

TITLE: READING A BUILDING

SUBJECTS/TOPICS: AMERICAN HISTORY, ARCHITECTURE,
GEOMETRY, SOCIAL STUDIES

GRADE LEVEL: K-2 (1 CLASS PERIOD)

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LESSON OVERVIEW

Buildings do not come with captions or user manuals, so architects and architectural historians must rely on their ability to read a building. During the exercises presented in this scaffolded lesson plan, students will begin to develop the necessary skills for decoding the rich architectural world around them by learning how to read architecture. With these skills, it will be easier for students to frame essential questions for conducting research on specific buildings while they, simultaneously, develop the tools for working 'in the field' and exploring the world of architecture, independently.

The exercises presented here offer three main ways to read architecture: (1) using physical building artifacts, whether they be complete buildings, fragments or ruins, (2) using drawings, whether from the original architects, designers, and/or engineer or 'as-built' drawings that record the building at a particular time, and (3) using texts, such as primary (letters, personal descriptions, historic structures reports and surveys, etc.) and secondary (books, critiques, etc.) sources. The lesson's products are also divided between analog elements (drawings, annotation exercises, etc.) and digital explorations (online research and digital modeling).

GUIDING QUESTIONS

What is architecture?

What does it mean "to read a building"?

LEARNING OBJECTIVES

Apply architectural vocabulary associated with classical architecture.

Identify the underlying geometric shapes associated with classical architecture.

Analyze building structures to identify their historic architectural influences, or their architectural "genealogy."

LESSON OVERVIEW, CONTINUED

As students continue to study, they will discover that the world of architecture is full of diverse projects: buildings and structures are different because of their cultural, geographic, and historic associations. This is why many of today's architects specialize in distinct building types, although it is possible to have an architectural practice that creates all different types and scales of buildings. Additionally, many architectural historians specialize in certain time periods and regions so that they can fully understand the context of the architecture. By presenting students with a broader survey with several different projects and styles, students will understand why it is essential to have experts with specialties in certain building types or historic eras.

You will also need to develop your skills of visual attentiveness. Have you ever used 'contextual clues' in your English class? When you are reading a sentence and do not recognize a new vocabulary word you can often use elements from the surrounding passage to decipher the meaning of the unfamiliar word. Similarly, as you explore a building you may find that there are components that you do not quite understand, so you must look for contextual clues. Just like expanding your reading comprehension skills or mastering a new language, learning how to read a building takes time, practice, and patience, but the rewards are extraordinary!

CONTENT STANDARDS

English Language Arts: Reading: Informational Text				
Grade	Key Ideas and Details	Craft and Structure	Integration of Knowledge and Ideas	Range of Reading and Level of Text Complexity
K	<p>CCSS.ELA-LITERACY.RI.K.1 With prompting and support, ask and answer questions about key details in a text.</p> <p>CCSS.ELA-LITERACY.RI.K.2 With prompting and support, identify the main topic and retell key details of a text.</p>	<p>CCSS.ELA-LITERACY.RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.</p>		<p>CCSS.ELA-LITERACY.RI.K.10 Actively engage in group reading activities with purpose and understanding.</p>
1	<p>CCSS.ELA-LITERACY.RI.1.1 Ask and answer questions about key details in a text.</p> <p>CCSS.ELA-LITERACY.RI.1.2 Identify the main topic and retell key details of a text.</p>	<p>CCSS.ELA-LITERACY.RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.</p> <p>CCSS.ELA-LITERACY.RI.1.5 Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.</p> <p>CCSS.ELA-LITERACY.RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.</p>	<p>CCSS.ELA-LITERACY.RI.1.7 Use the illustrations and details in a text to describe its key ideas.</p> <p>CCSS.ELA-LITERACY.RI.1.8 Identify the reasons an author gives to support points in a text.</p> <p>CCSS.ELA-LITERACY.RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).</p>	
2	<p>CCSS.ELA-LITERACY.RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.</p> <p>CCSS.ELA-LITERACY.RI.2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.</p> <p>CCSS.ELA-LITERACY.RI.2.3 Describe the connection between a series of historical events, scientific ideas/concepts, or steps in technical procedures in a text.</p>	<p>CCSS.ELA-LITERACY.RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.</p> <p>CCSS.ELA-LITERACY.RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.</p>	<p>CCSS.ELA-LITERACY.RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.</p> <p>CCSS.ELA-LITERACY.RI.2.8 Describe how reasons support specific points the author makes in a text.</p> <p>CCSS.ELA-LITERACY.RI.2.9 Compare and contrast the most important points presented by two texts on the same topic.</p>	

