The Legacy of Ancient Greece

Overview

In this lesson, students learn about the contributions of the Greeks to the modern world. In a **Social Studies Skill Builder**, they match 11 descriptions of modern arts, government, entertainment, and scientific beliefs and practices with images showing the Greek achievements that made these modern aspects of our lives possible. After matching each image, they read about additional Greek contributions in the respective fields. Finally, students apply their knowledge in a Processing assignment.

Objectives

Students will

- recognize Greek contributions to modern language and literature.
- describe the contributions of important Greek figures in medicine, mathematics, and the sciences.
- identify political practices of our democracy that came from the Greeks.
- describe architectural features of modern buildings that can be traced to the Greeks.
- recognize Greek contributions to modern entertainment and sports.

Materials

- History Alive! The Ancient World
- Interactive Student Notebooks
- Student Handout 31 (2 copies, cut apart)
- Placards 31A–31K
- masking tape



Preview

Have students complete Preview 31 in their Interactive Student Notebooks, and allow them to share their answers. Explain that just as they have described some new event, invention, or discovery that might be of use to future generations, in this lesson they will learn about ancient Greek contributions to our lives today.



Graphic Organizer

1 Introduce Chapter 31 in *History Alive! The Ancient World.* **Tell students that they will learn about many ways the ancient Greeks have contributed to our modern lives. Have them read Section 31.1. Make sure**

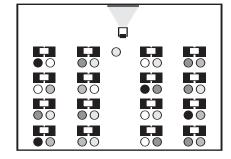
they understand the meanings of the boldfaced key term, which is defined in the Glossary. (**Note:** You may want to have students use the Prereading Handout in Lesson Guide 1 to conduct a prereading of the chapter.)

2 Introduce the graphic organizer on page 297. Ask, *What do you see? What do the two figures represent? What is the Greek woman doing? What do you think this represents?* Tell students that they will use this illustration to learn about Greek contributions to our modern world.



Social Studies Skill Builder

1 Prepare materials and arrange your classroom. Before class, cut the strips from two copies of *Student Handout 31: Greek Contributions to Modern Life* and spread them face up on a table. Post *Placards 31A–31K: Greek Legacies* on the walls to create 11 stations. Put students into mixed-ability pairs. You may want to prepare a transparency that shows students with whom they will work.



2 Review the directions for the activity. Tell students to follow these steps:

- Pick up a "Greek Contribution to [Topic]" strip from the table.
- Read the paragraph that describes some part of our lives. For example, it might describe a modern landmark or current scientific belief.
- Locate the placard showing the Greek achievement that made this aspect of our lives possible.
- Record the placard's letter in the appropriate place on Reading Notes 31, and have the teacher check your answer.
- Read the corresponding section in *History Alive! The Ancient World*, and complete the Reading Notes for that section. Note that the drawing in the gift box should be of a Greek contribution, not the present-day use of that contribution.

3 Monitor students' work. When a pair finishes a section, have both students raise their hands for you to check their work. Use Guide to Reading Notes 31 to check their answers and award them points (optional). Then have them exchange their "Greek Contribution to [Topic]" strip for a new one. (Note: You may want to check the whole of pairs' work for the first strip, and thereafter, if they have followed instructions properly, check only that they match each strip with the correct placard.) Allow pairs to continue working until most of them have matched most strips correctly and completed their Reading Notes.

4 Review the contributions. Remove the placards from the wall, and assign one to each pair. Explain that pairs will present their placards to the class. They should describe the image on the placard and explain its relationship to our modern lives. Give students a few minutes to prepare. As needed, offer help with Placard 31D, "Vote of the Greeks," which shows the casting of votes by Greek heroes.

5 Have students create a human spectrum. Create a spectrum by placing a 10- to 15-foot strip of masking tape across the floor. On the board above either end of the spectrum, write "Contribution with the Least Impact on Our Lives" and "Contribution with the Greatest Impact on Our Lives." Explain the purpose of a spectrum. Tell students that they will now evaluate the impact of each contribution. Then have one student from each pair stand on the spectrum where the pair thinks their contribution belongs and explain why it belongs there. Tell students to hold the placards in front of their chests. Challenge the other students to identify contributions they believe are misplaced.



