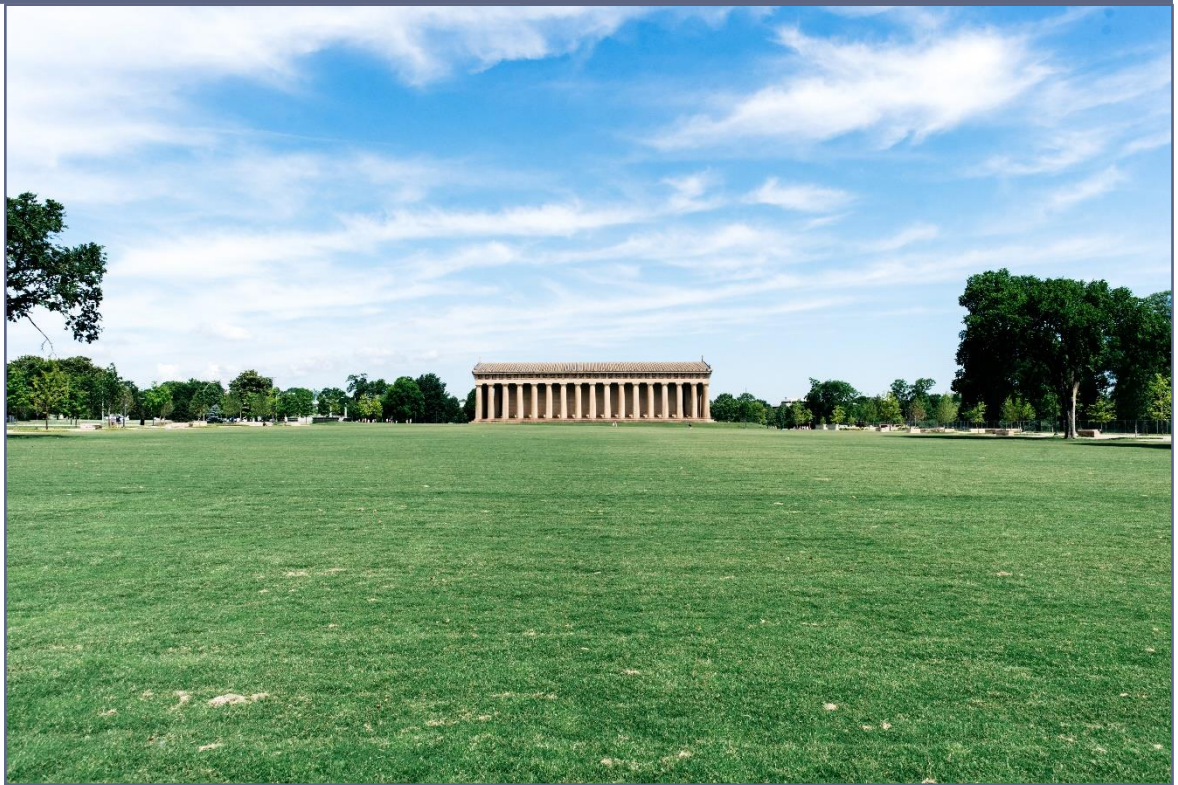


2023

STEAM EXPEDITION TO THE PARTHENON



Includes:

- Teacher Pre-Visit Guide
- Pre-Visit Activity
- Architecture Challenge
- Polychromy Activity:
Chaperone Guide
- Polychromy Activity
- Post-Visit Reflection

Katie Petrole
Assistant Director, The Parthenon
katherine.petrole@nashville.gov



Dear STEAM teachers,

Welcome to the Parthenon! We hope you and your students continue to discover how STEAM can combine with Social Studies to help us learn about the civilization that built the Parthenon both in Athens, Greece, in the 5th century BCE as well as in Nashville, Tennessee, in 1897. Along the way, your students will use Collaboration, Communication, Critical Thinking, and Creativity skills as they explore the Parthenon and its environs throughout their STEAM Expedition. We are excited to have your students experience something extraordinary while learning STEAM + Social Studies + the 4Cs!

The following is a brief pre-visit information guide to assist you and your students in preparing for your STEAM Expedition to the Parthenon.



Your STEAM Expedition to the Parthenon will include:

- ▶ **Greek Mythology Tour:** Students will join a museum tour guide for a 30-minute highlight of Greek mythology at the Parthenon, including Greek gods, such as Athena and Poseidon, as well as other mythological characters like Medusa, the Titans, and more.
- ▶ **Architecture Challenge:** Students will be in small groups with their chaperone to explore the exterior of the Parthenon. Every chaperone will have a script to lead their group in discovering interesting architectural features from the columns to measurements to curves. Throughout the challenge, chaperones can record any questions students have for Parthenon staff to answer.
- ▶ **Polychromy Activity:** Students will learn about color in ancient Greece and spend time creating a colorful depiction via a Parthenon coloring page. Note: due to time constraints, students may need to finish their coloring project at a later time.

