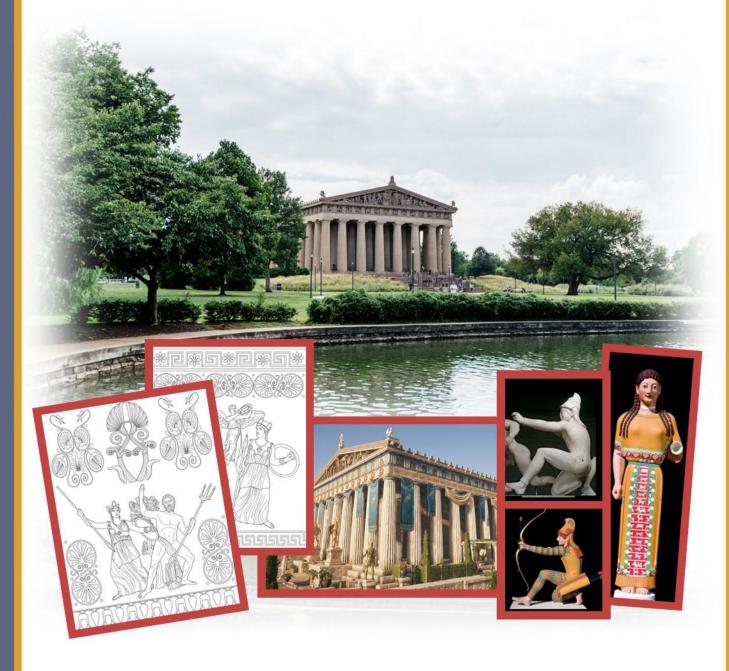


# AIA NASHVILLE SOCIETY EDUCATIONAL RESOURCES





AIA-Nashville Society
Polychromy at the Parthenon

## **AIA-Nashville Society Polychromy at the Parthenon**

**Mission:** To educate the public concerning the Parthenon and the civilization that built it, both in Athens, Greece, in the fifth century BCE and in Nashville, Tennessee, from 1897 to the present. To exhibit, collect, and care for objects and information related to: fifth century BCE Athens, the Tennessee Centennial Exposition, and the rebuilding of the Nashville Parthenon. To exhibit, collect, and care for visual art and to educate the public concerning its various forms.

**Program Title:** AIA-Nashville Society Polychromy at the Parthenon

**Target Audience:** All ages

**Exhibit/Gallery**: Outreach events and Nashville Parthenon Naos/Treasury (Art Cart)

Author: Katherine Petrole, AIA Nashville Society Outreach Coordinator & Nashville Parthenon Director of

Education; Jennifer Richardson, Nashville Parthenon Education & Curatorial Assistant

**Updated By**: Wesley Paine, AIA Nashville Society President; Mireille Lee, AIA Nashville Society Treasurer

**Activity Time:** Approximately 10 minutes (longer if coloring on-site)

**Implementation Date:** Fall 2021

**Staff/Docents Needed:** 1

**Overview:** During this program, visitors will explore color on the Parthenon through signage, supplies, and stories that introduce color on ancient Greek temples. Offering hands-on experiences with minerals, gems, and physical examples of color and coloring pages created by professional archaeological illustrator Christina Kolb that incorporate architectural sculpture and designs found on the Parthenon will help visitors understand the myth of whiteness on ancient Greek sculpture and architecture. Discussions on the history of the colossal statue of Athena and the use of color from art historical and archaeological perspectives will lead to observations about paint and preservation, which might lead to surprising revelations for the general public. Together, these polychromy offerings will promote public understanding and appreciation of a colorful ancient world and share how archaeologists study ancient color.

**Big Idea:** Ancient Greece was a vibrant and colorful place.

#### Goals:

- Visitors will acquire introductory information about color in ancient Greece.
- Visitors will gain an awareness of the importance of thinking about ancient Greece as a colorful, vibrant place.

## **Objectives:**

- Visitors will make observations about the examples of ancient color.
- Visitors will see and touch minerals.
- Visitors will take home free Parthenon Coloring Pages to color architectural sculptures or features.

