

# **We Built This City: Ancient Architecture in Greece and Rome**

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T.C. Miller Elementary, Lynchburg, VA

**Grades:** 3 – 5

**Time Allotment:** Two or three 45-minute sessions

**Overview:** Architectural contributions of Ancient Greece and Rome. This lesson introduces how the contributions of ancient Greece and Rome have influenced the present world in terms of architecture.

**Subject Matter:** History, Geography, Technology

## **Learning Objectives:**

The student will be able to:

- identify the three styles of columns first introduced by the Ancient Greeks.
- create a model of one style of column: Doric, Ionic, or Corinthian.
- use historical analysis skills and organize information to compare the usage of columns in ancient Greece and ancient Rome, and how they contributed to architecture we see today.
- research other contributions Roman civilization brought into architecture, and how they affect our lives today.

The student will use the Internet to:

- locate the ancient civilizations of Greece and Rome on a world map.
- participate in a telefield trip to Ancient Greece and Rome, and study the facades of buildings and roads in Washington D. C. and other cities.

## **Standards:**

The objectives listed above may be used to address the following Virginia Standards of Learning available at <http://www.pen.k12.va.us/go/Sols/historysol2001.doc>

History:

- 3.1 The student will explain how the contributions of ancient Greece and Rome have influenced the present world in terms of architecture, government (direct and representative democracy), and sports.

Geography:

- 3.4 The student will develop map skills by
- a) locating Greece, Rome, and West Africa;
  - b) describing the physical and human characteristics of Greece, Rome, and West Africa;
  - c) explaining how the people of Greece, Rome, and West Africa adapted to and/or changed their environment to meet their needs.

## Media Components:

### Video:

- United Streaming Video: <http://www.unitedstreaming.com/index.cfm>  
*Living History Series: Living in Ancient Greece*  
*Life in Ancient Rome: Contributions of Ancient Rome*

### Internet Web Sites:

- Greek Columns  
<http://eghs.dist214.k12.il.us/html/academics/english/humanities/grkcol.html>  
This web site provides excellent illustrations and compares the three orders of Greek columns, Doric, Ionic and Corinthian.
- Acropolis Tour  
<http://www.lfc.edu/academics/greece/AcropTour.html> This tour of the Acropolis includes close-up photographs of the columns used in architecture in Ancient Greece.
- Virtual Walkthrough of the Colosseum and Forum Romanum  
<http://home.nyc.rr.com/deadromans/walk/index.html> Take a walking tour of the Colosseum. There are over 400 photographs on this site that allows you a variety of views of several ancient monuments. Take a telefield trip to go on a walking tour of Rome's Colosseum, Via Sacra, and Forum Romanum. The tour includes important information about each monument.

## Materials:

Computer with Internet and e-mail access

E-mail software

Per Class:

- Crayola "Model Magic" air drying clay – one golf-ball-sized piece per student.
- low temp glue gun and glue sticks (or tacky glue)
- set of pictures of architecture samples showing use of columns- include the Parthenon, the Colosseum, and the Supreme Court building in Washington D. C. – 1 set per group of students
- computer lab with Internet access, or a computer station that students can rotate through to collect their information
- computer disks for information storage

Per Student:

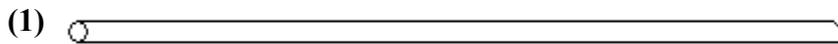
- 1 empty toilet paper tube
- two 3" x 3" poster board or foam core squares per student (foam core scraps can be begged from commercial frame shops – leftovers from framing projects) You can cut the foam core board on a paper cutter.
- 1 ruler
- 1 black Sharpie marker or pencil
- 6" x 18" white construction paper or heavy drawing paper, 1 per student

## Prep for Teachers

- Prior to teaching, have all Internet sites bookmarked for easy access throughout the lesson. The web sites should also be bookmarked on classroom computers for easy access by students during their individual time in the computer center, or on the computers in the lab for whole class use.
- You should preview the video clips and cue them as indicated in the Learning Activities section.
- Familiarize yourself with the lesson format and be sure to have all materials ready as listed in the materials section.
- Assemble the paper towel tube column base, or allow time for students to glue their own.
- When using media, provide students with a **FOCUS FOR MEDIA INTERACTION**, a specific task to complete and/or information to identify during or after viewing of video segments, Web sites, or other multimedia elements.