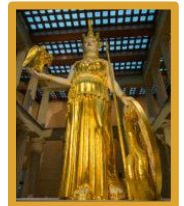
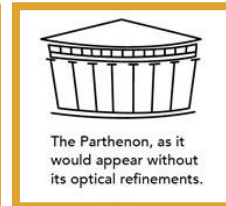
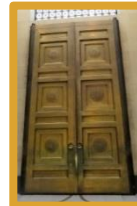
2023 STEAM Expedition to the Parthenon

Students will learn to...

- Describe the purposes of major Greek architecture, including the Parthenon and the Acropolis. *Social Studies Standard 6.49*
- Explain the characteristics of the major Greek city-states: Athens. *Social Studies Standard 6.43*
- Explain the polytheistic religion of ancient Greece, with respect to beliefs about the humanlike qualities of the deities, [and] their importance in everyday life... *Social Studies Standard 6.46*
- Explain the historical significance of ancient Greek literature, including how the *Iliad* and the *Odyssey* provide insight into the life of ancient Greeks. *Social Studies Standard 6.47*
- Combine concepts collaboratively to generate innovative ideas for creating art. *Visual Arts-Crete Standard 6.VA.Cr1.A*
- Explain environmental implications of conservation, care, and clean-up or art materials, tools, and equipment. *Visual Arts-Crete Standard 6.VA.Cr2.B*

Students will explore...

- A 42-foot tall statue of the goddess Athena
- Exhibits about Greek mythology
- Architectural secrets of the building
- A conservation project for the Parthenon Marbles Cast Collection
- Color on ancient statues



Students will create...

- A baseline knowledge of the Parthenon through the pre-visit activity.
 - Students will read an article adapted from a scholarly text by the Greek archaeologist, Manolis Korres, who has been studying the Parthenon for decades.
- An experiment to measure distances with unconventional measuring units.
 - Students will use found objects to measure and compare the distances between the columns.
- A colorful sketch of ancient Greece.
 - Students will choose colors to creatively interpret ancient sculpture.
- Memorable learning experiences at their city's cultural icon.
 - Students will spend the morning with their friends and school family learning from experts.
- Time to reflect on their experience.
 - Students will answer questions about their learning experience at the Parthenon.

New in 2023

- **Hands-on coloring activity**
 - The focus on ancient color will continue from 2022, but this year's STEAM Expedition will involve a hands-on coloring activity on-site at the Parthenon. Museum experts will show examples of color on sculptures and structures in ancient Greece to inspire student creations.
- **CLOSED to the public during large STEAM Expeditions**
 - MNPS students will have the Parthenon booked from 9:00 AM – 1:00 PM to allow for early arrival or late departure.
 - Public museum hours will be 1:00 PM – 7:00 PM if there is a STEAM Expedition on a Tuesday, Wednesday, or Thursday morning. See www.NashvilleParthenon.com for up-to-date hours.
- **STEAM Nights at the Parthenon dates**
 - MNPS families can visit the Parthenon for free to check out the newest exhibits, meet archaeologists and museum experts, stop by the Art Cart, or join special Museum and Architecture Tours.




Frequently Asked Questions:

- **What will the students be doing on their STEAM Expedition?**
 - Students will be visiting for a STEAM Expedition. Students will be in small groups of 12 with 1 chaperone. Combining into larger groups (40 or less), students will be joining a rotation of STEAM activities that may include a Greek Mythology Tour, Architecture Challenge, and Polychromy Activity. Students and chaperones will always stay together and will rotate through each activity during their visit.
- **What will teachers and chaperones be doing on the STEAM Expeditions?**
 - Teachers and chaperones will lead the Architecture Challenge for their small group!
 - Teachers and chaperones will be asked to be full participants in the STEAM Expedition, modeling appropriate behavior following the rules and instructions.
 - Teachers and chaperones are responsible for the behavior and safety of their students.
- **Weather today looks like it will be bad (rain/snow/cold). Should we cancel?**
 - STEAM Expeditions to the Parthenon will happen in all weather except dangerous conditions. Please advise your students, chaperones, and teachers to plan accordingly—some of the stations take place OUTSIDE. Your STEAM Expedition Coordinator, Dr. Heather Idhe, will work with MNPS and STEAM as well as with staff at the Parthenon to determine safety concerns due

to any dangerous weather conditions. Please feel free to check in with Heather for weather updates.

- **Can I bring my: backpack, large bag, food, gum, drinks, coffee, or water?**
 - No- these items are not allowed except for medical needs.
 - Instead, bring a warm jacket, hat, gloves, and comfortable walking shoes for spending time outside and exploring the museum.



Warm coats, hats, gloves, and shoes are highly recommended for this outdoor STEAM Expedition.

