

Leaving an Archaeological Legacy

Grade Level: K-12

Subject: History, Science, English, Math

Prepared By: Margaret Agbowo

<p>Overview & Purpose Students will learn about ancient civilizations through carbon dating, writing systems and cultural studies.</p> <p>Time: As much as required, 1 week to 1 month, depending on context (grade level, in-class, after school) and research vs. information provided by instructor.</p>	<p>Education Standards Addressed History: Ancient Civilizations Science: carbon dating, archaeology, anthropology English: letter writing conventions, writing styles, grammar, research skills Math: volume of shapes, especially pyramids STEM: architecture, buildings, Google Earth, online museums, spell check</p>
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	Teacher Guide	Student Guide	Materials & Notes
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	Teacher Guide	Student Guide	Materials & Notes
Objectives/Essential Questions (Specify skills/information that will be learned.)	Teach ancient civilizations by integrating real-world disciplines used by scientists to discover, authenticate and date ancient civilizations.	<ol style="list-style-type: none"> How do we know about ancient civilizations? Who decides what artifacts are important for society to leave for the future? What artifacts are generally found by archaeologists? What remains would define you in 1000 years? What remains would define humans in 1000 years? 	Materials Needed <ul style="list-style-type: none"> <input type="checkbox"/> Textbook or list of ancient civilizations <input type="checkbox"/> Computers with internet access <input type="checkbox"/> Cardboard <input type="checkbox"/> Scissors <input type="checkbox"/> Tape or glue <input type="checkbox"/> Ruler <input type="checkbox"/> Art supplies
Information (Give and/or demonstrate necessary information)	<ol style="list-style-type: none"> list of ancient civilizations from <ol style="list-style-type: none"> a. textbook b. students' heritages c. inter-curricular concept: <ol style="list-style-type: none"> i. counting systems (Math) ii. scientific or medical discoveries or inventions (Science) iii. farming methods (Science, STEM) iv. ecology (Science) online resources <ol style="list-style-type: none"> a. Google Earth to view archaeological sites b. current online museum exhibits to view ancient artifacts c. additional information on carbon dating d. instructions on building a pyramid from cardboard (search engine): <ul style="list-style-type: none"> ★ search engine to find theories on how ancient Egyptians built pyramids without modern implements 		<ul style="list-style-type: none"> <input type="checkbox"/> Computer Teacher <ul style="list-style-type: none"> ○ Student blog ○ Student wiki <input type="checkbox"/> Classroom Teacher <ul style="list-style-type: none"> ○ Notebooks ○ Folders <input type="checkbox"/> Google Earth pre-list of archaeological sites <input type="checkbox"/> Pre-list of current museum exhibits of ancient artifacts www.ancientcivilizations.co.uk www.kidsnewsroom.org/elmer/infoCentral/frameset/civilizations/ <input type="checkbox"/> Instructions on building a pyramid from cardboard: www.ehow.com/how_4777356_make-cardboard-pyramid.html
Verification (Steps to check for student understanding)		<ol style="list-style-type: none"> Students are able to answer Essential Questions Students complete pyramid and add personal artifacts 	<ul style="list-style-type: none"> <input type="checkbox"/> Theories on how Egyptians

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<p>Activity (Describe the independent activity to reinforce this lesson)</p>		<ul style="list-style-type: none"> <input type="checkbox"/> Write research report on ancient civilizations from text or choose from list generated by teacher <input type="checkbox"/> Research and write news article on how scientists date relics and remains; <input type="checkbox"/> “Leave Your Archaeological Legacy” project <ul style="list-style-type: none"> <input type="checkbox"/> Build cardboard pyramid <input type="checkbox"/> Write persuasive letter to State Governor on why your list of artifacts is best to be included in State’s time capsule <input type="checkbox"/> Find photos of artifacts you would like to include in your pyramid to represent yourself <input type="checkbox"/> Write letter to citizens of the future explaining each artifact and why you chose it <input type="checkbox"/> Research and discuss how you would preserve your artifacts 	<p>built pyramids www.archaeology.org/0705/etc/pyramid.html</p> <p>http://www.unmuseum.org/bldpyram.htm</p>
<p>Summary</p>	<p>Students will gain insight into ancient civilizations by acting as archaeologists when viewing current archaeological digs, viewing ancient artifacts in museums, and planning their own archaeological legacy, deciding on artifacts, and discussing preservation methods.</p>	<p>Students will obtain enduring understandings through this engaging exercise: rather than simply reading and committing facts to memory, students will participate in an engaging context by acting as a civilization by preserving artifacts, and acting as archaeologists and researchers by viewing their work online.</p>	<p>Additional Notes</p>

How to Make a Cardboard Pyramid

By Isaiah David, eHow Contributor

updated: February 03, 2011

http://www.ehow.com/how_4777356_make-cardboard-pyramid.html



A pyramid is a building or object made out of several triangles sitting on a base and angling in to meet at the top. Although the pyramid's sides are triangular, the base may have three or more sides. The more sides the bottom has, the more faces the pyramid will have. A pyramid with a triangular base is the simplest, most stable kind.

1. Cut a square out of cardboard.
2. Draw a straight line from each corner to the opposite corner on the square with your pen and a ruler, making an "X." The point where the lines cross is the center.
3. Cut from one corner to the center, using scissors or a craft knife.
- 4.



Make folds along the remaining diagonal lines so the two triangles adjacent to the cut overlap. For example, if you made the cut between the pink and blue triangles in the diagram, fold the pyramid so the pink triangle is directly on top of the blue. You now have a pyramid shape.

5. Attach the two overlapping triangles by putting a layer of white glue between them. Hold them together until the glue dries.
6. Set the pyramid base-down on a cardboard scrap and trace around its perimeter. Cut out the resulting triangle with a craft knife or scissors. Apply glue to the bottom edges of your pyramid and attach the triangle piece to form the shape's base.

Building a Pyramid Rubric

Teacher Name: _____

Total Points

Student Name: _____

CATEGORY	4	3	2	1
Planning Pyramid <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 100px;"></div>	Plan is neat with clear measurements and labeling for all components.	Plan is neat with most measurements and labeling for most components.	Plan is missing some measurements and labeling for most components.	Plan does not show measurements clearly or is otherwise inadequately labeled.
Constructing Pyramid <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 100px;"></div>	Great care taken in construction process so that the structure is neat, attractive and follows plans accurately.	Construction was careful and accurate for the most part, but 1-2 details could have been refined for a more attractive product.	Construction accurately followed the plans, but 3-4 details could have been refined for a more attractive product.	Construction appears careless or haphazard. Many details need refinement for a strong or attractive product.
Decorating Pyramid <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 100px;"></div>	Appropriate materials were selected and creatively modified in ways that made them even better.	Appropriate materials were selected and there was an attempt at creative modification to make them even better.	Appropriate materials were selected.	Inappropriate materials were selected and contributed to a product that performed poorly.
Personal Artifacts <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 100px;"></div>	Four (4) or more artifacts included in pyramid.	Three (3) artifacts included in pyramid.	Two (2) artifacts included in pyramid.	One (1) or no artifacts included in pyramid.
Letter writing <div style="border: 1px solid black; width: 40px; height: 20px; margin-left: 100px;"></div>	Letters provide all reasons for inclusion, and reflection about importance of all artifacts.	Letters provide some reasons for inclusion, and reflection about importance of most artifacts.	Letters provide a few reasons for inclusion, and reflection about importance of 1-2 artifacts.	Letters provide no reasons for inclusion, and no reflection about importance of artifacts.