#### Family Learning Behaviors:

P. Family member contributes information or ask a question during program.

Example: "I never knew they used all these colors." "What is it made out of?"

FF. Family member compares something to himself, other family members, or other objects.

Example: "I wear lots of colors, too." "I have a statue that is white."

M. Family members verbally and/or physically work on activity simultaneously to complete it.

Example: Families color at the Art Cart or pick up coloring pages for take-home coloring activity.

#### **Education Standards:**

6th Grade Social Studies

Ancient Greece: c. 800-300 BCE

- 6.46 Explain the polytheistic religion of ancient Greece, with respect to beliefs about the human-like
  qualities of the deities, their importance in everyday life, and the emergence of the Olympic Games to
  honor Zeus
- 6.47 Explain the historical significance of ancient Greek literature, including how the Iliad and the Odyssey provide insight into the life of the ancient Greeks.
- 6.49 Describe the purposes of major Greek architecture, including the Parthenon and the Acropolis.

#### Grades 9-12 Social Studies

The Classic Civilizations of Greece and Rome: 1000-500 BCE

- AH.21 Describe early Greek society, with an emphasis on social classes, cultural traditions, and religious beliefs.
- AH.25 Identify the significant developments and contributions of Greece to the following: architecture, art/drama, history, language, law, literature/poetry, medicine, philosophy, religious institutions, science, and technology

# **Background information:**

What is polychrome?

- Antoine Chrysostôme Quatremère de Quincy (1755-1849) coined the term polychrome as "a coating of color that did not fully cover the object". We now know that although the coating was sometimes very thin, ancient sculptures were almost always fully covered by paint.
- This may come as a shock given the popular depiction of ancient Greek sculpture as carefully sculpted white marble. This was because polychrome was abandoned during the Italian Renaissance due to attitudes, like Leonardo DaVinci's which viewed the use of polychrome as "barbaric and due to a lack of ability to breathe life into their work without the use of color. Because of the recreation of ancient Greek and Roman sculptures through the lens of this attitude, it was a difficult road to convince scholars and the public that ancient sculpture and architecture was vibrantly colored.

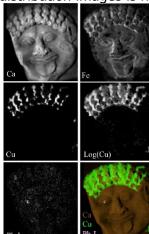


- Polychrome was first discovered on ancient sculpture during excavations of the town surrounding Mt.
   Vesuvius. Despite the color that was preserved beneath the ashes, polychrome was still not widely discussed due to people's hesitations of contradicting the popular belief of entirely white sculpture.
- Ultimately, doubt about polychrome in ancient sculpture and architecture was abandoned while
  excavating the Parthenon. In 480-479 BCE Athens the Persians destroyed sanctuaries and sculptures as
  vengeance for the Ionian Revolt. In ancient Greece, sometimes those destroyed and/or desecrated
  statues were given a proper burial. They also used destroyed art to fortify their defenses. Because of
  this practice, excavations of the Parthenon in the 19th century discovered not only the limestone &
  marble of the architecture itself, but also marble sculptures were found in the ground of the fortress
  sanctuary. This discovery closed the argument surrounding polychrome on ancient sculpture.

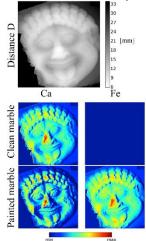
#### How do they research polychrome on sculpture/ architecture?

- Doric stone temples are generally thought to be inspired by earlier wooden temples. The
  - Earlier wooden temples were "likely to have been treated with an antifungal, copper-based paint. This is naturally blue in color, and is still widely employed in farming and silviculture" (Economakis 2022)
  - "The outermost sill board, the tainia, was typically painted red, and was held in place from below by the guttae. Judging from later stone examples that preserve traces of paint, the guttae consisted of copper nails that were driven through small cleats of wood or bone." (Economakis 2022)
  - Earlier forms of guttae were hollow and "protruded at a consistent length. This permitted them to be gripped by pliers and be removed whenever the flashing required polishing or a fresh coat of paint." (Economakis 2022)