- **Where should our bus drop us off?**
 - The Parthenon has a designated drop-off zone close to the museum entrance. This drop-off lane is located at the far end of the parking lot.
- **How do I enter the Parthenon museum?**
 - Enter the Parthenon at *sidewalk* level at the East entrance (toward toward the lake).
- **Does the Parthenon meet ADA standards?**
 - All public interior areas of the museum are accessible including restrooms. The exterior of the Parthenon cannot be accessed except by the external stairs. If anyone in your group requires special accommodation to access to the exterior (Architecture Challenge requires this) such as a wheelchair user, walker/crutches, etc., please inform Dr. Heather Idhe or Katie Petrole in advance.
- **Who do I contact with a question about STEAM Expedition reservations?**
 - Please contact Dr. Heather Idhe. You may also call Parthenon staff Tamatha Jackson at 615-862-8431 or Tamatha.Jackson@nashville.gov.
- **What is going on in the Treasury on Level 2—why are there ropes across the gallery?**
 - The roped off area is part of a conservation project to preserve and protect the Parthenon Marbles Cast Collection. There may be smells due to chemicals and supplies used in the conservation project. There also may be areas that are roped off or off-limits during this project, which should last January-March 2023.
- **If students want to visit the Parthenon with their families, what are your regular hours?**
 - As of December 2022, museum hours are:
 - Monday-Thursday 9:00 AM - 7:00 PM
 - Friday-Saturday 9:00 AM - 4:30 PM
 - Sunday 12:30 - 4:30 PM
 - See www.nashvilleparthenon.com for the most up to date information.



Parthenon Staff Contacts:

- Parthenon Phone: 615-862-8431
- Tamatha Jackson, Docent & Tour Coordinator: tamatha.jackson@nashville.gov
 - Tamatha schedules and coordinates all Parthenon field trips, including STEAM Expeditions.
 - Please contact Tamatha for any operations, logistics, or visit details about your trip.
- Katie Petrole, Assistant Director: katherine.petrole@nashville.gov
 - Katie has worked closely with MNPS to create STEAM Expedition programming.
 - Please contact Katie with any questions regarding field trip content or STEAM at the Parthenon.
- Lauren Bufferd, Director: lauren.bufferd@nashville.gov
 - Please contact Lauren if Tamatha and Katie are unavailable, or for an emergency.



STEAM EXPEDITION TO THE PARTHENON
PRE-VISIT ACTIVITY

“The Half-Finished Block”

*“Many visitors to the Athenian Acropolis have wondered how the large masses of marble used for the monuments were originally hauled to the top of the sacred rock.”
-Dr. Manolis Korres*

Introduction:

Have you ever wondered how ancient Greeks built their temples and monuments that have lasted for thousands of years?

One archaeologist, Dr. Manolis Korres, also asked this same question. He spent two decades leading the Parthenon Restoration Project for the Greek Ministry of Culture, meaning he was the lead archaeologist in charge of helping keep the Parthenon in Athens, Greece, safe by studying the monument and rebuilding areas in danger. Dr. Korres is also famous for creating drawings that help us understand how people lived and worked in ancient times.

Dr. Korres wrote a book called *The Stones of the Parthenon* (J. Paul Getty Museum, 2000) whose main character is a column capital that may or may not be used in the Parthenon itself. His book was inspired by the discovery of a large block that looks like it had part of a Doric column capital carved out of the block, but the carving was not finished. We know that large sculptures and building blocks were only roughly carved out near quarries where the stone was harvested, and that final details were carved very near to the stone’s final destination.

This is the story of quarrying a block of marble for an 11-ton Doric column capital and transporting it from the quarry to the Acropolis at Athens. Start with a preview some vocabulary words and continue with the story below.

Vocabulary:

<u>Athens</u>	The capital of modern Greece. Athens was one of the leading cities of ancient Greece and the capital of the city-state by the same name.
<u>Acropolis</u>	The Acropolis of Athens is the tall rock form south of the center of ancient Athens. Throughout many years, many temples were built, including the Temple of Athena Parthenos (the Parthenon). Acropolis means “high city” in Greek.
<u>Capital</u>	The top part of a column.
<u>Doric order</u>	The style of the column capitals on the Parthenon exterior.
<u>Ionic order</u>	The style of the column capitals in the Treasury (interior, back room).
<u>Parthenon</u>	The main temple on the Athenian Acropolis, dedicated to the city’s patron goddess, Athena. It was the last of many temples to Athena on the Acropolis.
<u>Pediment</u>	The triangular shape on the short side of a building.
<u>Pentelikon</u>	Mount Pentelikon is a mountain 10 miles northeast of Athens with marble used to make the Parthenon.
<u>Winch</u>	Machine used for pulling or hauling heavy loads, consisting of a rope coiled around one or more drums.