English Language Arts: <u>Speaking & Listening</u>		
Grade	Comprehension and Collaboration	Presentation of Knowledge and Ideas
K	<p>CCSS.ELA-LITERACY.SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.</p> <p>CCSS.ELA-LITERACY.SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.</p>	<p>CCSS.ELA-LITERACY.SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.</p> <p>CCSS.ELA-LITERACY.SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.</p>
1	<p>CCSS.ELA-LITERACY.SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>CCSS.ELA-LITERACY.SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.</p>	<p>CCSS.ELA-LITERACY.SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.</p> <p>CCSS.ELA-LITERACY.SL.1.5 Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p> <p>CCSS.ELA-LITERACY.SL.1.6 Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 here for specific expectations.)</p>
2	<p>CCSS.ELA-LITERACY.SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.</p> <p>CCSS.ELA-LITERACY.SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.</p>	<p>CCSS.ELA-LITERACY.SL.2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.</p> <p>CCSS.ELA-LITERACY.SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.</p> <p>CCSS.ELA-LITERACY.SL.2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language standards 1 and 3 here for specific expectations.)</p>

ACTIVITIES

Can you recognize the main shapes in two famous buildings? We are going to look at an ancient building, the Pantheon in Rome, and a building in America that was based on the Pantheon: the University of Virginia's Rotunda. This building originally served as the university's library; can you imagine reading a book in such an interesting structure? Let's get familiar with these buildings by finding some images online.

Activity #1 Reading a Building

- The Pantheon inspired the design of the Rotunda, but there are still some key differences in the buildings. Use the coloring sheet with the elevation (face) of each building: select a crayon and color all the building similarities in one color, then select another color to color all the elements that are different.
- Share your work with your classmates by hanging up your drawing sheet.

Activity #2 Architectural Shapes

- You have two sheets of paper: one has the elevation, or face, of the Pantheon and the other features the Rotunda. Now get a red, yellow, and blue crayon. On each sheet, outline each triangle in red, each square and rectangle in blue, and every circle in yellow.
- Now color within the outlines. How do the shapes overlap, to create new colors?
- Now that you know the basic shapes of the buildings, see if you can build them! Using wooden blocks, see if you can create a 3D model of the Pantheon or Rotunda. What are the main shapes that you need for this construction? How small can you make your model; how big can you make the model before it collapses?

