Unit 2: Archaeology and Ancient Civilizations

Content Area: **Gifted and Talented**
Course(s): **Gifted and Talented**
Time Period: **Week 16**
Length: **11 Weeks**
Status: **Published**

Unit Overview

During the course of this unit, students will move past the discovery of ancient animal artifacts, and begin looking at how archeologists discover information about ancient civilizations. Students will learn about the procedures that archeologists follow when they discover a historical site. They will explore how to gain meaning from different artifacts and how archeologists determine information about a culture from various findings.

Standards

SCI.3-4.5.1.4.A.2	Use outcomes of investigations to build and refine questions, models, and explanations.
SCI.3-4.5.1.4.B.2	Measure, gather, evaluate, and share evidence using tools and technologies.
SCI.3-4.5.1.4.B.3	Formulate explanations from evidence.
SCI.3-4.5.1.4.B.4	Communicate and justify explanations with reasonable and logical arguments.
SCI.3-4.5.1.4.C.2	Revise predictions or explanations on the basis of learning new information.
SCI.3-4.5.1.4.C.3	Present evidence to interpret and/or predict cause-and-effect outcomes of investigations.
SOC.5-8.6.2.8.D.1.c	Explain how archaeological discoveries are used to develop and enhance understanding of life prior to written records.
SOC.K-4.6.1.4.C.16	Explain how creativity and innovation resulted in scientific achievement and inventions in many cultures during different historical periods.
SOC.K-4.6.1.4.D.13	Describe how culture is expressed through and influenced by the behavior of people.
SOC.K-4.6.1.4.D.15	Explain how various cultural groups have dealt with the conflict between maintaining traditional beliefs and practices and adopting new beliefs and practices.
SOC.K-4.6.1.4.D.18	Explain how an individual's beliefs, values, and traditions may reflect more than one culture.
SOC.K-4.6.1.4.D.19	Explain how experiences and events may be interpreted differently by people with different cultural or individual perspectives.
SOC.K-4.6.1.4.D.20	Describe why it is important to understand the perspectives of other cultures in an interconnected world.

Essential Questions

- How do archeologists learn about the past?
- How do archeologists excavate a dig site?
- Why is it important to learn about the past?

Application of Knowledge and Skills...

Students will know that...

- Archeologists study how people lived in the past through artifacts they uncover.
- The artifacts archeologists collect allow them to gather information about what people ate, what activities they enjoyed, how people spent their time, and what was valued in a culture, among many other ideas.
- The deeper an artifact is found, the older it tends to be.
- When at a dig site, archeologists use excavation, measurement, dating, and careful recordkeeping in order to learn about the civilization.

Students will be able to...

- Grid and record areas using graph paper in which artifacts are found.
- Hypothesize possible explanations for artifacts found in a dig site.
- Measure the depth of uncovered artifacts and the distance between them.
- Survey an area to look for possible artifacts that will give clues about a civilization or a dig site.

Assessments

- Grid a Dig Site Formative: Other visual assessments Draw a grid on the white board or Smart Board. Using magnets or objects in the Smart Board program, place them on the grid. Have students use graph paper and attempt to recreate the grid on their own using counting and measuring.
- Excavating a Dig Summative: Personal Project Create an excavation site for students using a shoe box with various objects buried in different areas of the dirt. Have students use the skills they practiced throughout the unit to excavate and record all the artifacts found within the dig site. Have students hypothesize how the people in the culture lived based upon those artifacts.
- How old are the artifacts? Formative: Suggested Instructional/Assessment Strategies Create in advance, or have students create, various artifacts buried in different layers of a dig using peanut butter and jelly or Jello. Create a key for items found and have students explain the chronology of events based on where they were found in the dig.
- What do artifacts mean? Formative: Suggested Instructional/Assessment Strategies Provide

examples of artifacts and have students brainstorm individually or in small groups for a story possible meanings of those artifacts. Extend the activity by having students create a story about a culture including the different archeological pieces.

- What does an archeologist do? Diagnostic: Self Assessment K-W-L with students about their knowledge of archeology and what they want to learn about archeologists.

Activities

- K-W-L pre-assessment
- Discuss basic terms associated with archeology including artifacts, dig site, excavation, stratigraphy.
- Webquest on archeological dig procedures using National Park Service website
- Stratigraphy practice using peanut butter and jelly sandwiches or Jello
- Using various artifact samples, brainstorm different meanings of the artifacts.
- Create a practice dig site for students to excavate over several lessons, practicing different skills including screening the site, gridding the site, recording where they found different artifacts, carefully removing artifacts, and drawing conclusions about the civilization.

Activities to Differentiate Instruction

- Students may be paired together or may complete activities as a class, depending upon their reading ability levels.
- Teacher assistance may be required for using measurement tools.
- Provide varying levels of difficulty for artifacts.
- Use hands-on learning strategies to appeal to different learning styles.
- Create mixed-ability groups.

Integrated/Cross-Disciplinary Instruction

Math Teachers: Practice using measuring tools and graph paper

Resources

- National Park Service Archeology for Kids website:
  http://www.nps.gov/archeology/public/kids/index.htm
- National Park Service Activity using symbols:
  http://www.webrangers.us/activities/storiespast/?id=27
- National Park Service Activity comparing past and present civilizations:
  http://www.webrangers.us/activities/yesterdaytoday/?id=43
- National Park Service Presentation on decoding artifacts:
  http://www.webrangers.us/activities/artifact/?id=02

- Sample archeological dig of Jamestown:
  - http://www.historicjamestowne.org/learn/interactive_exercises.php
- Stratigraphy Activity from National Park Service:
  - http://www.nps.gov/hocu/photosmultimedia/multimedia.htm

- National Park Service Archeology for Kids website
- National Park Service Activity using symbols
- Thinking about past civilization activity
- National Park Service Presentation on artifacts
- Jamestown sample archeological dig
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