Short Reading:

"The Half-Finished Block"

Adapted from *The Stones of the Parthenon* by Dr. Manolis Korres

About 2,500 years ago, an old temple on the top of the Acropolis in Athens is undergoing major renovations. Giant scaffolding, like the scaffolding that you see all over Nashville today, is set up to create a much larger temple than the one before it.

For the first time ever in their city, the new temple will be made of marble. This new temple is the famous Athenian building known as "The Parthenon".

The marble quarry, where experienced and professional quarrymen work with stonecutters, foremen, and architects, is located on a nearby mountain called Mt. Pentelikon. Mt. Pentelikon is 10 miles away from the Acropolis. Ten miles is approximately the distance from Nashville, TN, to Brentwood, TN—which would take over 2.5 hours to walk at a steady pace.

So, how does marble stone in the ground get to its place on the Parthenon?

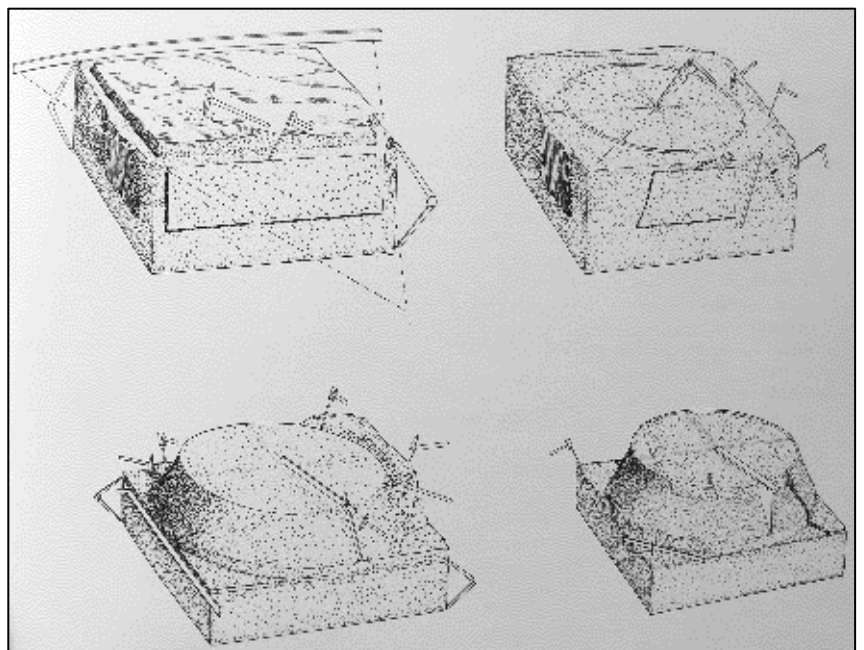
First, masons work to separate a large block of marble from the mountain. Simple machines such as iron wedges and long levers help split the stone block apart.

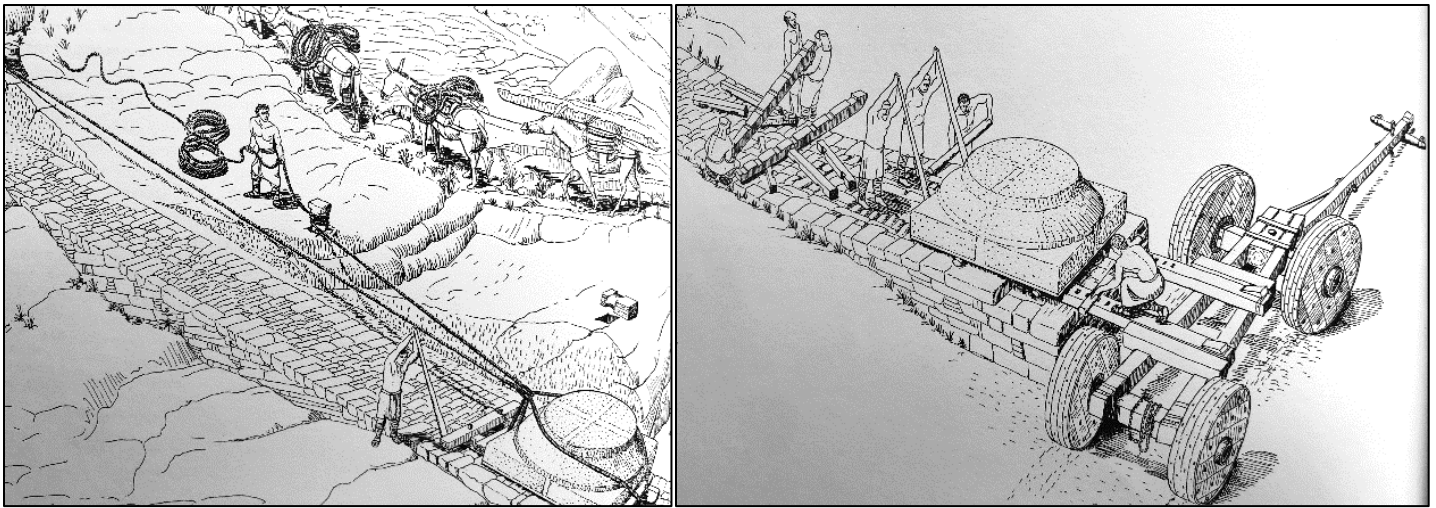
Then a master mason inspects the block to find weak points or cracks in the stone. The master mason directs workers on how to cut the best part of the block into the proper shape: a Doric column capital. For this, the mason needs create a large square block.