Processing

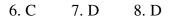
Have students complete Processing 31 in their Interactive Student Notebooks.



Assessment

Masters for assessment follow the next page.

1. D	2. B	3. B	4. A	5. C



- 9. Possible answers: *Language:* Words, grammar, punctuation, historical writing, drama. *Sports and entertainment:* Drama, theaters, special effects, the Olympics, the pentathlon. *Government:* Democracy, citizen juries. *Astronomy:* The idea that Earth revolves around the sun, names of stars, how to estimate distances from the Earth to the sun and moon. *Mathematics:* Euclid's geometry textbook, use of math to solve real-life problems.
- 10. The bulleted points can provide a rubric for this item.



Online Resources

Further resources for Lesson 31: The Legacy of Ancient Greece can be found at Online Resources for *History Alive! The Ancient World* at www.teachtci.com/historyalive/.

- Investigating Literature: Greek Literature in Our Lives Today: Aesop's Fables
- Investigating Literature: A World of Beauty: The Poetry of Sappho
- Internet Connections: Ancient Greece
- Internet Project: Ancient Greece
- Enrichment Essay: The Lasting Influence of Greek Literature



Options for Students with Diverse Needs

See page 788 for tips on adapting this lesson to meet the needs of

- English language learners.
- learners reading and writing below grade level.
- learners with special education needs.
- advanced learners.

Assessment

31

Fill in the bubble beside the best answer to each question.

- 1. Hippocrates was an important Greek doctor. Which statement would he most likely have made?
 - () A. "You are sick because the gods are angry at you."
 - () B. "I will operate on your spine."
 - O C. "You must let me try this experiment on you."
 - O D. "I observe that you got sick after eating that meat."
- 2. With which field are Pythagoras and Euclid associated?
 - \bigcirc A. chemistry \bigcirc C. linguistics
 - () B. geometry () D. literature
- 3. Because the ancient Greeks developed democracy, which of the following is part of American politics today?
 - \bigcirc A. a council of elders
 - () B. juries of citizens
 - \bigcirc C. a national religion
 - \bigcirc D. a symbolic royalty
- 4. What would Socrates have liked about the way Greeks approached their studies?
 - \bigcirc A. They asked a lot of questions.
 - \bigcirc B. They worked in large groups.
 - \bigcirc C. They believed in the gods.
 - \bigcirc D. They built machines to help them.
- 5. Greece contributed to our language today. The word *geography* comes from the Greek words meaning
 - () A. classifying plants
 - \bigcirc B. classifying animals
 - () C. writing about Earth
 - \bigcirc D. writing about the stars

- 6. This picture of the Lincoln Memorial shows that
 - A. Americans value the teachings of ancient Greek religion.
 -) B. Americans use stone from



Greece to build public buildings.

- C. Americans are influenced by ancient Greek architecture.
- O D. Americans use ancient Greek architecture to design homes.
- 7. To which of the following did the Greeks make major contributions?
 - \bigcirc A. theater and religion
 - \bigcirc B. religion and medicine
 - \bigcirc C. cooking and medicine
 - () D. language and government
- 8. Ancient Greeks looked to math and science for logical answers to their questions about nature. Often the ideas from one field contributed to understanding in another. To which field of study would the efforts of this man *not* contribute?
 - () A. geometry
 - () B. astronomy
 - O C. geography
 - \bigcirc D. biology



Use your knowledge of social studies to complete the item below.

9. For each area of life listed in the table, write or draw an ancient Greek contribution that continues to influence us today. For example, you might draw the Olympic Games logo for "Sports and Entertainment."

Area of Life	Evidence of Greek Influence Today	
Language		
Sports and Entertainment		
Government		
Astronomy		
Mathematics		

31

Follow the directions to complete the item below.