- "Regarding the articulation of the column shaft, I submit that the entasis and fluting came about as a result of applying a protective coating of earthen plaster, and shaping it with wooden rods. The shafts of spears would have lent themselves conveniently to such a purpose." (Economakis 2022)
- "The use of plaster may also explain the annulets; their curved profiles being strongly suggestive of the finishing flourishes of a plasterer's trowel. The hypotrachelion grooves at the bottom of the column necking appear to be the result of pressing the edge of a trowel into a thick coating of plaster". (Economakis 2022)
- o "The hypotrachelion grooves with their undercut profiles may have been to provide a sharp edge for a chisel to periodically 'dig out' and remove from the plaster the bronze necking that was nailed to the column shaft. This would have allowed plasterers to occasionally adjust and refinish the necking without damaging the rest of the fluted shaft." (Economakis 2022)
- "We have already suggested that blue color represents an earlier use of copper-based paint applied for its fungicidal properties. Before their 'petrification', triglyphs, regulae and mutules all presented faces with exposed end-grain, which required them to be similarly treated. The red paint that was used in other parts of stone entablatures —which were primarily horizontal members- can only be explained as representing copper flashing. Although in its natural state copper has an orangey-red color, it turns green over time; the process of oxidization was probably pre-empted by Greek builders by giving it a protective coating of red lead paint, as was until recently done on copper roof flashing. When the forms of the Doric temple were established, they were ready to be 'imitated in sculpture', with limestone or marble faithfully reproducing details that had first been developed in wood, brick, bronze, and plaster, and painted to simulate the original structures." (Economakis 2022)
- The first step is to do a visual examination of the surface. Stereoscopic reflected light microscopes (10x-60x magnification) help us see: the manner the paint was applied, sequence of paint layers, degree of weathering, and the original colors. Investigators also use raking light to see any traces of preparation for painting (like scratches and marks) as well as traces of ornamentations and motifs. After a visual investigation, there are various methods from chemical analysis to technical imaging that can be employed.
- In regard to chemical analysis, it originally was an invasive procedure that destroyed the color and also could only be used on inorganic substance. After advancements in technology, x-ray fluorescence (XFA) and ultraviolet visible absorption spectroscopy (UV-Vis) emerged as non-invasive chemical analyses. XFA helps determine different inorganic pigments without taking a sample. UV-Vis helps find both organic and inorganic pigment/ dye by using glass fiber optical wave guides to point light at the surface and measure the amount of light reflected or absorbed with a spectrometer. This measurement can then be matched to its corresponding color.
  - Example 1: Measurement head to marble surface distance map used for FP calculations. FP simulated elemental distribution images of Ca and Fe in case of a clean marble face and a marble face painted with a Fe containing pigment. Color scale of simulated elemental distribution images is normalized to the most intense pixel of the individual image.



 Example 2: Experimentally acquired elemental distribution images (110 x 100 mm2) of the Gorgon head with a brighter hue indicating a stronger signal. Lower right: Overlay of Ca (brown), log (Cu) (green) and Pb-L (pink). Only Pb-L signals above an empirical threshold are used for the overlay.



- Another technique is multispectral imaging which includes imaging in both ultra-violet (UV) and visible range of light (VIL) waves. UV imaging helps to strengthen the contrast of the colors for easier identification. VIL imaging shows luminescence from certain organic pigments, specifically it shows luminescence from Egyptian blue a synthetic pigment first produced in 3rd Century BCE Egypt and then was widely used in classical antiquity. Overall multispectral imaging is affordable, quick, and noninvasive.
  - o VIL image showing the white luminescence of Egyptian blue; mid 2nd century CE:







# What techniques and pigments were used?

- In ancient polychrome, most of the colors used were made from either natural or synthetic pigments. Despite their description as natural pigments, most colors used were inorganic, with only a few organic materials used. Some pigments frequently used include natural cinnabar, ochre earth colors, azurite, black, gold leaf, and Egyptian blue.
- It's important to note that polychrome isn't limited to paint, but a variety of other techniques and materials including chryselephantine, bronze, terracotta, wood, and (rarely preserved) colored semi-precious stone.
- Before being applied to sculpture, pigments had to be mixed with a binding medium There were many different binders used including egg-white, hot wax, casein, and gum Arabic. These binders could be used by themselves or in combinations. The choice of binder(s) was very important for the visual effect and durability of the paint layer. For example, pigments containing lead oxide or pure, very fine ochreearth could become smoother when combines with egg whites. Since the binders were organic materials, it explains the difficulties of finding good examples of ancient polychrome as most organic binding have either decomposed completely or need resource demanding analysis to be detected.
- Application of the paint heavily depended on the type of surface it was being applied to. When painting
  a smooth surface (normally marble), paints could be applied without a primer with light, even layers of
  paint. There were also marble polishing techniques which involved a candle wrapped in a linen cloth.
  This type of surface and application was vital when trying to make a statue realistic as it made skin

