

The Life of an Artifact

Language arts, social studies

SKILLS.....Knowledge, comprehension, application, analysis, synthesis, evaluation

STRATEGIES.....Discussion, problem solving, writing, sequence, scientific inquiry

DURATION.....2 or 3 class periods

CLASS SIZE.....Any, but with a large class the artifacts may need to be shared

OBJECTIVES

In their study of Ancestral Pueblo people, students will use the replica artifact trunk to:

1. Investigate the functions of artifacts.
2. Make observations about an artifact.
3. Derive inferences regarding an artifact's construction.
4. Combine their observations, inferences, and knowledge into creative writing about the life of the artifact.

MATERIALS

- Trunk of replica artifacts from Aztec Ruins

VOCABULARY

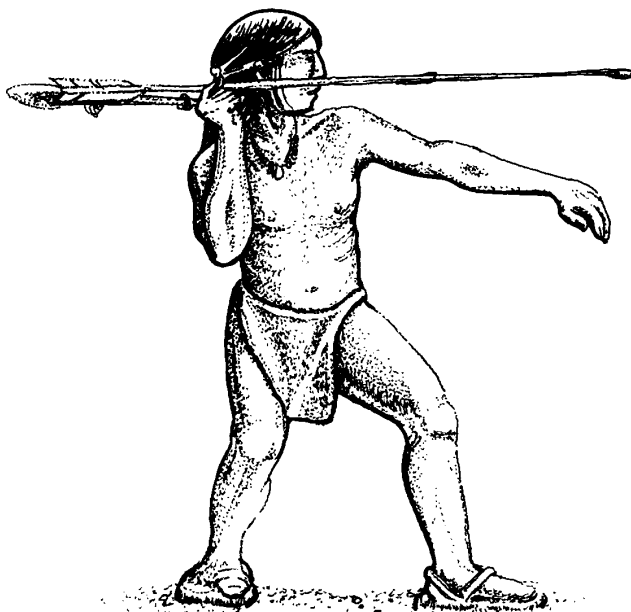
artifact: any object made or used by humans.

chronological order: an arrangement of events in the order in which they occurred.

hypothesis: a proposed explanation accounting for a set of facts that can be tested by further investigation.

inference: a conclusion derived from observations.

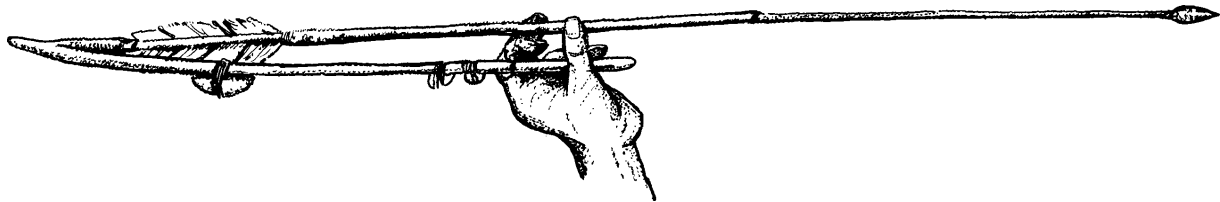
observation: recognizing or noting a fact or occurrence.



BACKGROUND

Archeologists use observation and inference in the scientific method to help them answer questions about prehistoric peoples. When investigating artifacts, *observations* are statements that can be made based on what is directly observed. An *inference* is a conclusion derived from observations, but cannot itself be observed. An inference often comments about the behavior of the people who used the objects. For example, observation of a projectile point might include: it is sharp; it is black. Inferences might include: a man made this artifact; it was used to kill rabbits; it is made from stone from New Mexico.

A *hypothesis* is a chosen inference that the archeologist will attempt to confirm or disprove through testing. Example: If this projectile point was used to kill rabbits, we would expect to find microscopic traces of rabbit blood on it.



The idea of *chronology*, or arranging events in the order in which they occurred, is also important in trying to understand the past.

Ancestral Pueblo people created objects, or *artifacts*, that served their basic needs, using the resources available to them. These needs are similar to those we have today, such as the need for food, clothes, tools, medicine, shelter and protection from the elements. Over time they changed the form of their artifacts to better suit their particular needs. For example, earlier Ancestral Puebloans used tightly woven or pitch-sealed baskets to cook their

food. They could not place the baskets directly over the fire, but they could drop hot rocks into the liquid, replacing them with others as they cooled. The introduction of pottery made cooking much easier, because they could place ceramic vessels directly over the fire. The form, construction techniques, design, and styles of pottery also changed over the centuries, adapting to the particular needs and preferences of the people.