Large fragments separated away from cutting and carving the block are not wasted—they could be repurposed for a section of the pediment or other building parts.

After more smoothing and shaping, tools such as rulers, calipers, chisels, and various squares and angles complete more stages in forming the column capital.

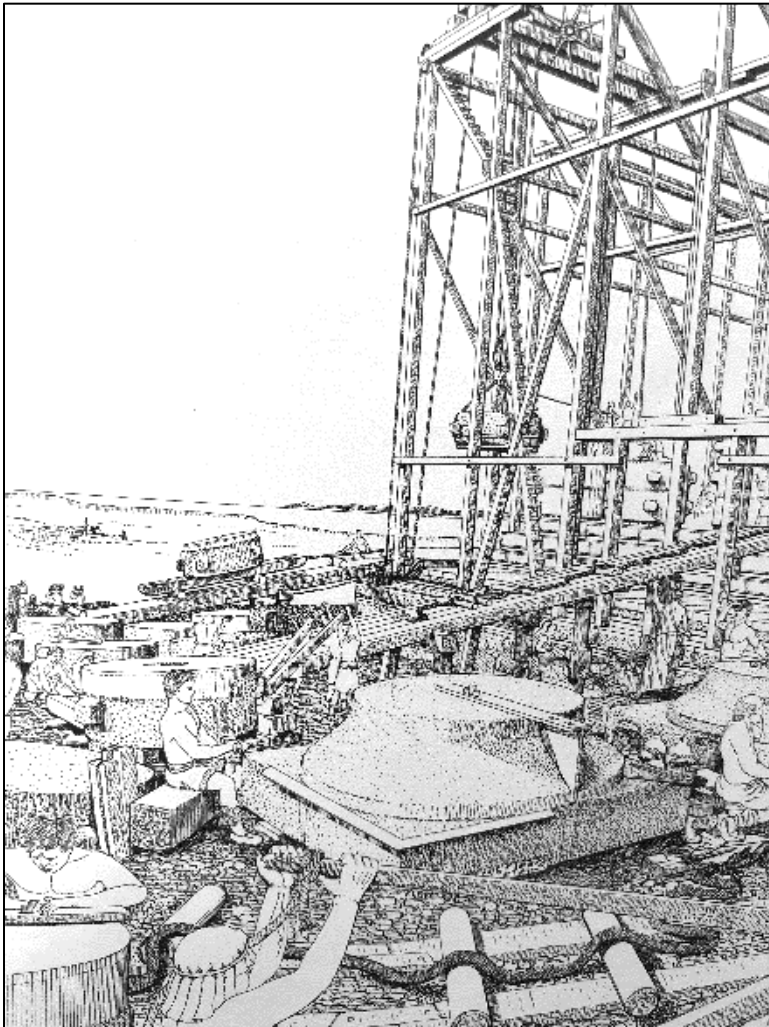
The goal is to whittle down the block into a "half-finished shape". This work could take about two months.





A wooden sled helps move the half-finished capital to a place where it can be safely lifted with ropes and a winch (a lifting device). The block then travels on a stone road down the mountain to a loading platform where it is transferred to a wagon.

Mules and drivers transport the half-finished column to the city, where fresh mules are harnessed up before the hill up to the top of the Acropolis. Pulleys help safely slide the sled with capital up the steepest and uppermost hill.



An architect inspects the piece for cracks while masons examine the dimensions, work that demands expert knowledge of geometry.

The architect learns that a crack was noted early in the column's cutting and spots the crack that was reported.

Hopefully most of the crack can be removed during final decorative work. To make the piece a Doric column capital, it must be finished with a square top and carved to slope down to the column shaft.

If the crack remains, it can be reinforced with iron clamps to strengthen it.

But if the crack is too dangerous, it will not be used. All the work of removing it from the ground will be for nothing.

Conclusion:

You have just read a short adapted version of a book by the famous Greek archaeologist Dr. Manolis Korres. His book is about how ancient Athenians brought stone from nearby mountains to the top of the Acropolis for use in building the Parthenon over 2,000 years ago.

But the block featured in his story had a problem: a fissure, or crack. Dr. Korres calls the Parthenon “the greatest accomplishment in the technology of stone.”

Do you think that ancient Athenian architects would complete that half-finished block to become one of the official Doric column capitals? Why or not?

If you were the architect, what would you do? Hint: There is no right or wrong answer.