Activity #3 Architectural Color-Coding

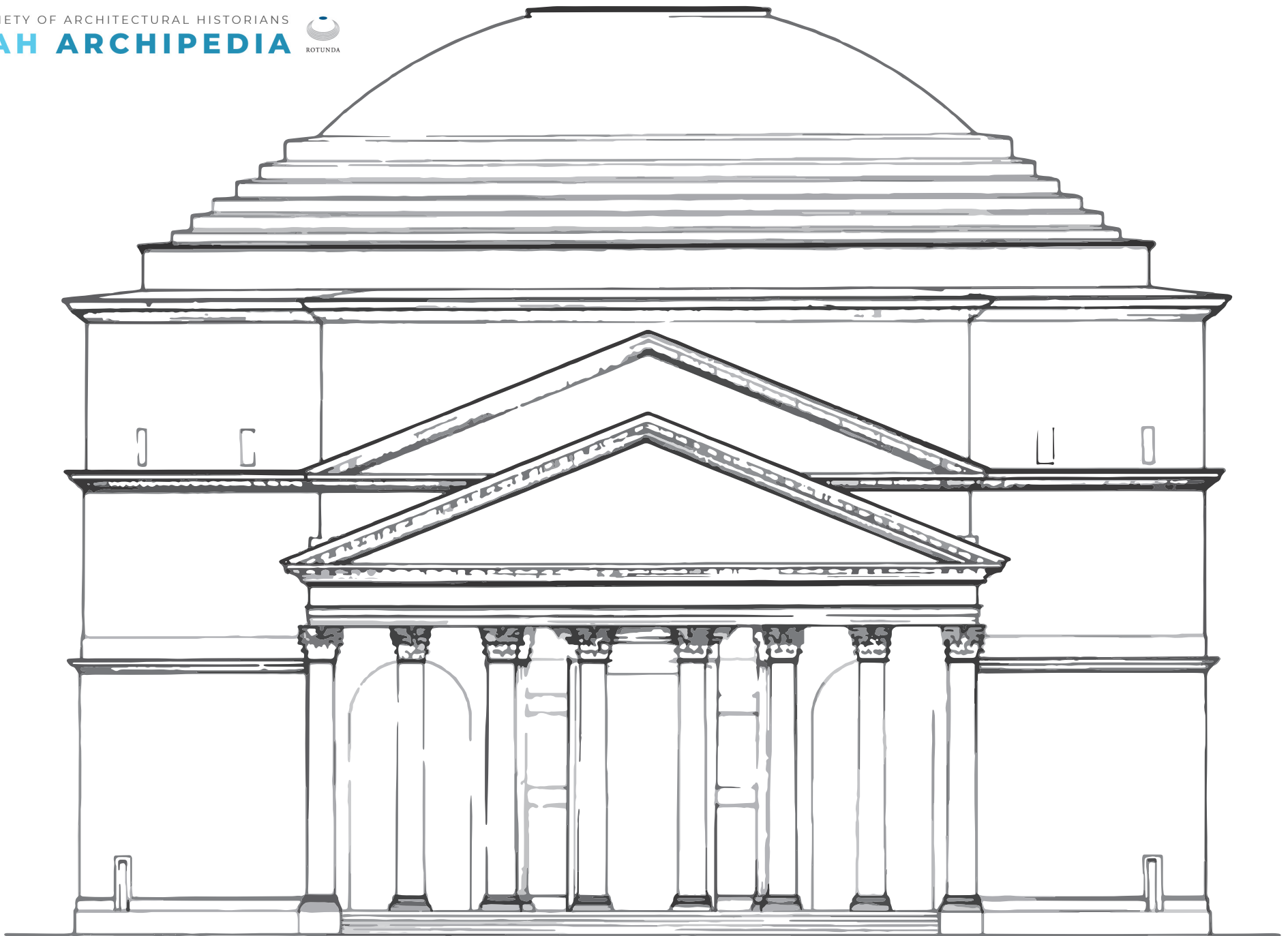
- Both the Pantheon and the Rotunda have the following architectural pieces: stairs, columns, pediments, and domes. Using the elevation coloring sheets, see if you can identify these pieces: pick a color for each architectural piece then color them the same on both buildings.
- Share your work with your classmates by hanging up your drawing sheet.
- Can you add labels to your drawing to identify these architectural pieces?