Tools used for hunting is another example of artifacts that changed to fit needs. For several hundred years, the *atlatl*, or spear thrower, was used widely for hunting. Later, the bow and arrow were introduced, and proved to be superior to the atlatl in speed, portability, and accuracy. The use of the atlatl then declined.

In the making of these artifacts, Ancestral Pueblo people may have shared an attitude similar to some of their descendants. Today, some Puebloan peoples believe that artifacts are living beings with spirits. With this belief, an artifact would be born when it is made, live while it is in use, and eventually die. Artifacts may have held special powers by virtue of their uses, their users, materials they were made from, and locations in which they were made or used. For some, the spiritual activity of creating an artifact is more important than the product that is created; the process aligns the maker with the greater movements of the universe.

SETTING THE STAGE

1. Discuss an invention that makes life easier for us today. Someone created it to meet a specific need. In the same manner, the Ancestral Pueblo people created objects to meet their particular needs. Brainstorm some of those needs. Examples: the need for food, clothes, tools, medicine, shelter, and protection from the elements.
2. What conveniences do we have today that people did not have 100 years ago? Examples: electric toothbrush, electric pencil sharpener, food processor, computer, telephone, automobile. How did these conveniences come to be? In a similar fashion, over time the Ancestral Pueblo people developed and used new tools that served their particular needs more efficiently and effectively. Share the examples of pottery replacing baskets for cooking, and bows and arrows replacing the atlatl.

PROCEDURE

1. As a group, quickly view each replica artifact in the trunk. Students will infer their construction and investigate their functions and occurrence at Aztec Ruins later in the lesson.
2. Divide students into pairs or small groups and randomly distribute the artifacts among them, or have each student select an artifact from the trunk by a fair method, such as by drawing a number.
3. Review the terms *observation* and *inference*. Students write observations about the artifact. Examples: it is long; it is made of wood; it is sharp.

4. Without dismantling it, students scrutinize the object to infer how it was made. They then write inferences about its construction on their paper. Examples: the wood was soaked and straightened; a man chipped the point in an hour.
5. Students infer how their object was used. The teacher then shares background information included in the replica trunk regarding the inferred use of the artifacts and their occurrence at Aztec Ruins.
6. Students pretend that they are the object, assuming its perspective. Using first person ("I"), students combine their observations, inferences, and knowledge into a story that creates a "life" for the artifact. Examples: "I began my life as a rock," or "I was once just grass blowing in the wind." Remind students about chronological order. Tell them to not reveal the name of the artifact being described, but to paint a clear picture of the possible steps taken to make it. Students may want to include their interpretations of how the user related to the artifact in a personal manner.
7. After students complete their stories, shuffle stories and distribute them to students randomly.



Pot rest

CLOSURE

1. Divide students into pairs. Each pair will evaluate the paper they each received and determine the artifacts it describes.
2. Each student reads aloud the paper received, and tells what artifact it describes. The writer of the story verifies the reader's guess of the artifact's identity. Students whose artifacts were guessed incorrectly are able to learn what went awry in their writing through peer and teacher feedback.
3. Compare students' stories with background information from the trunk regarding the artifacts' construction.

EVALUATION

Students are evaluated on observation and inference worksheets, and skill in writing their stories.

EXTENSIONS

1. Imagine that the ancient people had newspapers. Write a simulated newspaper article describing the invention of this particular artifact.
2. Students research and report to the class about the time period, area, resources, and people from whence the artifact came. Students could research further its particular occurrence and use at Aztec Ruins.
3. Make this a verbal exercise whereby the student conferences with the teacher only, or verbally shares his/her ideas with the class as opposed to putting it in writing.
4. Students tape record the assignment and allow an aide or student helper to put the recording on paper.
5. Students create a *hypothesis*, or testable inference, about the construction of their artifact. Students test the hypothesis by attempting to recreate the artifact at home.

REFERENCES

Barnett, Franklin, *Dictionary of Prehistoric Indian Artifacts of the American Southwest*, Northland Printing Company, Flagstaff, 1991.