- 10. Plan a tour of your town. First, draw a simple map of your town. Then, on your map, do the following:
 - Identify five things that reflect Greek influence.
 - Draw the route that people would follow to visit those five things.
 - Explain how each thing is like its Greek counterpart.

31.2 Greek Contributions to Modern Language and Literature

Step 1: Read this paragraph:

Schoolchildren all around the world learn how to write. They may use symbols that stand for things or ideas, as in Chinese. They may use symbols that stand for sounds, as in English. English-speaking children can use the 26 letters of the alphabet in different combinations to write just about anything.

Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.2 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.2, and complete the Reading Notes for that section.

31.3 Greek Contributions to Modern Government

Step 1: Read this paragraph:

In the United States today, all citizens have the right to vote. Sometimes they use machines. Sometimes they put a paper ballot into a ballot box.

Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.3 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.3, and complete the Reading Notes for that section.

31.4 Greek Contributions to Modern Medicine

Step 1: Read this paragraph:

When people become sick, they usually visit a doctor. Doctors observe their symptoms, perform physical examinations, and recommend various tests. They are able to determine the causes of and appropriate treatments for many diseases.

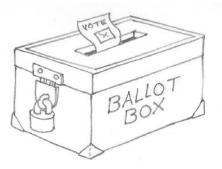
Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.4 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.4, and complete the Reading Notes for that section.







31.5 Greek Contributions to the Modern Understanding of the Body

Step 1: Read this paragraph:

Blood circulates through your veins and arteries. It brings food to your body's cells and carries away waste products. The heart pumps blood throughout your body every minute of every day. Blood stops circulating upon death.

Step 2: Find the placard that shows this Greek contribution to modern life. Write the letter of the placard in Section 31.5 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.5, and complete the Reading Notes for that section.

31.6 Greek Contributions to Modern Mathematics

Step 1: Read this paragraph:

In the study of geometry, students learn about the areas and angles of shapes. Navigators on ships and airplanes use geometry to determine their location. The study of geometric curves is important in satellite communication.

Step 2: Find the placard that shows this Greek contribution to modern life. Write the letter of the placard in Section 31.6 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.6, and complete the Reading Notes for that section.

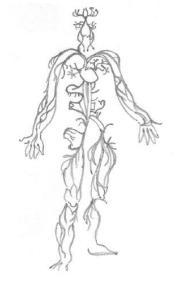
31.7 Greek Contributions to Modern Astronomy

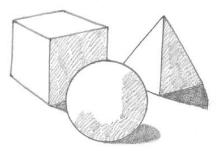
Step 1: Read this paragraph:

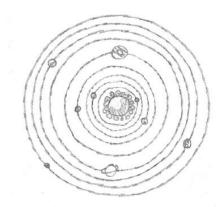
Scientists know that Earth and the other eight planets in our solar system revolve around the sun. As it revolves around the sun, Earth also rotates on its axis. Sometimes the moon moves between Earth and the sun and blocks the sun's light. This is called a *solar eclipse*.

Step 2: Find the placard that shows this Greek contribution to modern life. Write the letter of the placard in Section 31.7 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.7, and complete the Reading Notes for that section.







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31.8 Greek Contributions to Modern Geography

Step 1: Read this paragraph:

Making a flat map of Earth is difficult because our planet is round. Places farthest from the equator appear larger than they really are. Lines of longitude and latitude help us find locations on Earth's surface.

Step 2: Find the placard that shows this Greek contribution to modern life. Write the letter of the placard in Section 31.8 of your

Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.8, and complete the Reading Notes for that section.

31.9 Greek Contributions to the Modern Understanding of Plants and Animals

Step 1: Read this paragraph:

Plant growers in nurseries today know many ways to create new plant growth. They plant seeds and bulbs. They take cuttings from roots and stems. And they grow flowers that are pollinated by insects.

Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.9 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.9, and complete the Reading Notes for that section.

31.10 Greek Contributions to Modern Architecture

Step 1: Read this paragraph:

The two wings of the U.S. Capitol building in Washington, D.C., have beautifully carved pediments above finely decorated friezes. Tall, slender columns, topped by detailed leaf carvings, are under the pediments and friezes.