look life-like and also provided a layer of protection (Gallagher 2012). If the surface was rough (like limestone), it would have to be smoothed through a procedure involving a chalk or stucco ground applied in multiple layers. Smoothing layers were mixed with marble flour to become a ground for the paint.

- "It is possible thin, nearly translucent, layers of paint were used for the skin. Layers like this would wear away quicker than thickly painted layers. Wax was used to seal and protect the paint, some records indicate that wax was renewed within the same year for some sculptures. Vitruvius describes nude marble figures as first painted and then rubbed over with a stiff brush and melted Punic wax diluted with a little oil. This is then heated with a tool holding live coals to smooth the wax. A final polishing is done with a candle and clean cloths." (Richter and Hall 1944)
- Ancient sculpture was created by making the initial form and then applying paint to give it vitality. As
  this suggests the use of color was meant to expand the formal and narrative structure of the work, not
  detract from it as Da Vinci suggested, while also facilitating the main goal of sculpture at the time
  which was to depict life accurately.
- In reality, prior to the 15<sup>th</sup> century a color-less sculpture didn't indicate skill but rather a lack of money. There was even a time where real clothes were draped on sculptural figures. Ultimately, applying polychrome helped to increase legibility of the figure, clarify the volume of overlapping figures/differentiate single elements, distinguish figures crated through bas relief, and help with anatomical details. In later years, as light and shadow were emphasized in art, color was used to enhance the natural shadows of the body. Beginning in 5th century mixture of colors were also used to achieve painterly affects. To achieve light and shadow, one would use multiple layers of paint and, for some details, a black underpainting might be used to help with shadows.

## Greek Sculpture through the Years

Archaic Period



(Brinkman 2017)

- During this period the types of colors used expanded, as Greek authors talk about the colorful clothing and many forms in clothes of those in the east.
- o Greek sculpture was heavily influenced by Pharaonic Egypt. With the Archaic period being the most closely paralleled with their Eastern neighbors in style and color. "The data available suggest that the stylized forms of archaic sculpture carried a correspondingly stylized polychrome, with no shading, no mixing of pigments, a "free" relation to reality (blue lion's manes!), and a taste for strong colors" (Britannica). At this time, color was used to emphasize individual figures, illustrate figures, illustrate the relationship between those figures, and elucidate the dramaturgy of the piece as a whole.
- A sculptural example from this period is the Peplos Kore which was erected on Athens' Acropolis around 530 BC. On this figure, color is a necessary component for us to determine the significance of the figure. The garment of the figure is decorated with an animal frieze which indicates a ruler. This clothing was adapted by Greeks from the eastern tradition to mark the prominence of major divinities and their priests. Thus, by wearing this garment, it identifies her as a god.



(Brinkman 2017)

o Additional example: <a href="https://www.theacropolismuseum.gr/en/statue-kore-kore-kore-chios">https://www.theacropolismuseum.gr/en/statue-kore-kore-chios</a>

## Classical Period

0

The Classical Period was a time of innovation and later on this period would be considered the culmination of ancient art by academics. In this period, colors lost their decorative form and instead were used enhance light and shadow. This approach is even seen on architectural elements. The Parthenon itself has black paint tracing the sculptural folds of the garments on the pediment's figures. We also hear about the detailing of the Parthenon from Dodwell and Pomardi's writings during their trip to Greece in 1805-1806. Dodwell describes the polychrome on the Parthenon's molding by writing, "The inner cornice of the cella is painted with meander, with eggs and anchors, in the same manner as the Propylea; but this ornament can scarcely be visible when the roof was entire, however vivid the colors may have been. I found a fragment of this cornice; and observed that the outline was traced with sharp implement, and then painted; the colors appear to have been blue, red, and yellow, they had almost all vanished away"(p. 82)



