

#11784 PARTHENON: DESIGN AND ARCHITECTURE

DISCOVERY SCHOOL, 2001

Grade Level: 6–10

51 Minutes



CAPTIONED MEDIA PROGRAM RELATED RESOURCES

[#11325 ATHENS & ANCIENT GREECE](#)

[#11772 PLATO'S REPUBLIC](#)

[#11798 HOMER'S ODYSSEY](#)



Assignment Discovery Online Curriculum

Lesson Title: Parthenon

Grade level: 6-8, 9-12

Subject Area: Ancient History

Duration: Two class periods

Objectives:

Students will do the following:

- Describe the location, purpose, and significance of the Parthenon and the Acropolis
- Describe the form and function of the Parthenon and its major parts.

Materials:

- Newsprint
- Paper and markers (for each group)
- Internet access
- Photocopier
- Color printer
- Print resources about ancient Greece and the Parthenon

Procedures:

Note: Before you begin this activity, sketch three simple outlines of the Parthenon: one of its facade, one showing the long side of the structure, and one of the floor plan with the locations and numbers of walls and columns. (Dimensions and images can be found at the Web sites listed below.) Do *not* label any of the rooms or structures. Make five copies of each sketch.

1. Have students locate Greece on a world map. Explain that the history of Greece stretches back thousands of years. Ask students to brainstorm about what they know of ancient Greece. On a piece of newsprint, write their ideas, categorized as politics, religion, architecture, philosophy, sports, and daily life.
2. As an introduction to Greece, Athens, and the Parthenon, share the following facts with the class:
 - The Age of Classical Greece, between 500 and 323 B.C., was the most influential period of ancient Greece. During this period, the ancient Greeks developed ideas for philosophy, religion, government, science, and art. A few of the great accomplishments of this age included the rise of democratic city-states and the Parthenon. The philosophers Socrates and Plato and playwrights Sophocles, Euripides, and Aristophanes lived during this time.
 - Ancient Greece was divided into several independent city-states. The city-state of **Athens** was the center of Greek culture and arts. (Point out Athens on the map.)
 - Sitting high on a hill at the center of Athens is the **Acropolis**, a collection of monuments and temples dedicated to the gods.

The best known of these monuments is the **Parthenon**, dedicated to Athena Parthenos, the patron goddess of Athens. Built between 447 and 432 B.C., this monument remains the international symbol of ancient Greece and is probably the best example of classical ancient Greek architecture, especially of the Doric order—the earliest and simplest of the classical Greek styles.

3. Tell students that as a class, you'll create a complete picture of the Parthenon. Students will work in small groups to learn about one aspect of this structure. Then all will share what they've learned with the class. Some groups will research the history or purpose of the Parthenon, and others will learn about specific parts or materials. Divide the class into seven small groups, and give each group the following assignments. (Provide the first five groups with photocopies of the sketches. Explain that they should use these to fill in, label, or color the specific parts of the Parthenon.)

Group 1: Rooms

- What were the *pronaos*, *naos* (or *cella*), and *opisthodomos*?
- What was the purpose of each room? (*The pronaos was the front porch, the naos was the main room that held the statue of Athena, and the opisthodomos was the back room, used to hold offerings brought to the deity.*)
- What was unique about the dimensions and proportions of the *naos*? (*The proportion between length and width was slightly greater than two to one.*)
- How was its length and height related to its purpose? (*It was long and tall to hold a statue.*)
- What was unique about the columns around the *pronaos*? (*They were Ionic, not Doric.*)
- What was the main material used to build the Parthenon? (*marble*)
- Until the Parthenon was built, what material had most temples been made of? (*wood*)

Group 2: Columns and Capital

- How many columns were on each end of the Parthenon? (*8 rather than the usual 6*)
How many along the sides? (*17*)
- What was unique about this proportion? (*Each side had twice-plus-one the number of columns at each end.*)
- What were some of the optical illusions used to make them appear more graceful? (*Each exterior column has a very slight bulge in the middle. Also, the upper diameter of each is slightly narrower than its base diameter. Columns slant inward.*)
- What was the *peristyle*? (*the colonnade running around the naos and supporting its roof*)
- What were the *capitals*, *abacus*, and *echinus*? (*A capital is the part at the top of the column, the abacus is the upper portion of the capital, and the echinus is the lower portion of the capital.*)
- What is unique about the Doric capital? (*The abacus is square and the echinus is rounded.*)

