

Title	What did I find?
Grade Level	4-6
Content Area(s)	Science, social studies, math, writing, art
Time Allotment	Approximately two weeks (10- 45 minute periods), may depend on student age, ability, or how in depth you want the students to go
Standards	<p>The standards below are addressed in the activities in this unit.</p> <p>National Science Education Standards</p> <ul style="list-style-type: none"> <li>• Many individuals have contributed to the traditions of science. Studying some of these individuals provides further understanding of scientific inquiry, science as a human endeavor, the nature of science, and the relationships between science and society.</li> <li>• In historical perspective, science has been practiced by different individuals in different cultures. In looking at the history of many peoples, one finds that scientists and engineers of high achievement are considered to be among the most valued contributors to their culture.</li> <li>• Tracing the history of science can show how difficult it was for scientific innovators to break through the accepted ideas of their time to reach the conclusions that we currently take for granted.</li> </ul> <p>Principles and Standards for School Mathematics</p> <ul style="list-style-type: none"> <li>• collect data using observations, surveys, and experiments;</li> <li>• represent data using tables and graphs such as line plots, bar graphs, and line graphs;</li> <li>• understand such attributes as length, area, weight, volume, and size of angle and select the appropriate type of unit for measuring each attribute</li> </ul> <p>Curriculum Standards for Social Studies</p> <ul style="list-style-type: none"> <li>• Culture</li> <li>• Time, Continuity and Change</li> <li>• People, Places, and Environment</li> </ul>
Abstract	This unit is designed for 4 <sup>th</sup> -6 <sup>th</sup> grade students to teach them how archaeologists draw conclusions from their data. It is designed as a template that can be adapted to fit a variety of different units of study. The students will use artifacts to learn about a particular group of people or land. It can be made easier or more complex depending on grade level.
Goals	By the end of the unit, the students should be able to: Identify different artifacts; learn ways archeologists collect & analyze data; use their artifact to write a story about why it was important.

Performance Indicators	Students should be able to: sort artifacts in different ways (color, use, material, and size); record their data in a spreadsheet; use resources such as books or the internet to find information about their artifacts; collaborate with other groups to learn more about their artifact.
Background Information	This unit should be incorporated once the students have studied the culture, area, or time period the artifacts are from. With this background knowledge, the students will better be able to predict why their artifact was important.
Materials	Buckets filled with dirt/soil and artifacts- whole or broken pieces of pottery/glass, nails, tools, building material, other things related to the area of study; paper; pencils; sifter; paintbrushes; rulers; glue; magnifying glasses; shovels; books about area of study, water; scale; paper towels; Ziploc bags; student worksheet; books
Technology	Computer with internet access and word processing program
Instructional Procedure	<p>Sample Schedule  Prep time:  Prepare soil buckets containing 10-20 artifacts/ group; there should be a mixture of whole and broken artifacts pertaining to your areas of study. Give each bucket a number so the students can record it on their sheet. Make a list of the artifacts you include in each bucket.</p> <p>Find print materials and/or internet sites that the students can use to find information about their artifacts. (The younger the students, the more specific this material should be). The information should contain pictures, descriptions, type of materials (ceramic, wood, glass, metal) about the artifacts.</p> <p>Day 1: Introduction to activity</p> <p>Show the class a bag filled with an unidentified artifact. Allow each student to ask a yes or no question about the artifact. Once everyone has asked their question, have the students suggest what the artifact might be and the clues they used to draw their conclusion. Show the artifact and explain that when archaeologists find something, they use their background knowledge, print materials and personal experience to draw conclusions of what they found and what it might be. Explain that for the next few days, the students would become archaeologists and try to make sense of the artifacts they find.</p> <p>Divide the class into cooperative learning groups of 3-4 students. Assign roles such as recorder, cleaner, excavator, supply manager. They may be rotated as the activity continues.</p> <p>Each group will receive a bucket of soil/dirt filled with artifacts. It is their job to “excavate” the site, record their findings, and present to the rest of the class.</p>

	<p>Guidelines:</p> <p>Only one person should dig at a time, trying to disrupt the soil as little as possible. They can use the sifter, their hands, shovel, etc.</p> <p>Once they find something, another group member will clean the artifact and place it aside.</p> <p>Once all artifacts have been found and cleaned, the students will move into the research stage.</p> <p>The students will use the chart on the student worksheet to describe their artifact. They will use the print/internet resources to draw conclusions about what their artifacts are, how they are used, and why they were important.</p> <p>The data from each group should be combined to form a class data set to see if pieces from different groups can be combined to give more information about the artifacts.</p> <p>Each student will be responsible for describing one of their artifacts in detail. They will write a description explaining how their artifact was used and why it was important. They will draw a picture illustrating a situation when this artifact was used.</p> <p>Days 2-4: Excavation and analysis</p> <p>Days 5-8: Individual descriptions, combining data from different groups</p> <p>Days 9-10: Students will give individual presentations about their artifact</p>
Assessment	Students will be assessed on both their group and individual work.
Connection to Other Content Areas	History, culture, and customs of different civilizations
Extensions	Once the class database is complete, students can search for pieces of similar artifacts from different groups and work together to rebuild them.
Acknowledgements	<a href="http://www.socialstudies.org">www.socialstudies.org</a> , <a href="http://www.nctm.org">www.nctm.org</a> , <a href="http://www.nses.org">www.nses.org</a> , Kirby Giles, Sharin Manes
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# ARTIFACT WORKSHEET

Group Members: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Bucket # \_\_\_\_\_

Directions: After you excavate, clean and sort your artifacts, think about these questions to help you describe your artifact in the chart below.

What does it look like?

- Color
- size (use mm ruler or scale)
- shape
- material (ceramic, metal, wood, bone, plant)
- Distinguishing characteristics.

What condition is it in?

- Is there evidence of erosion or decay
- does it look new
- is it sturdy or fragile

What do you think the artifact is?

How was it used?

What evidence do you have to support this?

Be as specific as possible. The better your descriptions, the easier it will be to identify similar items from other groups!

ARTIFACT DESCRIPTIONS

Quantity	Material	Color	Condition	Shape	Size	Other stuff	What is it?

## GROUP SCORING RUBRIC

3	All artifacts found Descriptions match artifacts All group members worked together to complete the task
2	Almost all artifacts found Descriptions are not as clear as they could be Most group members worked together to complete the task
1	Few artifacts found Artifacts are not identifiable based on descriptions Group members did not work together to complete the task

## INDIVIDUAL SCORING RUBRIC

3	Written description contains accurate information about the artifact The artifact is clearly identified in the picture Oral presentation is easy to follow
2	Written description contains mostly accurate information about the artifact The artifact is identified in the picture Oral presentation is somewhat easy to follow
1	Written description contains inaccurate information about the artifact The artifact is not clearly identified in the picture Oral presentation is not easy to follow

# Research Collage- Sugar Plantations of Hawai'i

Sari Lerner



Hawaiian Flag



Measuring the length of an animal bone



Lab where the hard work takes place

Petroglyph @  
Volcano National Park



Better to eat you with...



Bag of artifacts ready to be catalogued