Assessment:

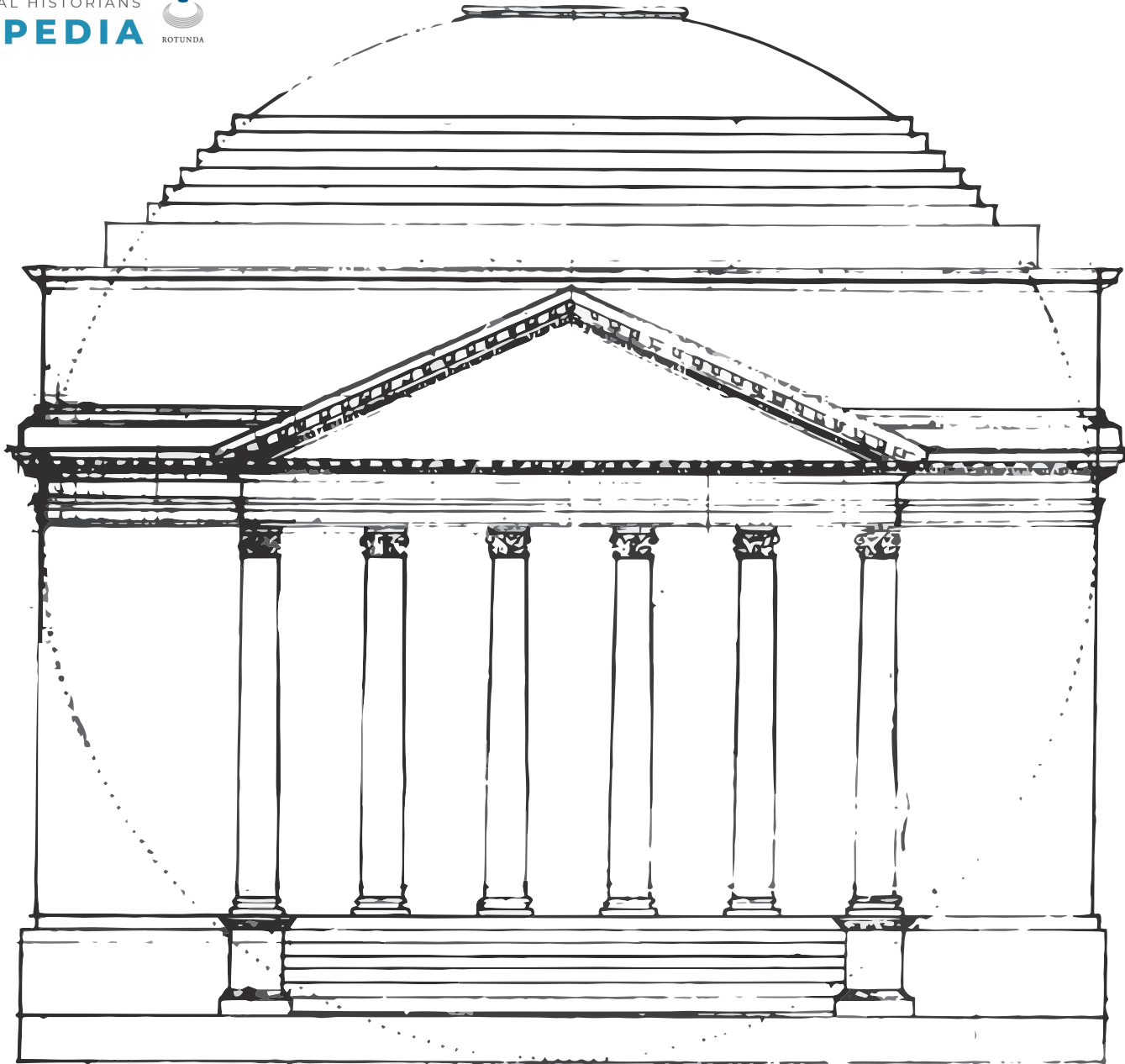
- These activities develop manual dexterity and skills.
- The coloring portion of Activity 2 could be used to teach primary and secondary colors. There are several, layered shapes within these elevations but an example is provided below.
- The modeling building aspect of Activity 2 could be completed in pairs or groups, so as to develop collaboration and team communication skills.
- A key for Activity 3 is available below.

Lesson Extensions:

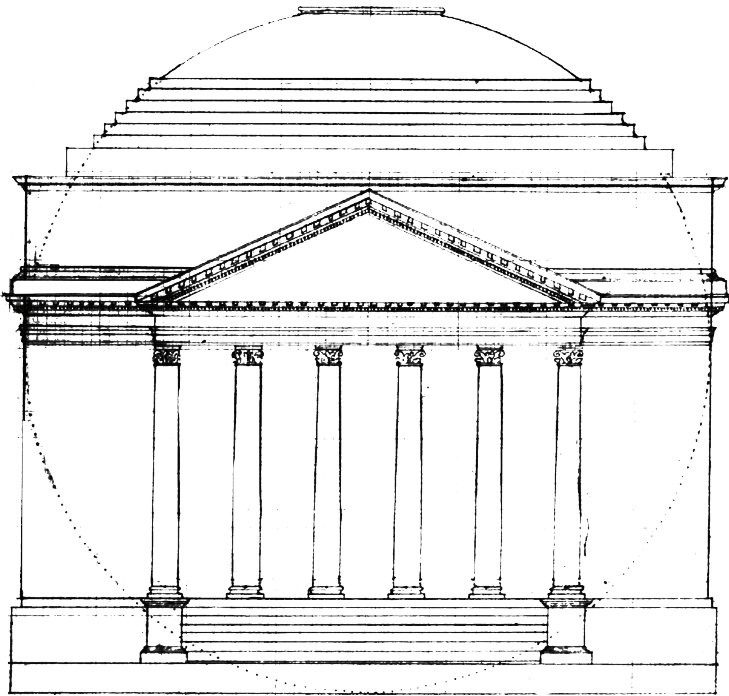
- SAH Archipedia pages on select architectural styles:
 - [American Colonial](#)
 - [Classical Revival](#)
 - [Expressionist](#)
 - [International Style](#)
 - [Palladian](#)
 - [Postmodern](#)
 - [Spanish Colonial](#)
 - [Vernacular](#)
- SAH Archipedia pages on typology (building uses):
 - [Airports](#)
 - [Churches](#)
 - [church-specific vocabulary](#)
 - [Colleges and campuses](#)
 - [Exhibition buildings](#)
 - [Houses](#)
 - [Mission churches](#)