**Source for adapted text, quotes, and all images:**

Korres, Manolis. *The Stones of the Parthenon*. J. Paul Getty Museum, 2000.



STEAM EXPEDITION TO THE PARTHENON ARCHITECTURE CHALLENGE

Dear Team Chaperone,

You are leading your team of students on the Architecture Challenge to learn more about ancient Greek architecture. The rules and tips are listed here to help you lead your group.

You will read everything out loud. Begin by reading the Rules and Directions out loud. Continue to read out the Architecture Challenge at each stop.

Italicized = tips • Underlined = vocabulary • Red = safety info

STEAM Architecture Challenge Rules:

- Stay with your Team.
- Complete as much of the Architecture Challenge as possible in approximately 30 minutes.
- Be ready for your next STEAM experience on time.

STEAM Architecture Challenge Directions:

- Gather on the porch of the Parthenon (above museum entrance).
- During this entire station, we will be outside. If you are cold, try to stay in the sun. If you are wet, try to stay up in the colonnade under the roof. Do some jumping jacks for warmth!
- Team chaperones have the Architecture Challenge guide on their clipboard (this is it!).
- Chaperones will be leading your team through the Architecture Challenge.
- Parthenon staff Katie will be roving around to help all teams with any questions!
- Quick Architecture Challenge overview:
 - The Architecture Challenge has 4 Stops.
 - Stop 1 is right here—you made it, yay!
 - Stop 2 is up the middle steps, over at a corner column.
 - Stop 3 is halfway down the long side of the Parthenon.
 - Stop 4 is all the way down at the other corner.
 - Hint: At Stop 4, we will be looking for the sign that says, "Can You See Me?" Does everyone see this sign on the Parthenon base over at the corner? At Stop 4 you will be all the way down the other end of the Parthenon playing peek-a-boo with this sign.

**CAN YOU
SEE ME?**



PROGRAM IN PROGRESS
DO NOT MOVE THIS SIGN

Let the Architecture Challenge begin!

Stop 1

Welcome to the Architecture Challenge!

There is a lot of STEAM hidden in the architecture of the Parthenon. Our mission today is to discover the engineering feats of the Parthenon, built over 2,400 years ago in Athens, Greece! We will study this exact replica here in Nashville, Tennessee, to learn about how ancient Athenians solved problems in construction.

From here, look up to find a big, long triangle. This is called a pediment.

What gods do you see in this pediment? Hint: look in the middle of the triangle to see two famous Greek gods!

Next, I need everyone to notice long lines on the building. Can you see:

- The long horizontal line at the base of this triangular pediment?
- The long horizontal lines of the base steps of the building?
- The vertical lines of the columns?

These long lines are actually curved! There are ZERO straight horizontal lines in the Parthenon.

The Athenians used advanced architectural refinements to trick our eyes. They understood STEAM concepts and designed the Parthenon to have corrections to correct how human eyes see lines. You are seeing very slight curves-- everywhere! The Parthenon curves up in the middle—very slightly—to help it look exactly, perfectly straight to our human eyes.

Come gather around me to see an example.

On my clipboard, I have a laminated page full of drawings so you can see these curves for yourself.

(Show laminated page--the image to right.)

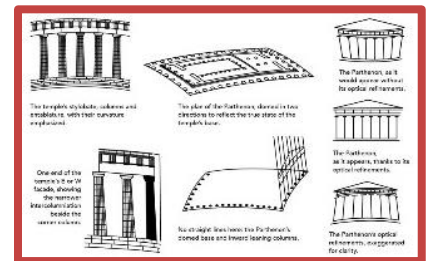
Image credit: www.greece-is.com/the-optical-illusions-that-make-the-parthenon-perfect/

Let's look to our left and right to find tall buildings in the distance. Do they look like they are slightly sagging in the middle? They are not curved like the Parthenon.

We must stay together and walk together up only one flight of steps to Stop 2 near the corner columns.

*Proceed to Stop 2— walk up ONE set of steps ***human-sized steps are in the middle*** to the colonnade and walk to the corner. Gather inside the corner columns.*

Start Here



Stop 2

We are now at a corner of the Parthenon. Are these Doric columns larger or wider than you expected? Where do they look the widest to you?

Give your group a minute to make observations out loud.

These Doric columns are widest about 1/3 of the way up. It can be hard for our eyes to notice this small curve. I have a test to find the widest part.

Here's how you do this test:

- Look at a column that is far away.
- Use both hands to divide the column in three equal parts.
- Your lower hand will be at the widest part of the column!

These curves in architecture are called entasis (EN-tah-siss). We just discovered entasis on the columns!

Now let's think about the distance between columns. Do you think all the columns are the same distance apart? We must find a way to measure the distance between this corner column and its neighbor, then later we will measure the distance between two columns on the long side.