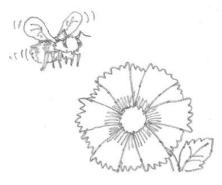
Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.10 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.10, and complete the Reading Notes for that section.







31.11 Greek Contributions to the Modern Theater

Step 1: Read this paragraph:

Theaters today are designed to give audiences the best possible viewing experience. Extraordinary theatrical stunts, such as flying, make it important for everyone to have a seat with a clear view. Good acoustics assure that theatergoers are able to hear special sound effects.

Step 2: Find the placard that shows this Greek contribution to

modern life. Write the letter of the placard in Section 31.11 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.11, and complete the Reading Notes for that section.

31.12 Greek Contributions to Modern Sports

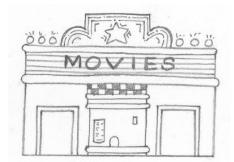
Step 1: Read this paragraph:

Every four years, people from countries throughout the world gather to participate in the Olympic Games. They compete in winter sports such as skiing and ice-skating. They also compete in summer games like footraces and events involving throwing such objects as the discus, javelin, and shot put.

Step 2: Find the placard that shows this Greek contribution to modern life. Write the letter of the placard in Section 31.12 of your Reading Notes. Have the teacher check your answer.

Step 3: Read Section 31.12, and complete the Reading Notes for that section.





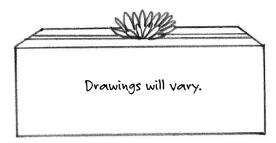


Match the aspect of modern-day life described on each "Greek contribution strip" with a placard showing the ancient Greek contribution that made it possible. Once you have located the placard, check your answer with your teacher. Then read the corresponding section in *History Alive! The Ancient World* and complete the Reading Notes for that section.

31.2 Greek Contributions to Modern Language and Literature

Placard <u>A</u> shows a Greek contribution to English language and literature.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to English language and literature.



2. List another contribution the ancient Greeks made to English language and literature.

Possible answers: our alphabet, words with Greek roots, grammar, punctuation, paragraphing, tragedies, comedies, historical writings

3. Punctuation, which came from the Greeks, can change the meaning of a sentence. Read the sentences below. Circle the sentence that means "Cats Rule!"

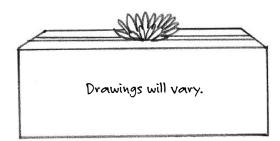
My cat knows its master.

My cat knows it's master.

31.3 Greek Contributions to Modern Government

Placard \underline{D} shows a Greek contribution to our form of government.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to our government.



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2. List another contribution the ancient Greeks made to our government. Possible answers: democracy, trial by a jury of citizens

3. Is the best person always elected in a democracy? Why or why not? Answers will vary.

31.4 Greek Contributions to Modern Medicine

Placard <u>B</u> shows a Greek contribution to modern medical practices.

- 1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to modern medicine.
 - Drawings will vary.
- 2. List another contribution the ancient Greeks made to modern medicine.

Possible answers: belief that diseases have natural causes, belief that doctors should observe patients, the Hippocratic Oath

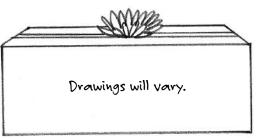
3. As in ancient Greece, there are still many unscientific beliefs about diseases and cures. For instance, some people believe you can get a wart by touching a frog. Below, describe another unscientific belief about some disease.

Answers will vary.

31.5 Greek Contributions to the Modern Understanding of the Body

Placard <u>G</u> shows a Greek contribution to our understanding of the human body.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to the modern understanding of the body.





2. List another contribution the ancient Greeks made to our understanding of the body.

Possible answers: names and descriptions of internal organs, discovery that the heart pumps blood through the body, discovery that the brain is the center of the nervous system

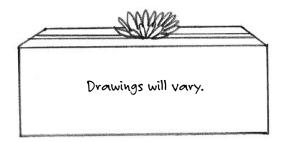
3. When we cut ourselves, why do we bleed?

