

Do Your Own Dig

Topic: Anthropology

Subtopic: Archaeology

Type: Activity

Level: for grades 6 and up

Time: Less than a week

Origin: Petra

Keywords:

Archaeology--Field work • Excavations (Archaeology) • Science--Methodology • Scientific apparatus and instruments

MORE ABOUT THIS RESOURCE

This activity is a supplement to the Petra Educator's Guide. Here, students use mathematical skills and scientific inquiry to generate and process information from their own excavation site. It includes:

Lead Question: What are the steps taken in an archaeological dig to secure and assess artifacts safely and authentically?

- a list of materials for setting up the dig site, digging, and recording data
- step-by-step instructions for preparation, digging, recording of finds, and laboratory observations and analysis
- do's and don'ts when digging

STANDARDS

National Science Education Standards

Grades K-4:

Science as Inquiry CONTENT STANDARD A:

- abilities necessary to do scientific inquiry
- understanding about scientific inquiry

Physical Science CONTENT STANDARD B:

- properties of objects and materials

Earth and Space Science CONTENT STANDARD D:

- properties of earth materials

Science and Technology CONTENT STANDARD E:

- abilities of technological design
- understanding about science and technology

History and Nature of Science CONTENT STANDARD G:

- science as a human endeavor

Grades 5-8:

Science as Inquiry CONTENT STANDARD A:

- abilities necessary to do scientific inquiry
- understanding about scientific inquiry

Physical Science CONTENT STANDARD B:

- properties and changes of properties in matter

Earth and Space Science CONTENT STANDARD D:

- structure of the earth system

Science and Technology CONTENT STANDARD E:

- abilities of technological design
- understandings about science and technology

History and Nature of Science CONTENT STANDARD G:

- science as a human endeavor

Grades 9-12:

Science as Inquiry CONTENT STANDARD A:

- abilities necessary to do scientific inquiry
- understanding about scientific inquiry

Physical Science CONTENT STANDARD B:

- structure and properties of matter

Science and Technology CONTENT STANDARD E:

- abilities of technological design
- understandings about science and technology

History and Nature of Science CONTENT STANDARD G:

- science as a human endeavor

Curriculum Standards for Social Studies**Grades K-4:***Culture*

- explore and describe similarities and differences in the ways groups, societies, and cultures address similar human needs and concerns.

People, places and environment

- use appropriate resources, data sources, and geographic tools such as atlases, data bases, grid systems, charts, graphs, and maps to generate, manipulate, and interpret information.
- estimate distance and calculate scale.

Grades 5-8:*Culture*

- compare similarities and differences in the ways groups, societies, and cultures meet human needs and concerns.

People, places and environment

- use appropriate resources, data sources, and geographic tools such as aerial photographs, satellite images, geographic information systems (gis), map projections, and cartography to generate, manipulate, and interpret information such as atlases, data bases, grid systems, charts, graphs, and maps.
- estimate distance, calculate scale, and distinguish other geographic relationships such as population density and spatial distribution patterns.

Grades 9-12:*Culture*

- analyze and explain the ways groups, societies, and cultures address human needs and concerns.

People, places and environment

- use appropriate resources, data sources, and geographic tools such as aerial photographs, satellite images, geographic information systems (gis), map projections, and cartography to generate, manipulate, and interpret information such as atlases, data bases, grid systems, charts, graphs, and maps.
- calculate distance, scales, area, and density, and distinguish spatial distribution patterns.

Michigan Framework for Social Studies Education***Strand 5 – Inquiry***

- **Standard 5.2 – (Conducting Investigations)** – Students will conduct investigations by formulating a clear statement of a question, gathering and organizing information from a variety of sources, analyzing and interpreting information, formulating and testing hypotheses, reporting results both orally and in writing, and making use of appropriate technology.
 - **Benchmark 5.2.3 – (Early Elementary)** – Construct answers to the questions posed and support the answer with evidence.
 - **Benchmark 5.2.4 – (Early Elementary)** – Report the results of their investigation.
 - **Benchmark 5.2.7 – (Later Elementary)** – Construct an answer to the question posed and support it with evidence.
 - **Benchmark 5.2.8 – (Later Elementary)** – Report the results of their investigation including the procedures followed.
 - **Benchmark 5.2.11 – (Middle School)** – Construct answers to the questions posed and support their answers with evidence.
 - **Benchmark 5.2.12 – (Middle School)** – Report the results of their investigation including procedures followed and possible alternative conclusions.
 - **Benchmark 5.2.13 – (High School)** – Conduct an investigation prompted by a social science question and compare alternative interpretations of their findings.
 - **Benchmark 5.2.14 – (High School)** – Report the results of their investigation including procedures followed and a rationale for their conclusions.