the "Looking at an Object" activity sheets to the students. The students will fill in these sheets as they observe their artifact.

2. Allow the students 10 or 15 minutes to visually and physically examine the object in order to answer the questions on their activity sheets. After answering the applicable questions about physical features, construction, and design, they should make an inference about the function of their object. Ask them to write down reasons supporting their conclusions.

3. At the end of the allotted time, have the students open the sealed envelopes or taped answer sheets and compare their hypothesized function against the written explanation. Ask for several volunteers to display their objects and explain how they came up with their conclusions.

4. After the completion of the exercise, return items to their owners.

Closure

Have students write a paragraph on some of the ways archaeologists can use objects to help them learn about the past.

Links

Lesson 1.3: "Observation and Inference."
Lesson 2.3: "Artifact Classification."
Lesson 2.7: "Experimental Archaeology: Making Cordage."

Sources

Durbin, Gail, Susan Morris, Sue Wilkinson, and Mike Corbishley. 1990. *A Teacher's Guide to Learning from Objects*. London: English Heritage. [The "Looking at an Object" activity sheet is adapted from this book.]

Hally, David J. 1986. The Identification of Vessel Function: A Case Study from Northwest Georgia. *American Antiquity* 51(2), pp.267–295.

Ward, H. Trawick, and R. P. Stephen Davis, Jr. 1999. *Time Before History: The Archaeology of North Carolina*. Chapel Hill: University of North Carolina Press. [The image in this lesson's main heading is taken from Figure 5.15.]

Looking at an Object (page 1)

Name:

QUESTIONS	THINGS FOUND OUT BY LOOKING
Physical Features What does it look like?	
What color is it?	
What is it made of?	
Is it a natural or manufactured substance?	
What do the materials suggest about its purpose?	
Is the object complete or broken?	
Is it worn, and if so, how?	
Has it been altered or mended?	
Do the wear patterns or mends reveal anything about the object's use?	

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Name:

QUESTIONS	THINGS FOUND OUT BY LOOKING
Construction How was it made?	
Is it machine-made or handmade?	
Was it made in a mold or in pieces?	
Design Is it decorated? If so, describe.	
How was the design made?	
Is there writing on the object?	
Does the writing or decoration suggest anything about the object's use?	
Function How might this object have been used?	
How sure are you about your inference?	