We bleed because the heart is pumping blood through our body.

31.6 Greek Contributions to Modern Mathematics

Placard <u>E</u> shows a Greek contribution to modern mathematics.

- 1. In the gift box below, draw and label a picture to illustrate an ancient
 - Greek contribution to modern mathematics.



2. List another contribution of the ancient Greeks to modern mathematics. Possible answers: development of mathematical theories, new techniques for measuring shapes and spaces, Euclid's geometry textbook

3. Suppose you want to cover the floor of a closet with tile. The floor measures 3 feet by 3 feet. Each tile is 1 foot by 1 foot. How many tiles will you need? Draw a diagram of the completed floor below. Write an equation for finding its area.

You will need 9 square feet of tiles to cover the floor. The equation is width X length = area of a rectangle.

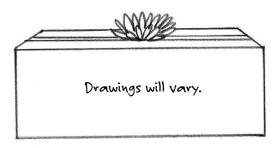
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31.7 Greek Contributions to Modern Astronomy

Placard \underline{C} shows a Greek contribution to modern astronomy.

- 1. In the gift box below, draw and label a picture to illustrate an ancient
 - Greek contribution to modern astronomy.



2. List another contribution of the ancient Greeks to modern astronomy.

Possible answers: idea that Earth revolves around the sun, estimates of distances from Earth to the sun and moon, naming of stars

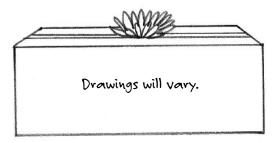
3. List one reason it is important to know that Earth is round.

Possible answer: This knowledge is important in space exploration and satellite communications.

31.8 Greek Contributions to Modern Geography

Placard \underline{k} shows a Greek contribution to our understanding of geography.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to modern geography.



2. List another contribution of the ancient Greeks to modern geography.

Possible answers: use of stars to locate places on the Earth, use of longitude and latitude, maps that show the round Earth on a flat surface

3. If you were on a sinking boat, how could you let rescuers know your location?

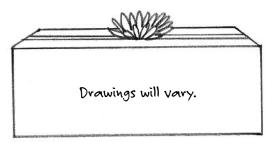
Rescuers could find me if I communicated to them my location by degrees of latitude and longitude.



31.9 Greek Contributions to the Modern Understanding of Plants and Animals

Placard \underline{J} shows a Greek contribution to our understanding of plants and animals.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to our understanding of plants and animals.



2. List another contribution of the ancient Greeks to our understanding of plants and animals.

Possible answers: identification of plants and their parts, an understanding of how plants reproduce and their use as medicine, classification of plants and animals

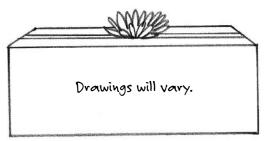
3. Why is it important to be able to tell one kind of plant from another?

Possible answer: Otherwise you might eat a poisonous plant or try to grow a plant in an unsuitable environment.

31.10 Greek Contributions to Modern Architecture

Placard \underline{F} shows a Greek contribution to building design.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to architecture.



- 2. List another contribution of the ancient Greeks to modern architecture. Possible answers: pediments, friezes, columns, covered porches
- 3. Why do you think elements of Greek architecture are often seen on banks, schools, government buildings, libraries, and museums?

Possible answer: Because this style represents tradition and strength.

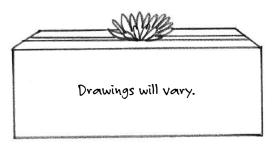
GUIDE TO READING NOTES 31



31.11 Greek Contributions to the Modern Theater

Placard \underline{H} shows a Greek contribution to the modern theater.

- 1. In the gift box below, draw and label a picture to illustrate an ancient
 - Greek contribution to the modern theater.



2. List another contribution of the ancient Greeks to the modern theater.

Possible answers: seat arrangement, special effects, revolving scenery, stories and plays

3. Describe the best stunt or special effect that you have seen in a play or movie.

Answers will vary.

31.12 Greek Contributions to Modern Sports

Placard <u>|</u> shows a Greek contribution to modern sports.

