

Details



Completion Time: About 1 Period

Permission: Download and Share

You are the Archaeologist

Overview

In this lesson, students learn about what archaeologists do and then practice implementing these skills with "real artifacts."

Objectives

- Students will be able to define an artifact and an archaeologist.
- Students will use evidence to support their decisions about the origin and use of an unknown item.

Preparation

Some of the objects that have worked well in this lesson are small odd-shaped or weathered rocks or minerals (such as quartz, sedimentary rocks with uneven weathering, or unusual fossils), pieces of larger machines or tools (such as springs or wheels), unusual shells, bones, or root castings. Essentially anything that doesn't look like what it really might be or would be unfamiliar to students.

Procedure

Engage:

Begin either by asking students to define archaeology, describe archaeologists or to draw what an archaeologist looks like on their paper. Discuss student responses.

Tell students that archaeologist's work to determine WHAT happened, TO WHOM it happened, WHEN it happened, WHY it happened, and HOW it happened. To do this they collect evidence or clues. They look at

Materials

- Student Journals
- Replica artifacts, if available
- Odd assortment of natural and man-made items for students to "identify"



ARTIFACTS – which are anything that has been modified by humans or by human activity.

{With older students we have looked at a common object, such as a popsicle stick and had a discussion about whether it is an artifact, before I tell them the “actual” definition. They often have a conception that an artifact must be “old”, a “fossil” or “found in the ground” and the realization that anything that has been modified by humans or by human activities creates an artifact comes as a surprise to them.}

Show student’s replica artifacts or examples of unknown items and ask them to decide if they think that they are made by nature or made by people. Always follow up their responses with a request for their reasoning or evidence that led them to that conclusion – WHY do you think so?

Explore:

The students will work individually or in pairs to observe, describe and make conclusions about an unknown object. Together they will need to

- Sketch the object
- Give it a written description
- Decide if it is made by nature (not an artifact) or made/modified by humans (an artifact)
- Justify their decision with evidence or observations

{I have found it helpful to first show an object to the students and ask them “Do you know what this is?” or “Have you seen an object like this before?”, so that they can truly be engaged with the purpose of the activity without having to pretend that they don’t already know about the object.}

As students work, walk around and ask them to elaborate their ideas, prod them to more fully explain their conclusions and ensure that they are recording their thoughts.

Assessment

Summarize: There are two options – debrief as you go or debrief at the end. With younger students, they may spend the entire time working on one object, so debriefing together at the end, might be best. With older students they can look at 3-4 objects, so debriefing as you go is recommended. To debrief, have the students share their ideas/decisions about their objects. Afterwards, give them the part that archaeologists don’t get – “the answer” – and tell them about the object.

Credits

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National Science Education Standards (NSES):

Content Standards, Grades 5-8

Content Standard A: Science As Inquiry

- a. Abilities necessary to do scientific inquiry
- b. Understandings about scientific inquiry

Content Standard F: Science In Personal and Social Perspectives

- b. Populations, resources, and environments

Content Standard G: History and Nature of Science

- b. Nature of science

Other Standards: