

What is Archaeology?

Students will explore how archaeologists study ancient groups through the things they left behind and explain the importance of protecting archaeological sites to preserve our heritage.

Before You Visit

Overview

Archaeologists play a critical role in our understanding of the past. In our history, entire civilizations have risen and fallen, leaving only objects behind for us to study and draw conclusions about their culture, way of life, environment, social structure, and technological sophistication. Archaeological dig sites are also sometimes our only way of knowing when certain peoples arrived in the Caribbean, making the careful excavation, dating and study of found artifacts one of our only links to understanding our heritage.

However, the archaeological sites (and those sites yet to be discovered) are at risk of being disturbed by unauthorized and illegal excavation and sales of artifacts, such as ceramics, on the black market. Even “innocent” digging and removal of found objects can pose a problem, since archaeologists rely on context to learn about the object—where exactly it was found, what objects were near it, how it was positioned in the ground, what might have been inside of it, the type of earth covering it, etc.

Therefore, it is crucial to share this unique part of historical “detective work” with students and stress the importance of leaving archaeological dig sites (or buried items) alone.

Lesson objectives

SWBAT define archaeology, and explain their role in how we learn about our past.

- Students will identify how archaeologists explore and excavate objects from dig sites and study



Amerindian Heritage

Grenada National Museum: Teacher Kit

Grade Levels

- 4th +
- Extension Activities for Secondary Forms 1+

Duration

- Pre-Visit: 30 minutes
- Visit: 30 minutes
- Post-Visit: 15-20 minutes

Topics

- Defining archaeology
- Making observations and inferences about objects
- Using context to make inferences about the past
- Protecting dig sites and our cultural heritage

Linkages: Tools, ceramics, dig sites, Pearls Airport, carbon dating, chemistry, geology, anthropology

Materials

- **Investigating Artifacts handout**; Or, write the features on the board for students to copy into their exercise books
- **Artifacts Crossword handout (optional/extension)**
- Clipboards or notebooks for students to press on
- Pencils for each student

Exhibit Tie-Ins

- Amerindian Heritage Room Exhibit Displays: *What is Archaeology?* and *Protecting Our Cultural Heritage*

Objects of Interest

- Various ceramics, tools, and other excavated objects that were important in telling us about Amerindian history

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these objects and their context to retell a story about the group/culture being studied.

- Students will understand the negative impact of looting and illegal selling of artifacts from dig sites around Grenada and see the importance of protecting them to help preserve our heritage.

Procedure

1. A few days before this lesson, ask students to bring to class 3 small objects of personal importance. The personal objects might include a toy, an item they use to get ready in the morning, a craft or drawing they made, a piece of jewelry or article of clothing, a tool or household utensil, or anything that might describe them or their way of life. Students should bring their objects with them in a brown paper bag so that other students cannot see what the objects are. Make sure to tell students to keep their objects secret! They should not tell any of their classmates what they have chosen to bring.
2. On the day of the lesson, have your class-list handy, with a number next to each student's name. Collect the paper bags and number them accordingly as you go. Remember: students should not share which bags or items are theirs. In succession, invite a student to the front of the room, give them a bag that isn't their number, and have them draw just **one object** from it, revealing the object to the class.
3. Ask this student to describe the object using only **facts** from observation alone:
What size is it? Shape? Weight (heavy or light)? Color? What is it made of? What is it called?
4. Next, introduce the concept of **inferences**, or things we might conclude or **guess** about the object based on the information we know from our observations.

For example, if Object 1 is a hair brush, we might infer that whoever brought it could have longer hair, and may be female. Do we *absolutely know* the owner of the brush is female? No. This is an **inference**, and inferences can be incorrect without enough facts to support them.

However, the more facts we can draw, the more our inferences might be correct. For example, if long strands of hair were found in the brush, we might feel more confident that its owner is female. If the object is found in a bag which **also** contains lipstick, we can be more confident in our inference (but still not certain).
5. Ask students to start making observations about the first object, including who might be the possible owner. What facts and inferences can they make based on their observations? Help students categorize each statement as "fact" or "inference" (or "guess" for younger students) so they can see the difference.
6. Next, reveal all of the remaining objects in the bag at once. With this added information, what new facts and inferences can be made? Are students closer to discovering who owns the items? Explore a bag together as a group if students need more practice identifying facts from inferences.
7. Now, ask pairs of students to come up and take one bag back with them to their desks. Student pairs should explore 1 object from the bag first, without looking at the remaining contents of the bag. Ask students

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to identify facts and inferences using the **Investigating Artifacts** handout. Students can also draw a dividing line on blank paper and label one column “Facts” and one column “Inferences” (“Guesses”) for this activity. After making some observations about the first **object**, including who might own it, student pairs should explore the remaining contents of the bag to see if their assessment changes.

8. Visit the pairs to examine the objects in their bags and the recorded facts and inferences made about them, providing corrective feedback if needed. Use this opportunity to pre-select 1 or 2 groups with good examples for the debriefing.

Debriefing

Use the following questions to help students understand how their examination of facts and inferences can be used to learn about a person, group, society, or culture.