(Brinkman 2017)

- In regard to sculpture, the Parthenon's sculptures had no ornamentation on the clothes but were colored. In this phase the forms of the Greek's neighboring cultures, especially the East, were excluded. Overall, there are less examples of polychrome on stone sculpture in the Classical Period compared to the Archaic period. The lack of polychrome evidence is partially because of mere chance, but "post-antique "cleaning" of the surfaces to make them conform to the idea of classical sculpture being monochrome white must be taken into account.25 This aspect of the history of reception needs further study". (Oxford Research Encyclopedia)
- "In 1787, Favel observed a blue background, purple and green drapery, and green caps worn by figures in painted chariots with traces of bronze accessories on the Parthenon frieze. He examined the frieze from scaffolding as he made casts which very possibly are responsible for removing traces of color. By 1913 most visible traces had been removed through multiple washes of strong acid." (Finn 1913)

"Lord Elgin's former secretary W.R. Hamilton wrote to the Trustees of the British Museum on October 12, 1836 urging a committee to be formed to investigate traces of paint on the Parthenon sculpture. A committee was formed and they examined a selection of architectural fragments and found evidence of ochre tints but dismissed it as weathering. Traces of color were found and described as a fragrant gum and vegetable substances. However, the committee remained unconvinced of that color was applied to the surface of statues. No one doubted that color had been applied to architecture. In the 1980s a 'streak' of paint sealed by an orange-brown accretion on the back of Figure 'F' on the east pediment and protected from the harsher elements by the tympanum and geison. Marks resembling brush-strokes can be seen on the chest of Figure 'E' of the east pediment." (Jenkins and Middleton 1988)

## Late Classical Period

During the Late Classical Period, ornament found its way back into the palette of figures although he emphasis on light and shadow remained central. During this time, artists tended to use "harmonized pastel colors" and specifically would use reddish-brown shades for the skin. One of the most studied examples of polychrome from this period is the Alexander Sarcophagus. On this piece, they highlight the eyes, make the buttons appear 3 dimensional, put patterned pants on the Persian warriors. This piece shows how color differentiated figures on a single sculpture. While the Persian warriors had patterned pants, Greek warriors tended to be painted in monochrome colors ranging from bright yellow and red to violet and brown. Modeling with color was applied with 2 steps: underpainting applied directly on the marble, followed by hatching and highlights added to a flat layer of paint.

#### Hellenistic Period



(Brinkman 2017)

- The Hellenistic period generally used pastel colors but would supplement with bright colors. Painting techniques called for several layers of paint for different effect of shadowing, because of this technique the paint was fragile and easily destroyed. The accents of the sculpture would determine the character of the palette, and with this mindset gilding became very important. Gold gilding was used on large portions of the sculpture, but also could be used as a base.
- An example of sculpture from this period is the Treu Head, one of the most famous examples of polychrome in ancient sculpture. On this piece, the skin painting was laid over a black underpainting while on areas like the lips the skin color was further enhanced using reddish-brown hematite and pink madder lake. Little shadows (like those by lips) were applied with carbon black, while in high areas like cheeks calcite was used.



(Brinkman 2017)

# How does this program tie to your gallery content and museum?

This program introduces visitors to our permanent collection in a way that makes it fresh, familiar, and memorable. By being able to understand the original look of the Parthenon and its sculptures, visitors are interacting with our art in a new and different way.

# **Ideas for Initiating Interaction:**

• This program can be posted on the Parthenon website as an Art Cart program option.

# **Props:**

- Minerals:
  - Ochre, in labeled storage jar
  - Kaolinite, in labeled storage jar
  - Azurite, in labeled storage jar
  - Malachite, in labeled storage jar
  - Carnelian, in labeled storage jar
  - Lapis lazuli, in labeled storage jar
- Gold leaf in storage jar (optional)
- Coloring pages:
  - East Pediment & West Pediment
  - o Acroteria & Meander
- Laminated pictures:
  - Polychromy Definition Sign- Definition & Assassin's Creed
  - Polychromy Examples Sign- Peplos Kore & Archer
- AIA Nashville Society program sign in acrylic frame

#### **Advance Preparation:**

- Check Art Cart program supplies.
- Bring cart to area in front of Athena or in Treasury.