1. In the gift box below, draw and label a picture to illustrate an ancient Greek contribution to modern sports.



2. List another contribution of the ancient Greeks to modern sports. Possible answers: Olympic Games, the pentathlon

3. In ancient Greece, only Greek citizens could participate in the Olympics. Today, athletes from all over the world compete. What difference do you think this makes to the Games?

Answers will vary.

Timeline Challenge 5

Ancient Greece Timeline Challenge

Overview

This activity challenges students to analyze a historical timeline. Working in pairs, students respond to a series of questions that lead them to complete and analyze a timeline of key dates from the unit they just studied.

Objectives

Students will

- add key information to complete a historical timeline.
- identify additional key information from the unit and add it to their timelines.
- answer timeline challenge questions by analyzing their completed timelines.

Materials

- History Alive! The Ancient World
- Interactive Student Notebooks
- Timeline Challenge Transparency 5



Timeline Challenge

1 Place students in mixed-ability pairs. You may want to prepare a transparency to show students where they will sit and with whom they will work.

2 Have students open their Interactive Student Notebooks to Timeline Challenge 5.

Review the directions with them, and answer any questions. Complete Item A as a class to make sure students understand the directions. Circulate as pairs complete their timelines. (**Note:** Students should not refer to their textbooks as they work on their timelines.)

3 Have students correct their timelines. Have students open to the Ancient Greece Timeline on pages 304 and 305 of *History Alive! The Ancient World*. Review the items one at a time, and have students check their timelines against the one in the book.

4 Have students add one or two more key items from the unit to their timelines. Allow students to look through the chapters in this unit and find one or two more key items to add to the timelines. For each item, students must include the following:

- the date(s) and a short written description of the item
- a simple visual symbol for the item, drawn inside the appropriate geometric shape
- a dot or color bar on the timeline to represent the appropriate date or dates
- a line connecting the dot or bar to the geometric shape

5 Reveal the first question on *Timeline Challenge Transparency 5: Ancient Greece Timeline Challenge Questions*. Allow pairs to analyze their timelines and discuss the question. Select a Presenter for each pair, and have several Presenters share their answers with

the class. Repeat the process for each challenge question, rotating the role of Presenter.

Guide to Timeline Challenge Questions

The timeline challenge questions appear on Timeline Challenge Transparency 5.

1. Which item occurred the longest time ago? Approximately how long ago was that?

The Greeks adopted Phoenician writing approximately 2,800 years ago.

2. Look at the timeline for Unit 2 in *History Alive! The Ancient World*. How many years were there between the time the Egyptians developed hieroglyphics and the time the Greeks began using Phoenician writing? Look at the timelines for Units 1, 3, and 4. What other writing systems were developed during this time?

There were 2,200 years between the time the Egyptians developed hieroglyphics and the Greeks began first using Phoenician writing. Sumerian cuneiform, Sanskrit, and Chinese writing also developed during this time.

3. Which item on the timeline occurred first, the Persian wars or the building of the Parthenon? How many years were there between the two events? How are the two events related?

The Persian wars occurred first. There were 32 years between the end of the Persian wars and the beginning of the building of the Parthenon. The Parthenon was built as part of the restoration of Athens that happened after the city was destroyed during the wars.

4. Look at the timeline for Unit 2. How many years were there between the building of the Great Pyramid and the building of the Parthenon? In what ways are the two buildings different? In what ways are they the same?

There were approximately 2,100 years between the building of the Great Pyramid and the building of the Parthenon. The Parthenon is a more delicate structure than the Great Pyramid. Also, there is a large interior section in the Parthenon to house the statue of Athena, while the interior of the Great Pyramid is almost completely filled with building stones. The buildings were both constructed for religious reasons, the Great Pyramid to insure everlasting life for the pharaoh and the Parthenon to honor Athena. Also, each building required the movement of heavy building materials sandstone blocks for the pyramid and marble for the Parthenon.

5. Which event on this timeline do you think is the most significant? Why?

Answers will vary.