Group 3: Base and Floor

- What are the *crepidoma* and the *stylobate*? (*The crepidoma was the stone base of the temple, with three levels or steps; the stylobate was the top level that formed the floor of the temple.*)
- What were they made of? (*stone*)
- What optical refinements were used? Why? (*The three levels of the crepidoma are slightly domed in the center because purely horizontal lines would have appeared to dip in the middle.*)

Group 4: Friezes

- What are the *entablature*, the *frieze*, the *triglyph*, and *metope*? (*The entablature is the stretch of wall between the tops of the columns and the roof; the frieze is the horizontal band running along the wall, just under the cornice. There were two parts of the frieze: the triglyphs, or blocks with vertical grooves, and metopes, or rectangular areas.*)
- What were found in the *metopes* along the outer sides of the Parthenon? (*stone carvings of legendary battles*)
- What was specifically depicted in the *metopes* on the north end? (*the Trojan War*)
- What was found in the *frieze* along the four outside walls of the *naos*? (*Sculpture depicting a religious procession—probably the Panathenaea procession—with horsemen, chariots, gods, and beasts*)

Group 5:Roof

- What was the *pediment*? (*the triangular space directly under the two sides of the sloping roof at the ends of the Parthenon*)
- What did archaeologists find at each *pediment*? (*Sculptures of two mythological scenes: The east end shows the birth of Athena; the west end shows Athena and Poseidon fighting over the name of the city.*)
- How were these sculptures decorated? (*They were painted bright colors.*)
- What was the roof made of? (*marble tiles*)

Group 6: Purpose

- Why was the Parthenon used? (*to honor the goddess Athena*)
- Who was Athena? (*patron goddess of Greece, goddess of wisdom, war, the arts, industry, justice, and skill*)
- What were her symbols? (*owl, olive tree, spear*)
- How was she honored at the Parthenon? (*A large statue of her stood in the center of the Parthenon.*)
- What was the sculpture of Athena made of? (*gold and ivory*)
- Who was the head sculptor of the Parthenon? (*Pheidias*)
- Which piece do scholars believe Pheidias sculpted? (*Athena*)
- Describe the Panathenaic Procession. (*Every August, a procession in honor of Athena began in the city and ended at the Parthenon.*)
- Sketch an overview of the Acropolis, and label other important monuments. (*Sketch should include the Propylaea, temple to Athena Nike, and the Erechtheion.*)

Group 7: History

- How long had the Acropolis been in use? (*It had been the site of temples and palaces for a thousand years.*)
 - What happened in 480 B.C.? (*Persian invaders conquered the city of Athens and ravaged the Acropolis temples.*)
 - When was the Parthenon built? (*between 447 and 438 B.C.*)
 - Who were the architects of the Parthenon? (*Iktinos and Kallikrates*) How have other peoples used the Parthenon? (*The Romans restored the interior, the Byzantines converted it to a church, the Catholics used it as a cathedral, and the Turks used it as a mosque.*)
 - When was most of the damage done to the Parthenon? (*In 1687, it was used to store gunpowder during the Venetian-Turkish war. An explosion destroyed much of the main room and the roof.*)
4. Have each group create a report that answers the questions assigned. The first five groups should fill in, color, and label at least one of the photocopies of the Parthenon. All reports should also include one or two images or original drawings. Students may visit the following Web sites:

The Parthenon

<http://www.jccc.net/~jjackson/part.html>

<http://www.culture.gr/2/21/211/21101a/e211aa01.html>

Images and Plans

<http://www.perseus.tufts.edu/cgi-bin/architindex?entry=Athens,Parthenon>

Acropolis Images (see the Parthenon section)

<http://www.indiana.edu/~kglowack/athens/acropolis.html>

The Acropolis Experience (see the 3D animated walk-through of the Parthenon)

<http://www.pbs.org/empires/thegreeks/htmlver/index.html>

The Goddess Athena

www.goddess-athena.org/Encyclopedia/Athena/index.htm

Finally, have each group present its findings in the order of the group numbers. Ask groups to hang their reports and pictures on the appropriate place on a bulletin board set aside for this project. You may want to create a “master drawing” of the Parthenon.