#### **Gathering:**

"Hello, everyone! My name is \_\_\_\_ and I have some things to help us learn about ancient color. Come stop by the cart while you are exploring today."

# **Program Script:**

Hello, come on up. My name is \_\_\_\_\_ and I have some interesting things on my cart here. Have you been to the Parthenon before? (Allow for response.) Welcome! (Or Welcome back!)

What do you notice about this giant statue of Athena? (Allow for response. Include all visitors by asking for observations from younger and older visitors.) Excellent observations. Let's focus on one of those—she's gold! Do you have any gold things, maybe you are wearing some or you have some at home? (Allow for response. This helps younger visitors connect their Parthenon visit to something familiar.) I have gold-colored doorknobs at home!

Optional, if you have gold leaf jar: I have some gold here. (Show container with gold leaf.) We keep it closed to keep the gold safe. Here, you can hold it. (Pass it to one of the group members.) What do you notice about this gold? (Allow for response. Possible responses: it's broken, it's light, it's shiny, it's sticking to the walls, etc.) This is gold leaf, and this statue in the Parthenon had thick plates of gold, was made of ivory, and had painted details.

The gold and color are often surprising to people! But ancient Greece was a colorful, vibrant, place! Just check out these leggings that look exactly like some worn by a Trojan archer 2,500 years ago! (**Show leggings and laminated picture of Persian archer.**) Crazy, right? (**Allow for response.**) We try to show polychromy, or many colors, here in our statue and on the color of the architecture. What colors have you noticed so far? (**Allow for response.**) Great observations!

Scholars like art historians and archaeologists know about polychrome statues and structures, but often only traces of color exist—the pigment dries out, flakes off, and isn't preserved over the 2,500 years since they were made. But, ever since the Renaissance in the 14<sup>th</sup> century—600 years ago—when artists and experts began preferring plain statues, the idea of them as white has lingered as a big misconception!

Why is this all important? Not only does it bring out the details and make it eye-catching, but it also helps change our picture of the ancient world. Ever since the Renaissance It was not white people wearing white clothes walking around white buildings in a quiet, empty city. People from all over the Mediterranean could be found in Athens doing things like living, working, traveling, visiting-- things we do today.

People couldn't just go to a store and by a tube of paint like can today. They could find a mine to harvest colorful minerals, grind them up, then add a binding agent to create their own paints. Sculptures and buildings and temples and houses and stores and walls and decorations were all painted—I bet there was a whole industry of making paints from pigments. Here you can see some examples of what minerals were used to make colorful paints. (**Gesture to minerals in jars.**). We like to leave the jars with powder sealed shut, but you are welcome to look at the other minerals and gems up close. Here, take a look! (**Hand container to someone in group—including adults.**) Pigments were turned into paint with special binders like egg-white, hot wax, casein, and gum Arabic. Special details could also be made from ivory, bronze, clay, wood, stone, gold, silver, and more.

There's an organization called the Archaeological Institute of America—the AIA—and their local chapter, the Nashville Society, had an archaeological illustrator help us create illustrations of our pediments and architectural details so you can picture the past in color, too. So local archaeologists here in Nashville who study ancient Greece are trying to spread the word about polychromy—and you can help out.

We have these free coloring pages so you can create your own polychrome picture at home. These are also on our website at nashvilleparthenon.com/education where you can download our custom colording pages. Remember to think about metal, stone, fabric, wood details and add shimmer or patterns to your image! There are two different pages, each has one side with architecture sculpture of our pediments and architectural details on the reverse.

Continue conversation and encourage observations of patterns and details in the Naos—both in clothing people wear today and in the architectural details. Show laminated coloring pages as examples and remind visitors they don't need to be an artist to picture the past in color. Reinforce that ancient Greece was a vibrant and colorful place.