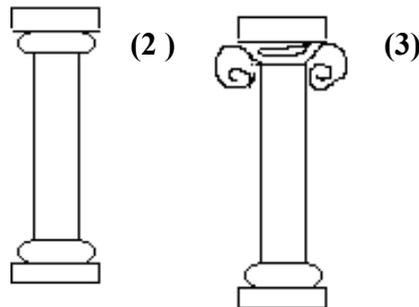
## Introductory Activity: Setting the Stage

1. Tell students they are going to create a model of a very important element in architecture, one that was used in ancient Greek times and continues to be used today.
2. Hand out the paper towel tubes that have been attached to foam core bases. Have them put their name on the bottom of their column. **Ask** students, “What shapes do you see in this structure?” (cubes, cylinder) **Ask**, “Does this structure remind you of anything you see around town?” (columns on houses or churches) **Ask**, “Does it look like something is missing?” (the top of column is too plain) Show students pictures of the three types of columns used in Ancient Greek architecture: Doric, Ionic and Corinthian.
3. Hand out a golf-ball-sized piece of model magic and demonstrate making a long cylinder (snake-shaped) by rolling it out with the palms and fingers of your hand. (fig. 1)



Use a small part of the snake to make a coil at the bottom of the column. Use another small piece to make a coil at the top of the column. Turn the column upside down to press it into place. This completes a Doric style column. (fig. 2)

4. If students wish to create an Ionic column, they should split their remaining “snake” into two parts and coil them up, pressing them into each side of the top of the column. (fig. 3)



5. Some students may want to try a Corinthian column. They should skip step 4 and split their leftover clay into many little pieces, creating a crown of leaves at the top of their column. (fig. 4)

(4)



Corinthian Column



Doric and Ionic Columns

### Learning Activities

1. **CUE** the first video at the title screen: "Living in Ancient Greece." (0:20 on video streaming counter) Provide a **Focus for Media Interaction** by saying, "We are reviewing some of the things we have learned about Ancient Greece. I want you to be able to tell me some of the contributions Ancient Greece is known for." **START**, and **PAUSE** after "...birthplace of western civilization." (1:25 on the video counter, showing statues of two people, one reaching into a box). **Ask**, "Did you hear what Greece is known as?" (Answer: Birthplace of western civilization).

2. Provide a **Focus for Media Interaction** by saying, "Does anyone remember why Greece was such an important place? I'm going to rewind this a little bit. See if you can find out why Greece is such an important part of our history." **REWIND** the video to the title screen, **PLAY** and **PAUSE** after the words "...literature, science and math." (01:01, where the video shows a picture of six columns). **Ask**, "Did you hear anything about what contributions Greece has made?" (Answer: Its people created the world's first democratic government, the first Olympic games, and made contributions to architecture, art, science and math.) **Say**, "Do you see anything in this picture that looks like the activity we just did? What kind of columns do you see here?" (Answer: Doric columns) **Say**: "As we said before, the Greeks were the first to use columns in their architecture. That's a big word, *architecture*. Can you tell me what it means?" (Answer: designing and making buildings) "Can you think of places where you can see columns today?" (Answer: churches, houses, government buildings, etc.) "So, if the Greeks were the first to use columns, where did architects today get their ideas about columns?" (Answer: from Ancient Greece)

3. **CUE** the second video, *Contributions of Ancient Rome*, at the "United Streaming" title screen (0.20 on the United Streaming counter). Provide a **Focus for Media Interaction** by saying, "Now we are going to learn something about the architecture in another important place in history. In this next video clip I want you to search for examples of columns similar to the ones we built. Raise your hand if you see any columns. Also in this clip you will hear some of the most important accomplishments of Ancient Rome. See if you can name some of them." **START** the video and **PAUSE** at 0.46, when the narrator says, "...accomplishments of Ancient Rome."