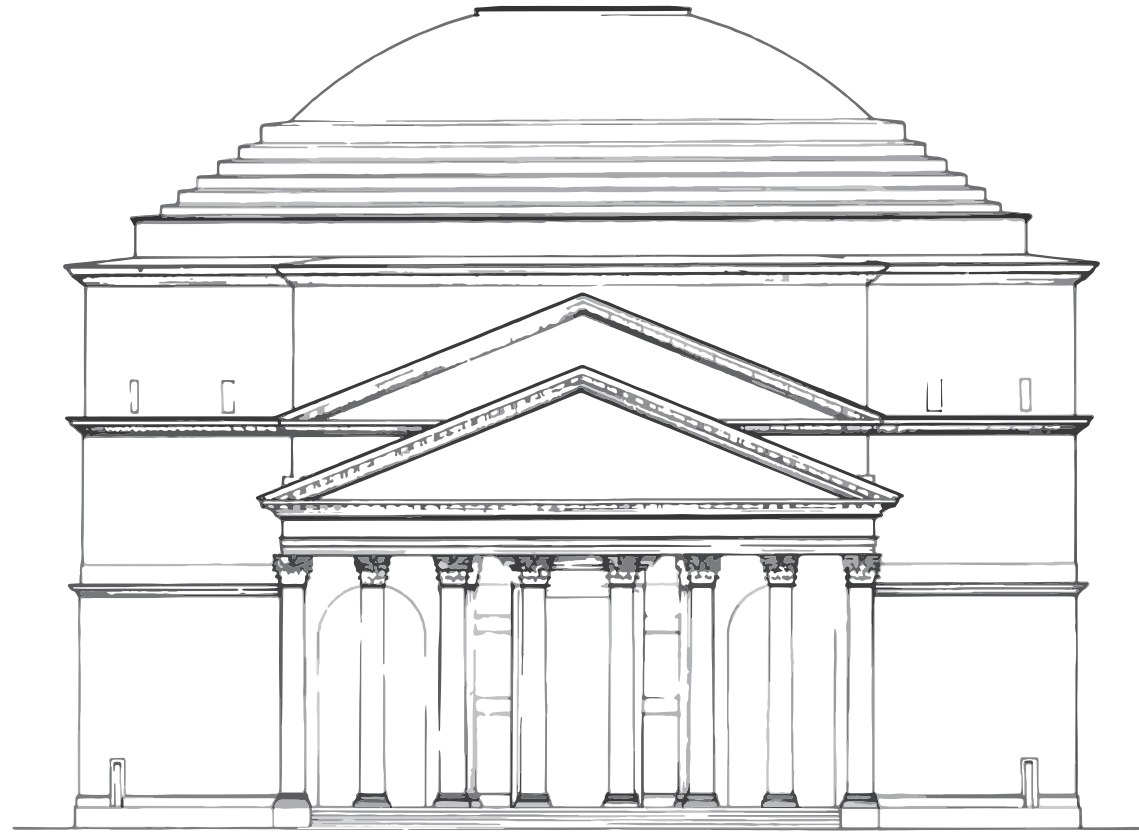
PANTHEON
ROME, ITALY



Rotunda
Charlottesville, Virginia

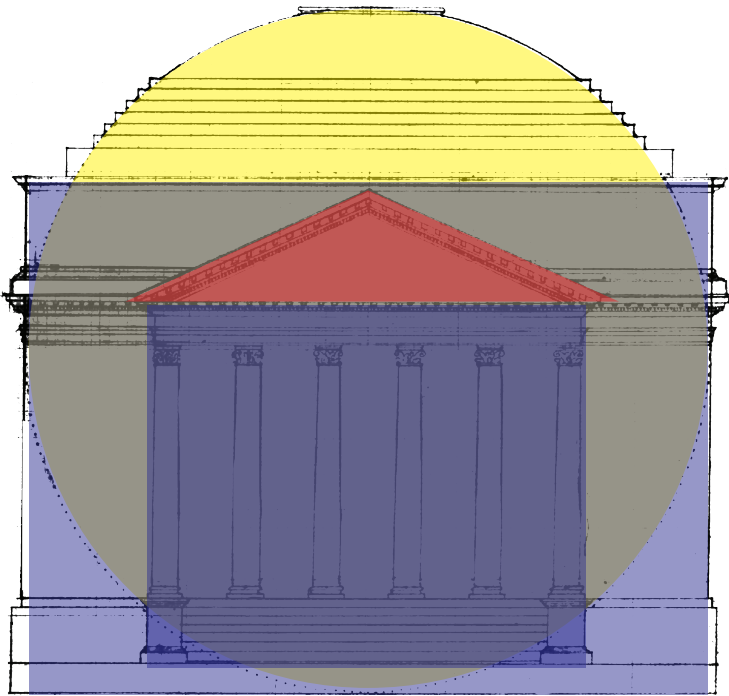


Rotunda
