

ARCHAEOLOGY: THE BASICS

Primary Learning Outcomes

To teach students to the basic concepts of the archaeological method and the importance of learning new information in science. It also introduces the students to the notion of preservation and stewardship for cultural resources.

Assessed Standards

Grade: 8

Science

Standard: Students will understand the features of the process of scientific inquiry.

Indicator: Scientific investigations usually involve collecting evidence, reasoning, devising hypotheses, and formulating explanations to make sense of collected evidence.

Social Studies Skills

Goal: The student will be able to locate, analyze, and synthesize information related to social studies topics and apply this information to solve problems/make decisions.

Indicator: The student should be able to draw conclusions and make generalizations.

Procedures and Activities

Step: 1 Duration: 0 minutes

Hang the poster (from Forgotten Invasion trunk) on a classroom wall to visually represent the steps of the archaeological method.

Attachments for Step 1

Archaeology Poster

Step: 2 Duration: 10 minutes

Introduce students to the job of an archaeologist using the background information.

Attachments for Step 2

Background Information: What is Archaeology?

Step: 3 Duration: 15 minutes

Use true and false questions to dispel and discuss common myths about archaeology.

Attachments for Step 3

Background Information: Common Myths

Step: 4 Duration: 15 minutes

Discuss the importance of archaeology as a science.

Attachments for Step 4

Background Information: The Most Important Thing

Step: 5 Duration: 15 minutes

Discuss and have students evaluate the conservation issues surrounding the field of archaeology. Discuss how students can assist in protecting historic resources.

Attachments for Step 5

Background Information: Two Big Problems for Archaeology

Step: 6 Duration: 20 minutes

Pass out the Archaeological Method classroom reading. This reading takes the student through the steps of the Archaeological Method using a War of 1812 site as an example.

Attachments for Step 6

Reading: Archaeology

Step: 7 Duration: 30 minutes

Have students play the enclosed computer game. The game takes students through the steps of the archaeological method. The game is available on disk (enclosed) or on the web.

Attachments for Step 7

Disk: Forgotten Invasion, the Web Game

Website: <http://www.forgotteninvasion.com/>

Step: 8 Duration: 30 minutes

Divide the class into four groups. Give each group a bag containing broken ceramics and a roll of masking tape. Each group must put together the “puzzle” of the broken ceramics to form a plate, using masking tape to hold the pieces together. After all groups have finished, remove the masking tape and return the pieces to the bags.

Attachments for Step 8

Background Information: Mending ceramics
Plastic bags containing broken ceramics (4)
Rolls of masking tape (4)

Step: 9 Duration: 20 minutes

Pass out the archaeology puzzle. Students can work on the puzzle in a group or alone.

Attachments for Step 9

Puzzle
Puzzle Answer Sheet

Step: 10 Duration: **30 minutes**

Hand out the archaeology quiz.

Attachments for Step 10

Quiz
Quiz Answer Sheet

Materials and Equipment

Background information, reading, puzzle, quiz, poster, plastic bags containing broken ceramics (4), rolls of masking tape (4), cd containing computer game, answer sheets.

Total Duration

3 hours, 5 minutes

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Assessment

Students will be assessed on their participation in the classroom activities and discussion. Their quizzes will be evaluated for accuracy.

Attachments for Step 1

Archaeology Poster

The poster is in the *Forgotten Invasion* trunk.

Attachments for Step 2

What is Archaeology?

Before we answer that, let's see how much you actually know about it. Here's a few true or false questions.

T or F Archaeologists study dinosaurs. (False)

T or F Archaeologists look for treasure. (False)

T or F Archaeologists go to school for a long time. (True)

T or F Lara Croft is an Archaeologist. (False)

T or F Most archaeology happens in other countries. (False)

T or F Archaeological sites are hundreds or thousands of years old. (False)

T or F Sometimes archaeologists don't find anything when they are working. (True)

T or F Archaeologists sell artifacts to make money. (False)

Ok, now that we've answered a few questions, here's the definition of Archaeology.

Archaeology is the study of the HUMAN past.

Attachments for Step 3

Common Myths

Let's look back at our True and False questions. Most of these questions deal with common myths about archaeology. Let's talk about these myths.

1. *Archaeologists study dinosaurs.* Remember, archaeology deals only with the human past. The study of dinosaurs and other prehistoric animals is called Paleontology.
2. *Archaeologists look for treasure.* Archaeologists are scientists. Scientists are interested in learning and finding out new information. Scientists are not interested in how much something is worth. They are interested in how much something can tell you about the past. People who look for treasure are called looters. Looting is against the law because it involves stealing artifacts.
3. *Lara Croft is an Archaeologist.* Lara Croft is a looter. Archaeologists go to school for a long time to become scientists. Lara Croft did not go to college and has no special training. Lara Croft also steals artifacts, which is against the law.
4. *Most archaeology happens in other countries.* There are thousands of important archaeological sites in the United States. There are hundreds of archaeologists working here as we speak. Every country has archaeological sites, because every country has its own past.
5. *Archaeological sites are hundreds or thousands of years old.* Archaeological sites can be as young as 50 years old. For example, World War II battlefields and sunken ships (Pearl Harbor) can tell us important things about how soldiers lived that we don't already know. Once all the World War II veterans pass away, it will be up to archaeologists and historians to help tell their stories.
6. *Archaeologists always find things when they are digging.* Many times archaeologists find nothing. Let's say that there is a small forest with an archaeological site in it. No one knows where the site is. Archaeologists conduct a survey, digging holes, called shovel tests, every few feet until they've covered the whole forest. These shovel tests will be empty until they find the site.
7. *Archaeologists sell artifacts to make money.* Archaeologists do not get to keep any artifacts. The artifacts go into museums or special storage areas called *curation labs*. If an archaeologist were to keep an artifact, that would be stealing. In most places, it is against the law to sell artifacts. If archaeologists stole an artifact and tried to sell it, they would probably go to jail. They would also lose their reputation and would never be able to work in archaeology again.

