

Uncovering the Past

This module is designed to help you explore the wonders of archaeology.

1. Choose either A, B, or C and complete **ALL** the requirements.
 - A. Watch an episode or episodes (about one hour total) of a show about anything related to archaeology. Then do the following:
 - 1) Make a list of at least two questions or ideas from what you watched.
 - 2) Discuss two of the questions or ideas with your counselor.
 - B. Read (about one hour total) about anything related to archaeology. Then do the following:
 - 1) Make a list of at least two questions or ideas from what you read.
 - 2) Discuss two of the questions or ideas with your counselor.

Some examples include—but are not limited to—shows found on PBS (such as *NOVA*), Discovery Channel, Science Channel, National Geographic Channel, TED Talks (online videos), and the History Channel. You may choose to watch a live performance or movie at a planetarium or science museum instead of watching a media production. You may watch online productions with your counselor's approval and under your parent's supervision.

Books on many topics may be found at your local library. Examples of magazines include but are not limited to *Odyssey*, *Kids Discover*, *National Geographic Kids*, *Highlights*, and *OWL* or owlkids.com.



- C. Do a combination of reading and watching (about ONE hour total) about anything related to archaeology. Then do the following:
- 1) Make a list of at least two questions or ideas from what you have read and watched.
 - 2) Discuss two of the questions or ideas with your counselor.
2. Complete **ONE** adventure from the following list for your current rank or complete option A or option B. (If you choose an adventure, choose one you have not already earned.) Discuss with your counselor what kind of science, technology, engineering, and math was used in the adventure or option.
- Wolf Scouts: Collections and Hobbies
 - Bear Scouts: Beat of the Drum
 - Webelos Scouts: Looking Back, Looking Forward; Project Family



Option A: Some of the objects archaeologists find have been preserved in various ways. Experiment with preserving a hot dog with baking soda. Measure each dimension, then completely surround and cover the hot dog in baking soda. Let sit in a safe place for seven days, and measure again. Then cover the hot dog again, let it sit another seven days, and measure it a third time. Make note of any changes in size, shape, color, and other properties. Compare it to a hot dog that has not been preserved. Discuss your experiment with your counselor.

Note: Do not eat the hot dog, and make sure to store your experiment in a safe place

and dispose of it properly when you are done.

Useful Links

www.scientificamerican.com/article/bring-science-home-mummification/

www.sciencebuddies.org/science-fair-projects/project_ideas/HumBio_p022.shtml

Option B: Use plaster of paris to create a “rock” mold at least half an inch thick. Once it is set, create a dark surface like a patina on the rock, possibly by using tempera paint. Use a carving tool, such as a screw or push pin, to create one or more petroglyphs on your rock.

Search online for “plaster of paris petroglyphs” for instructions.

3. Explore. Do **EACH** of the following:

A. Look up the definition of the word *archaeology* and discover what an archaeologist does on a dig site, and what other activities are involved in their work. Discuss it with your counselor.

Archaeology is the study of the human past by recovering and analyzing materials that people left behind.

B. Discover the differences between physical remains, artifacts, and ecofacts. Discuss with your counselor examples of each that archaeologists can find for a prehistoric people group.

An *artifact* is any object made by a human being. Usually, it refers to an object that has cultural or historical interest.



An *ecofact*, or *biofact*, is any organic material that has been recovered and has cultural or historical significance. This might be bones, animal horns, plants, and so on. If the item has been manipulated or modified by humans, it becomes an artifact.

Physical remains are things left behind that were part of an animal—for example, body parts or fossils of body parts.

- C. Look around your house. Make a list of 10 artifacts from your home that serve as clues to the way you live. Discuss what you discovered with your counselor.

Artifacts could include anything found lying around the Scout's house. A dog crate could indicate the family has kept domesticated animals. A hammer could indicate they know how to use tools. Ask the Scouts to pretend they have never seen a particular item before, and what might they think it is.

4. Be an archaeologist! Choose A or B:
 - A. Much can be discovered about a group of people based on the items they throw away. With a parent or guardian's permission and guidance, look through the items in a medium-sized trash can that contains at least a few days' worth of trash. Draw conclusions about the people in that location and how they might live, based on what they throw away. Determine which items are artifacts and which

are ecofacts. Discuss with your counselor how the relative age of the artifacts can be estimated based on their location in the trash can.

You may want to have the Scout wear disposable gloves, especially if the trash can contains food remains. The Scout could lay out a plastic tarp or sheet on the floor, then spread the trash out in order from what was at the top of the can to what was at the bottom. Can the Scout tell when one day ended and the next began? Is it possible to estimate how many days' worth of trash there is? You could ask the Scout to take pictures and bring them to discuss with you.

- B. Create your own layers of artifacts and ecofacts. Gather some small items that would show future archaeologists how you and your family lived. Use a plastic bottle or glass jar as the vessel and Play-Doh sand, dirt, etc., to form layers. Place the gathered items in different layers. Think about which layers would hold the older items compared to newer ones. Show it to your counselor, and discuss with your counselor why you chose these items and what they would show archaeologists about how you lived. Excavate your items when you're done.

The lower the level, the older the item would be.

5. Visit a place that has items that have been excavated, such as a museum, dig site, historical society, etc. Talk to someone who works there about the displays. If you can't visit in person, use resources in your school or local library or on the internet (with your parent's or guardian's permission and guidance) to take a virtual visit. Discuss with your counselor what you saw, how the archaeologists helped uncover those items, and what questions you had.
6. Discuss with your counselor what you have learned about archaeology while working on this award.