Charlottesville, Virginia

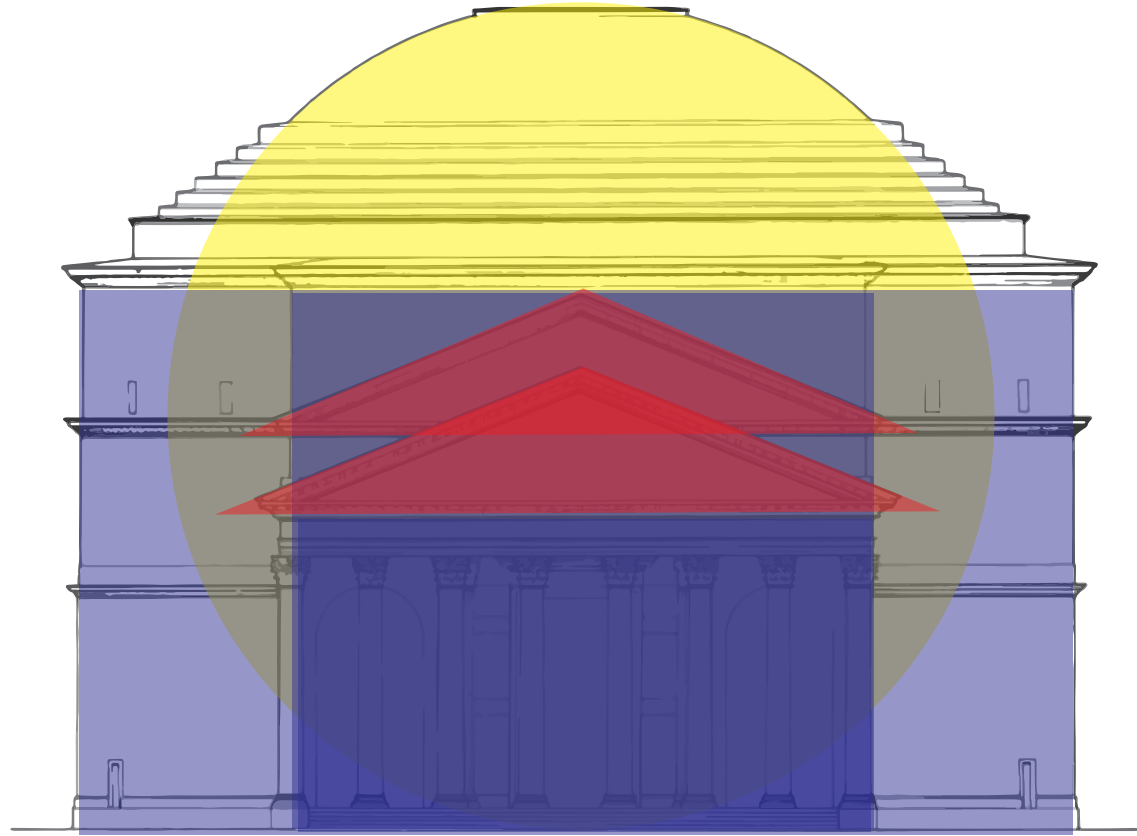


PANTHEON
ROME, ITALY

Key for Activity #2

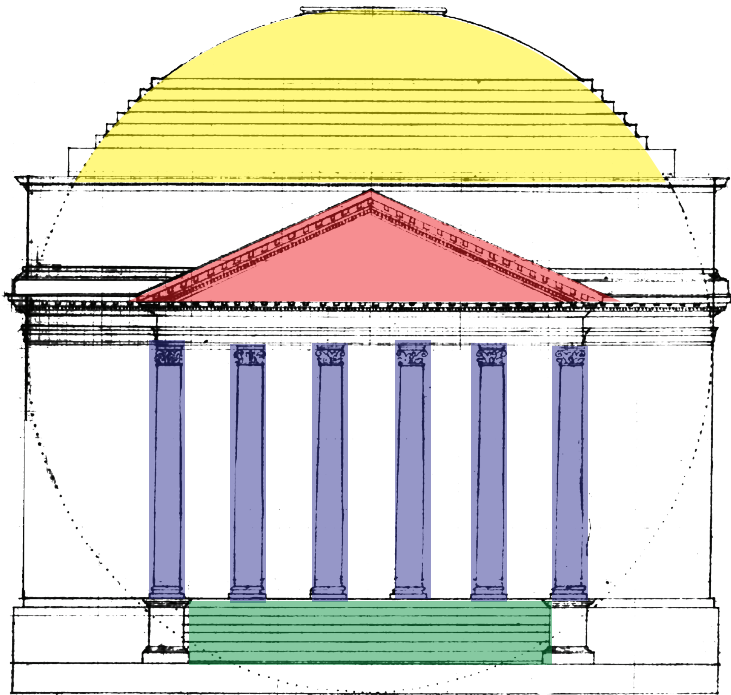


Rotunda