Attachments for Step 4

The Most Important Thing

What is the most important thing to an Archaeologist?

Take guesses: artifacts, dirt, mummies, money, pottery, tools...

The most important thing to Archaeology and to an Archaeologist is INFORMATION.

Remember, archaeology is a science, and science is about information. The archaeologist wants to LEARN about past peoples, not just look at the things they owned.

Scenario: Your friend is an archaeologist. You find a bunch of neat artifacts, stone tools, broken pottery, and you take them to your friend.

You: "Look, isn't this cool?"

Your Friend: "Where did you find them?"

You: "I don't know."

Your Friend: "Yeah, looks like some artifacts to me."

Why isn't your friend excited?

Take guesses

Because to an archaeologist, artifacts by themselves are just a bunch of stuff. A piece of pottery can't tell you anything about how a group of people lived. The archaeologist wants to know about the whole site. He wants to know exactly where every artifact was found. By knowing this, the archaeologist can read the site, the way you might read a book. Every artifact on the site is a clue. If you move those clues or take a few of them, it's like erasing sentences out of the book. When you brought your friend the pottery, you brought him a few words. He wants the whole book.

Attachments for Step 5

Two Big Problems For Archaeology

Can anybody guess what would be the two biggest problems for Archaeology?

Take guesses.

Answer: looters and vandalism

Does anyone know what a looter is?

A looter is someone who steals from an archaeological site. What types of things could be stolen?

1. Artifacts
2. Parts of buildings
3. Information

Possible scenarios:

1. Someone steals artifacts from an archaeological site and keeps them or sells them for money.
2. Someone goes metal detecting on a battlefield. She finds some bullets and takes them home. Those bullets are considered part of the battlefield, and the battlefield is protected by law. By protecting the battlefield, we are honoring the men that died there. When you steal from the battlefield you are stealing from the men who died there.
3. Someone who's not an archaeologist goes and digs up an archaeological site for fun. Even if he doesn't take anything, it's still stealing. *Why?* Because he's taken information. An archaeologist reads dirt like most people read books. If you went out and dug on a site and were not a professional archaeologist, it would be like taking a book and ripping all the pages out, tearing the pages into pieces, and then still expecting people to be able to read it.

Does anyone know what vandalism is?

Vandalism is when someone destroys an archaeological site for fun or to show off.

Possible Scenarios:

1. Someone starts a fire in a national or public park.
2. Someone spray paints pictures or words on a historic building.
3. Someone is hiking in the Grand Canyon. She sees ancient drawings on the mountain sides. She thinks it would be funny to paint their own drawing next to or on top of the ancient one.

Looting and Vandalism hurts everyone. *What can you do to help?*

You can become a *good steward*.

A *steward* is someone who understands the importance of *archaeological resources* and takes steps to protect them and help educate other people about them.

Common ways to help:

1. Learn about the archaeological resources in your community.
2. Never vandalize or loot a site.
3. Teach your friends not to vandalize and loot.
4. Tell your parents the things you've learned about cultural resources and how important they are to your community.

Attachments for Step 6

Reading: Archaeology

Attachments for Step 7

Disk: Forgotten Invasion, the Web Game

Website: <http://www.forgotteninvasion.com/>

Attachments for Step 8

Plastic bags containing broken ceramics (4)

Rolls of masking tape (4)

Mending Ceramics

When archaeologists return from the field, they bring bags of broken ceramics to the lab. Lab technicians must put together the broken pieces to discover what kind of ceramics the people who lived at the site used. Archaeologists study the shapes of the ceramics, the materials the ceramics are made from, and the patterns printed on the ceramics. From these shapes and patterns, archaeologists can learn:

- How old are the ceramics?
- How expensive were they?
- What groups of people used them?
- Where were they made?

At Point Peter, archaeologists uncovered many “high-status” ceramics at the bottom of a privy, which is a type of outhouse. From historic maps, archaeologists knew the privy was located in a soldiers’ campground. The high-status ceramics were too delicate and too expensive to be the kind soldiers used. Who used the ceramics? Where did they come from? Any guesses?

Archaeologists and historians worked together to solve the mystery of the high-status ceramics in the privy. They read that British soldiers stayed at this campground after they captured Point Peter. They also read accounts that said British soldiers raided the town of St. Marys and stole many expensive things from the homes of the area. Archaeologists believe the British soldiers stole more things than they could use. They threw the ceramics they didn’t need into the privy. The high-status ceramics that archaeologists found confirmed the historic accounts.

Attachments for Step 9

Puzzle

Puzzle Instructions

Use the images to identify which word goes in each line. When all the rows are filled in correctly, Clue #2 will be formed vertically. This clue will tell students what part of the past archaeologists study.

Puzzle Answer Sheet

Attachments for Step 10

Quiz

Quiz includes five types of questions:

True/False

Multiple Choice

Short Answer/Fill in the Blank

Matching Association

Short Essay