(at the "Accomplishments of Ancient Rome" title screen). **Ask**, "Did you see any columns? Can you name the type you saw?" (Answer: Corinthian.) **Rewind** and **pause** at each example. "Can you name some of the accomplishments of Ancient Rome?" (Answer: colosseum, paved roads, aqueducts, elaborate buildings made of concrete)

4. Provide a **Focus for Media Interaction** by saying, "Look and listen to this portion of the video. See if you can find Rome on the map, and find another country we have also been talking about." **START** the video and **PAUSE** when the narrator says, "...busy Mediterranean cities." (1:22, where the labels *Italy*, *Rome*, and *Greece* are clearly visible on the map). **Ask**, "Who can come up and point out Rome on the map? What country do you see on this map?" (Answer: Greece.) **Say**, "Can anyone find this same area on our large world map?" (have students come up to find the Mediterranean area)

5. Provide a **Focus for Media Interaction** by saying, "Let's listen for some more contributions made by Ancient Rome." **START** the video and **PAUSE** when the narrator says, "He organized Rome's first census." (1:42, just after the counting on the abacus scene, as the man is walking away from the camera). **Ask**, "Does anyone know what a census is?" (Answer: counting the people) **Say**, "Let's listen to see if you were correct." **START** the video and **PAUSE** when the narrator says, "...by a man named Serpius Tullius." (at 2:00 on the counter, where the scene shows a man sitting on a throne). **Ask**, "What do we do in the United States today that is just like what they used to do in Rome?" (Answer: count our citizens.) **Ask**: "How often do we count our citizens?" (Answer: every ten years.)

6. Provide a **Focus for Media Interaction** by saying, "Now we are going to hear about another important contribution made by Ancient Rome. See if you can tell me what it is and why it is important." **START** the video and **PAUSE** when the narrator says, "... each city would be connected by straight, paved roads." (at 2:23, where the scene shows a road up close, with a bridge on the right side). **Ask**, "What was the contribution we were looking for?" (Answer: the Romans connected their cities with straight, paved roads) **Ask**: "Why would this be helpful to the people?" (Answer: easier to get from place to place.) **Say**, "Let's listen to some more about the transportation system in Ancient Rome. See if you can find something else the Romans had that we also have today." **START** the video and **PAUSE** when the narrator says "... surely one of Rome's most enduring legacies." (2:52) **Ask**, "Did you find what I wanted you to look for?" (Answer: mileage markers, which told the distance between other cities and Rome)

7. Provide a **Focus for Media Interaction** by saying, "In this next video clip I want you to find one more thing that the Romans built that are very important in our lives today." **START** the video and **PAUSE** when the narrator says, "... the most famous things they left behind were probably the stadiums." (3:33, after the scene of the man talking in a modern football stadium). **Ask**, "What did they say were the most famous things the Ancient Romans left behind?" (Answer: stadiums) **Ask**, "What was the most famous stadium or amphitheater the Romans built?" (Answer: the Colosseum in Rome.)

### **Culminating Activity**

1. Tell students that they are going to take a tour of Ancient Greek and Roman ruins. Go to the Acropolis Tour web site (<http://www.lfc.edu/academics/greece/AcropTour.html>). On the web

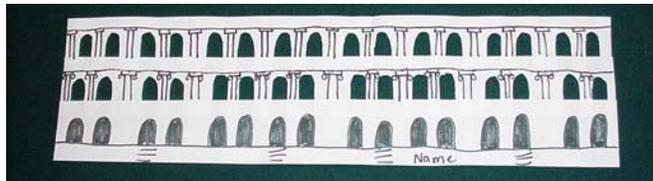
site, scroll down to the Parthenon picture. **Ask:** “Who can tell me the name of this very famous Greek building?” (Answer: the Parthenon) **Ask:** “Where is it located?” (Answer: Athens, Greece) **Ask:** “Who can identify the type, or order of columns used to build the Parthenon?” (Answer: Doric) You can scroll down further on the page to find close-ups of the columns.