1. Review student guesses of who owns the bags. For any that are correct, ask the students what facts and inferences they made to make this “discovery.” Ask a few incorrect groups what inferences they made that led them to this decision.
2. Ask any of the groups if their guesses and inferences changed as they revealed the other items in the bag. How did the presence of these items change their conclusions? Explain that this is the power of context when studying objects—*the presence of information around the object is sometimes just as important (or more important) as the object itself.*
3. What can our observations tell us about people, groups, or cultures? How hard was this activity? If these objects were found in a person’s room next to many more objects, would that have made the job of guessing its owner easier or harder? Why?
4. Archaeologists take great care to ensure artifacts do not get damaged during excavation. What if the objects are disturbed, damaged, or missing pieces? How might that make the job of archaeologists harder?

Explain that archaeologists rely on the location and proximity of objects to others (*context*) in order to draw better inferences and conclusions about the items they find. If an object is looted or removed from an excavation site, this valuable information becomes lost forever!

Extension

1. Students should explore the web for informative articles explaining how **radiocarbon dating** techniques help establish the age of objects. Ask students to explore websites to find out other techniques for analyzing artifacts. How does knowing the age of an object help historians? Search for “[Measuring age on Earth](#)” on www.khanacademy.org for great videos explaining the concept (Tie-ins: chemistry, atoms). Students could also explore the interactive “[Radioactive Dating Game](#)” from the University of Colorado, Boulder (<http://phet.colorado.edu/en/simulation/radioactive-dating-game>).
2. What can the Government of Grenada and other neighboring Caribbean islands do to counteract illegal excavation and looting of ancient artifacts? What policies are in place to protect these sites? What can citizens do if they see a potential site being disturbed?

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At the Museum

Investigating Artifacts

Overview

Students will explore the *Amerindian Heritage Room* and select an artifact for observational inquiry.

Background Information

Archaeologists have a tough job. They must do a lot of hard work digging and sorting the objects they find at an excavation site, while being very careful not to break or disturb any of the objects they are looking for in the process. The goal is to preserve these objects as best as they can while they are being excavated, cleaned, studied, and occasionally shown at museums. Furthermore, **illegal looting** of items has made their job even harder, since once an object is removed from its context, it becomes much harder to reveal anything about the people or groups who may have lived here! This creates a permanent loss of the rich history and cultural knowledge of our story of Grenada and the cultural heritage of its citizens.

The artifacts on display at the GNM are all real items recovered from the earth, unless otherwise mentioned on the object label. Some objects may be replicas, which are safer to display than the real item, especially if the item is fragile and could break or degrade due to the elements. Two posters, *What is Archaeology?* and *Preserving Our Cultural Heritage* should accompany this lesson/visit.

Lesson objectives

SWBAT use inquiry-based observation to examine an artifact and identify facts and inferences about it.

Procedure

1. Using the questions from the *Investigating Artifacts* handout, invite students to quietly explore the museum and select an object to observe and explore*. They will carry out their investigation by viewing the object from different angles, observing its properties, measuring (estimating) the object's size and other physical characteristics, and recording observations. They can also read the object's label for additional clues and information. Once their observations and recording of facts are complete, they can make inferences about what the object was used for, who might have used it, where it might have been used, how it might have been made, and why it was useful to the people who owned it. Allow approx. 15 minutes to explore.

* If you have not completed the pre-visit lesson, briefly introduce students to the idea of "facts" vs. "inferences" using a simple hair brush or household item as an example. Even a refuse bin/trash can tell us a lot about a person's way of life. For example, the type of snacks they eat, the papers and past correspondence or homework they discard, etc., can all provide an observer with a set of facts and assumptions (inferences) about the person living there. (Additionally, the order of the trash deposit gives a chronological sequence, something archaeologists call "stratigraphy.")

2. Walk around and examine student observations and inferences, providing feedback and clues if needed.

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Pre-select a few choice examples to review as a group in the debriefing.

Extension/Alternate Activity

In lieu of the facts and inferences exercise, students can complete the *Artifacts Crossword* while exploring the museum. The crossword provides clues (facts and inferences) about particular objects in the museum. Students should be sure to read the object labels for additional clues to complete the crossword. (Time: approx. 15 minutes).

Debriefing

1. Bring the group back together near the *What is Archaeology?* and *Protecting Our Cultural Heritage* poster displays. Ask students to identify ways archaeologists assess artifacts to help them arrive at conclusions about the people who used them.
2. Ask students how much we would know about Amerindians if it weren't for these artifacts. What if many of these objects were never found, or were stolen before they could be studied? What would we know about this part of our history? Review what we can do, as citizens, to protect our cultural heritage.

After Your Visit

Post Visit and Extension Activities

1. Work with students to start a letter-writing campaign, urging groups (businesses, art galleries, tourist companies, cruise line operators, government agencies, the airport, etc.) to help do their part by not disrupting sites or allowing artifacts to leave Grenada. Students can also make posters for display at the museum to urge tourists not to purchase artifacts being sold in certain parts of the country.
2. Have the class work (together or in small groups) to develop a policy or set of procedures that people should take if they discover a possible excavation site in Grenada. Who should they contact? What steps should be taken to protect and secure the area? Ask students to research government and organization websites (such as the museum) for appropriate contacts. Finally, have groups make brochures or posters with this information.
3. Ask students to research and present a past archaeological discovery in the Caribbean, explaining what was found, who found it, what was done with the site, and why it was important.

Post-Visit Reflection

- How does our knowledge of the past help society in the present? Why do we care about history and past cultures that lived in Grenada? Is there only “one side” to history?