Let's start measuring! We have 0 tools and need to figure out what we to use as a unit of measurement. What can we use to measure? How can we get this done? You have two minutes to decide what you will use to measure and get the first measurement done.

Give students the time they need-- this is hard. This is key problem solving for students-- try NOT to suggest anything. They CANNOT use the "Can You See Me?" sign—it must stay in place. Note: common measurement units students come up with are feet/shoes, body length, arm length, stick, jacket, etc. Give the students some time reminders to keep them on track.

One minute left... 30 seconds... Come gather near me!

Who has a measurement number, and what unit or item did you use to make your measurement?

Let's move toward the middle of the long side to get our measurement between two middle (non-corner) columns. Let's pick two columns near Stop 3 to measure as our comparison.

Walk to Stop 3 location. Stop 3 is located in the middle area of the colonnade along the long side of the building. Any middle area is fine—choose one that does not already have another team working in it.

You need to measure again, this time between any of the two columns in the middle of this side! Use the same exact measurement unit you did before and see if the measurement is the same-- or different!

Come gather near me! This is important, so please listen up. You just did two great tests, getting two different measurements. What is the difference between the corner column and middle column measurements? So, as a group, we now have proof. What did we discover about the columns-- are they all equally spaced apart?

Well done! We just did some creative thinking to answer that question.

Let's get ready for Stop 3 and our next test-- we are already in the right spot.



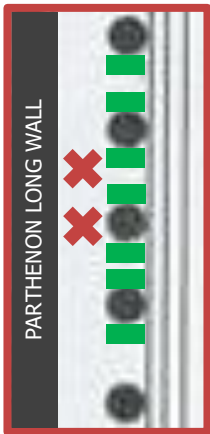
Stop 3

Stop 3 is located in the middle area of the colonnade along the long side of the building. Any middle area is fine—choose one that does not already have another team working in it.

The Doric columns of the Parthenon lean slightly inward. We're going to test this to see how they tilt toward the walls of the building.

I need two volunteers to try this next test.

Each volunteer needs to find a column and stand exactly at its side, not at an angle, but exactly in the middle of the side of the column.



Example:

Each green rectangle on this example represents good spot for a student to stand.

Students stand exactly between columns (not in the colonnade/walkway where the red Xs are on this map) and face the column, so that their nose is almost touching the concrete.

Call for Katie with questions—she will do her best to be available for questions and to show the exact placement needed between the columns at this station.

Here's how you do this test:

- Stand up against the column, without touching it or leaning on it.
- Face the column.
- Standing up as straight and tall as you can.
- Raise your arms as straight and tall as you can.
- The palms of your hands should be facing each other, almost as if you are clapping your hands.
- Move your palms wider, just wider than your shoulders.
- Tilt your head back and notice how the columns narrow at the top.
- Slowly move your palms toward each other. Slowly.
- Does one palm visually hit a side of the column before the other? This may be a visual clue that the column is slightly leaning toward the interior of the building.

If anyone else would like to try it, feel free. The student volunteers who did this first can help you see this visual clue.

Moving on to our final stop, #4!

*Proceed to Stop 4: The whole group will walk down the colonnade to the far corner, then walk to the middle of the short side. Use the human-sized stairs to go down to ground level. ***Using extra care and caution, you can step down the giant steps at the corner.***

Stop 4

Once on the ground, bring the whole group over to the corner of the lowest giant step. Make sure you are at the corner on sidewalk level, as shown in the Stop 4 image.

Our final stop will show us the curvature of the base, which is made out of three giant steps.

The stylobate (STY-low-bate) is the highest giant step.
The stereobate (STARE-ee-oh-bate) is the lowest step.

From corner to corner on the long side of the Parthenon, the stylobate and stereobate slope up 7 inches higher in the middle than on the sides. Did anyone feel this while walking over here?

To see this with our own eyes, we are going to get down to eye level with the stereobate, this lowest step. We are going to look down the length of this giant step toward that special "Can You See Me?" sign and observe how much of it we can see, and how much is blocked by the curvature of the stylobate.

Here's how you do this test:

- Approach the stereobate.
- Squat down to place your eyes to be even with the step, almost as if you are playing peek-a-boo.
- When your eyes are low enough, look down the stereobate to find that sign that you know is there.
- How much of the "Can You See Me?" sign do you see?

Take turns and try this out one at a time. Help the person after you, show them how you did it. Can anyone see part of the sign? After everyone has a look, let's go find it up close.

Use the sidewalk to walk back toward Parthenon entrance along the long side toward that sign. Do not walk on the stereobate or stylobate—other students may still be using it. You will end up near Stop 1, where we started.

This is a regular-sized piece of paper, 8.5 inches wide by 11 inches tall. How much of it could you see? The 7-inch curve of the stereobate can prevent you from seeing most or all of the sign when you are down at eye level!