Discussion Questions:

1. Describe the location of the Acropolis and the Parthenon. Explain the significance of this location for Athenians at the time of the construction of the temple.
2. Explain why the Parthenon is one of the best examples of classical Greek architecture.
3. What were the optical refinements used in the Parthenon? How did each one create an illusion that enhanced the gracefulness of the structure?

Extension:

Build the Parthenon

Divide the class into groups of three or four. Have each group construct a model of the Parthenon using salt-dough, Sculpey® modeling clay, or other lightweight material. The roof must be relatively lightweight so the model does not collapse.

Evaluation:

Use the following three-point rubric to evaluate how well each student participated in class discussion, worked within the group, and created the presentation on the Parthenon.

Three points: active participation in class discussion; strong research skills; clear, thorough presentation created with several details about the topic.

Two points: average participation in class discussion; on-grade research skills; complete presentation created with some details about the topic.

One point: little participation in class discussion; weak research skills; incomplete presentation created with few or no details about the topic.

Suggested Reading

The Parthenon: How It Was Built and How It Was Used

Peter Chrisp. Raintree Steck-Vaughn, 1997.

This slim volume presents a solid introduction to the history and significance of the Parthenon. A brief history of Greek civilization explains the circumstances that led to the building of the Parthenon, dedicated to the goddess Athena, and follows its gradual decline until it was mostly destroyed by an invading Venetian army. Mention is made of the Elgin Marbles, a large portion of the frieze decorating the top of the Parthenon, removed by Lord Elgin in the early 1800s and currently in the British Museum in London.

The Parthenon of Ancient Greece (Building History series)

Don Nardo. Lucent Books, 1999.

One in a series of books that explore history by focusing on specific architectural creations, this volume considers the Parthenon and its importance in the history of Greece. Chapters detail the events prior to the building of the Parthenon, its construction, its use as a place of sacred (and not-so-sacred) rites, its eventual ruin, and current restoration efforts. Black-and-white photographs and boxed sidebars add to the presentation, and the book includes a glossary and an annotated bibliography.

Vocabulary

acropolis

Definition: The upper fortified part of an ancient Greek city; when capitalized, *Acropolis* refers to the famous collection of temples in Athens.

Context: The Parthenon stands on the **Acropolis**, a site that overlooks the city of Athens.

ancient

Definition: Relating to the historic period beginning with the earliest known civilizations and extending to the fall of the Roman Empire in A.D. 476.

Context: The culture of **ancient** Greece had rich traditions, many of which exist today.

classical

Definition: Relating to the ancient Greek and Roman world, especially to its literature, art, architecture, or ideals.

Context: The **classical** age of Greece began with the Persian War (490-479 B.C.) and ended with the death of Alexander the Great (323 B.C.).

colonnade

Definition: An evenly spaced row of columns usually supporting the base of a roof structure.

Context: A **colonnade** runs along the entire exterior of the Parthenon.

mythology

Definition: A group of myths that belong to a particular people or culture that tells about their history, heroes, and gods.

Context: In Greek **mythology**, powerful and immortal gods who look and act like humans can control nature.

Academic Standards:

This lesson adheres to the following standards from the National Council for the Social Studies for students in grades 5-8:

1. Provide for the study of culture and cultural diversity.
2. Provide for the study of people, places, and environments.
3. Provide for the study of the ideals, principles, and practices of citizenship in a democratic republic.

Credit:

Joy Brewster, a freelance writer and editor of educational material.

This lesson was developed in consultation with Tom Malone, a middle school social studies teacher.

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