2. **Say:** “Now let’s travel to the Colosseum.” Access the Virtual Tour of the Colosseum web site (<http://home.nyc.rr.com/deadromans/walk/index.html>). **Ask:** “Who can find an example of the Greek style of columns we learned about when you look at the façade of this building? Look at the model you made to help you figure this one out.” (Answer: Doric on the first level, Ionic on the second level, and Corinthian on the third level)

3. **Ask:** “Can you find another architectural feature on this building?” (Answer: arch) **Say:** “When the Romans conquered Greece, they began using the columns in their own buildings. You can see examples of the three types of columns on many Roman buildings. They also are known for introducing the arch into their constructions.”

### Assessment

1. In their journals, have students practice drawing the three types of columns first created in Ancient Greece. Students should write a description of each type to help them remember the similarities and differences.
2. Show them pictures of the Capitol building and the Senate building in Washington D. C. and have them identify the types of columns.
3. Have students build a mini-model of the colosseum using 3 strips of paper cut from a 6" x 18" piece of white drawing paper.



### Cross-Curricular Extensions:

#### Language Arts:

1. Have students read trade books about life in Ancient Greece and Rome, comparing their own life to the stories they read.
2. Have students write poems, stories and songs about Greek and Roman life.

#### Science:

1. During the study of matter in third grade, bring in the components needed for making concrete (mix, rock, water, mixing spatula). Discuss the fact that an important contribution the Romans made to the building industry was the use of concrete. They were the first to mix ash and rock and water. Wearing a mask, the teacher should mix up a batch of concrete for students to pour into small plastic containers. Discuss the states of matter (solid, liquid and gas) and have them identify what components went into the concrete mixture (solid and liquid). Students can embed

small glass marbles or other objects into the mix to create a mosaic effect. After two days, remove the concrete form from the plastic container to reveal a rock-hard solid shape.

2. Ask students to make a list of all the ways concrete is used today. (roads, sidewalks, walls, playgrounds, foundations, sculpture, columns, etc.)

Social Studies:

1. Have students map the locations of Greece and Rome.
2. Students can use information found on the various web sites about Ancient Greece and Rome to create a diorama or model of a typical building.

Art:

1. Students can create a small mosaic using donated pieces of tile or cut up clean Styrofoam meat trays.
2. Students can assemble the columns they made at the beginning of this lesson into a model of a Greek building.

Movement Education:

1. Have students organize and participate in their own version of the Olympic games. Students can compare the ancient games with current sports now included in modern Olympic competition.

Technology:

1. Have students plan a PowerPoint presentation showing what they have learned about Greece and Rome. They should include food, clothing, shelter, city organization, and any other details that would describe life in ancient times. Students could expand the presentation to include comparisons with modern life.
2. Have students visit the following web sites to compare the architecture of ancient Greece and Rome with more modern buildings in the United States:

- Colosseum  
<http://home.echo-on.net/~smithda/colosseum.html>  
This web site shows an excellent illustration of the colosseum and explains how it was built and the use of a system of concrete vaults to achieve its height.
- Hampton Coliseum  
<http://www.hamptoncoliseum.org/>  
Show students an example of a modern coliseum by visiting this website. Have them compare the appearance, shape, building materials, etc.
- Greek Architecture  
[http://www.bc.edu/bc\\_org/avp/cas/fnart/arch/greek\\_arch.html](http://www.bc.edu/bc_org/avp/cas/fnart/arch/greek_arch.html)  
This web site provides more examples of the three orders of Greek columns, as well as American examples of the use of Greek columns.

- Washington Pictures

<http://www.aviewoncities.com/gallery/washington1.htm>

This web site provides pictures of buildings in Washington, D. C., many of which are in the Greek Revival style of architecture. The pictures can be used to discuss contributions made by the Ancient Greeks in the area of architecture.

**Community Connections:**

1. Have an architect visit the class to talk about how buildings are constructed, and why columns are a type of support in structures. Compare modern buildings to those in Ancient Greece and Rome.
2. Visit a road construction site to see how modern roads are built. In making comparisons, students will discover that modern methods of building are actually based on many of the ideas used by Romans.