#### **Conclusion:**

- I hope you enjoyed seeing examples of ancient color and thinking about the myth of whiteness in ancient Greece. I'll be here for about 10 minutes if you have more questions while you explore.
   Definitely check out the colors used on the inside and outside of the shield, too. Thanks for coming today!
- Thanks for joining me today! I hope you enjoyed exploring at the Art Cart. When you head outside the museum, see if you can think about what colors are missing from the outside of our Parthenon!

# Adaptation suggestions for different audiences:

# One Family/Small program size

• Tailor pigment and preservation information to specific ages in the group. Be sure to include all ages in the conversation and ability to hold objects and ask questions.

# For younger/preschool audiences

Look closely at the objects and help younger visitors make comparisons to something they know.
 Spend time explaining what it is. Focus only on a couple parts that are visible from their viewpoint.
 Encourage adults to participate equally.

# <u>Larger groups (who may wish to participate but have limited time or space)</u>

• Keep discussions shorter. Include adults by inviting them to answer questions, modeling participation for their group, and invite to return later or stop by the Art Cart next time they visit.

# **Adults only**

 Adults often look for more detailed background knowledge, including the history of how color was misrepresented, what happened to pigments, how color erased, etc.

## **Following Up:**

- Self-assessment:
  - o What went well?
  - o What is one thing that didn't go well?
  - O What is one thing you will try next time?
- Record number of visitors on the program clipboard. Return cart and materials; report any items that need repair or replacement.

#### **Resources:**

- Oxford Research Encyclopedia
  - https://oxfordre.com/classics/view/10.1093/acrefore/9780199381135.001.0001/acrefore-9780199381135-e-8118?rskey=suOSos
- Brinkmann, Vinzenz et al. Gods in Color: Polychromy in the Ancient World. DelMonico Books 2017.
- Economakis, Richard. "The Origin of Doric Architecture in 'Prop-and-brace' Construction." Archaeological Institute of America Annual Meeting, 2022.
- Gallagher, Kristen T. "Discoveries in Encaustic: A Look through History." (2012).
- Gisela M. A. Richter, and Lindsley F. Hall. "Polychromy in Greek Sculpture." *The Metropolitan Museum of Art Bulletin*, vol. 2, no. 8, The Metropolitan Museum of Art, 1944, pp. 233–40.
- Finn, D. J. "The Greeks and Painted Sculpture." *Studies: An Irish Quarterly Review*, vol. 2, no. 6, Irish Province of the Society of Jesus, 1913, pp. 20–31, <a href="http://www.jstor.org/stable/30082603">http://www.jstor.org/stable/30082603</a>
- Jenkins, I. D., and A. P. Middleton. "Paint on the Parthenon Sculptures." The Annual of the British School at Athens, vol. 83, [British School at Athens, Cambridge University Press], 1988, pp. 183–207, http://www.jstor.org/stable/30103116.

#### **Contact Information:**

- Phone: 615.862.8431
- Email: Katherine.Petrole@nashville.gov
- Mailing Address: The Parthenon, Centennial Park, P.O. Box 196340 Nashville, TN 37219
- Physical Address: The Parthenon, Centennial Park, 2600 West End Avenue, Nashville, TN 37203
- Fax: 615.880.2265

## **APPENDIX A: IMAGES**

# Definition Sign- Double-sided

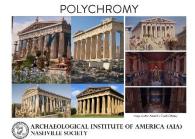
**POLYCHROMY** 

pol • ee • kroh • mee

The art of using many colors in decoration, including sculpture, painting, and architecture.







# Example Sign- Double-sided

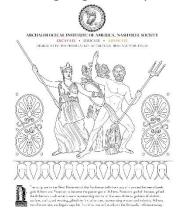
# **POLYCHROMY**



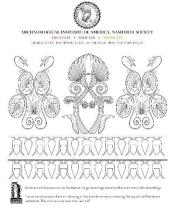


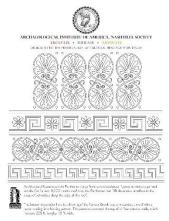


# Coloring Pages Examples









# **Coloring Pages Examples**