Congratulations! Together, we have finished today's Architecture Challenge. Take a minute to think if you have any questions about the Parthenon and its architecture? Anything-- from its purpose or its sculpture to columns or curvature? We can ask the Parthenon staff person, Katie.

Find Katie near somewhere nearby Stop 1 and ask any questions.
Return the Architecture Challenge kit (clipboard, paper, laminated page).
Stay in your small team and prepare for the next STEAM Expedition station.
Gather at the wood benches near the front museum entrance.





STEAM EXPEDITION TO THE PARTHENON POLYCHROMY ACTIVITY

Dear Team Chaperone,

This is the Polychromy Activity. Please help your team of students will follow the directions listed on their Polychromy Activity worksheet. The rules and directions are listed here to help you assist your group.

Polychromy Activity Rules:

- Stay with your Team.
- Follow the steps on this Polychromy Activity worksheet.
- Be ready for your next STEAM experience on time.

Polychromy Activity Directions:

1. With your team, find a spot to sit together in your assigned museum space, most likely in the Museum Lobby or the Gallery Lobby.
2. For 2-5 minutes, a Parthenon team member will review examples of color in ancient Greece, from real minerals and gold to reconstructions of statues and buildings in full color.
3. When instructed, pass out coloring pages to the students in your group. Read this to your group:

Check out the drawing on your coloring page. This was made by an archaeological illustrator who lives in Greece! Her job is to draw artifacts, from the tiniest little ancient earring to an entire building! You all have the middle section of a pediment, the top triangle on the outside of the Parthenon. There is a story about the pediment to read, and then you can color in the page with inspiration from the images and examples of ancient color we just saw. Think about patterns and details you could add, then get started!

4. Students have about 15 minutes to finish this Polychromy Activity coloring page.
5. Ask everyone write their name on their page.
6. Collect all the coloring pages for your team and pass them to their teacher when appropriate.



STEAM EXPEDITION TO THE PARTHENON POLYCHROMY ACTIVITY

Name: _____ Class/Teacher: _____

West Pediment:

The West Pediment sculptures tell the story of a contest between Greek gods Athena and Poseidon to become the patron god of Athens. Poseidon, god of the seas, gifted the Athenians a saltwater stream representing control of the seas. Athena, goddess of wisdom, warfare, crafts, and weaving, gifted the first olive tree, representing wisdom and industry. Athena won the contest, and legend says her first olive tree still stands on the Acropolis in Greece today.





Name: _____ Class/Teacher: _____

East Pediment:

The sculpture in the East Pediment of the Parthenon tells the story of how Athena become one of the 12 Olympian gods. Zeus, king of the Greek gods, sits in his throne watching Nike, goddess of victory, crown Athena with a victory wreath. Zeus swallowed Athena's mother, Metis, but Athena, goddess of wisdom, warfare, crafts, and weaving, kept growing inside her father until bursting from his head. Athena was born as a fully-grown Greek goddess complete with weapons and armor!





Reflection Questions

Your students were able to experience the Greek Mythology Tour, Architecture Challenge, and Polychromy Activity during their STEAM Expedition. Upon returning to your classroom, the following questions can serve as a post-visit reflection for your students. This can be done through a 15-minute class discussion, or these questions can be assigned for homework and assessment.

1. Describe the architecture of the Parthenon.
2. What are similarities and differences between Doric and Ionic orders of columns?
3. What function did the Parthenon have back in ancient Greece?
4. Why would Athens, not other city-states (such as Sparta or Corinth) build this architectural masterpiece?
5. List names of gods and goddesses you remember seeing at the Parthenon, and their roles.
6. Before these Olympian gods ruled Greece, there were other older gods. What are these gods called?
7. What is the story of how Athena was born OR how Athena became the main goddess of Athens?
8. How would you describe the giant statue of Athena to someone who has never seen it before?
9. Based on your observations, how does color impact how you picture ancient Greece?
10. Name something that was used or created in ancient Greece that is still used today.
11. Nashville has been known as the "Athens of the South" since the 1820s—about 200 years! Do you think that Nashville is still the "Athens of the South"? Why or why not?
12. What surprised you about your visit to the Parthenon today?
13. Pick one word to summarize your entire STEAM Expedition to the Parthenon.



At-Home Architecture Challenge

It's time to put your ancient architecture skills to the test!

Using household materials, build an ancient structure similar to the Parthenon.

Building supplies can include anything found in your home: kitchen utensils, stuffed animals, toys, furniture, anything!

Example:



Source: J. KL. Misener, www.jlmsisener.com/blog/2020/3/27/diy-toilet-paper-parthenon

Suggestions for sharing:

- Explain the features in your architectural masterpiece (base, columns, pediments, roof, curvature)
- Share on social media—the museum will share your creations!
 - #NashvilleParthenon #AthensOfTheSouth
 - Facebook, Instagram: @NashvilleParthenon @CentennialPark @Nashville_Parks
 - Twitter: @NashParthenon @CentennialPark