Charlottesville, Virginia

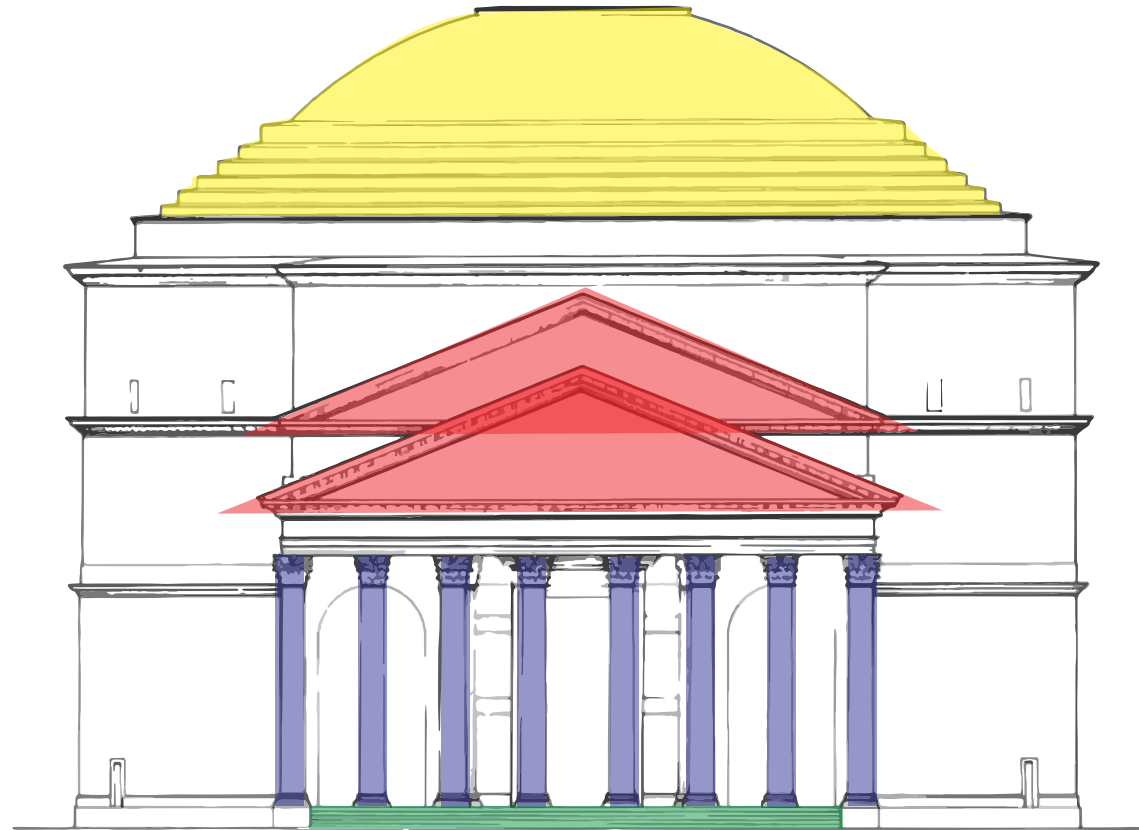


PANTHEON
ROME, ITALY

Key for Activity #3



Rotunda
Charlottesville, Virginia



PANTHEON
ROME, ITALY