

Design Detectives

Program Overview

Grade Level: Fourth and fifth

Focus: Architectural features and styles

Sessions: Three, including one introductory classroom session, one neighborhood walk, and one classroom session with final project.

Common Core Learning Standards:

- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*. (CCSS English Language Arts – Literacy RI.4.4)
- Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (CCSS English Language Arts – Literacy RI.4.7)
- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing their own clearly. (CCSS English Language Arts – Literacy SL.4.1)
- Identify the reasons and evidence a speaker provides to support particular points. (CCSS English Language Arts – Literacy SL.4.3)
- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. (CCSS Mathematics – Content 4.G.A.3)

Description: Through Design Detectives, students explore both the form and function of buildings. They are introduced to basic architectural concepts, including building parts and their essential contributions to the structure of the building, as well as different styles and their corresponding visual clues. In the first session, *My Preservation Journal* introduces students to architectural elements and styles. In the second session, students go on a neighborhood walk to see firsthand the buildings in their school's neighborhood. Looking at façades, students will note the individual parts they see and how these parts come together to create an architectural style. Finally, students incorporate their knowledge of building parts and architectural styles into the creation of a cohesively designed building façade.

Goals:

- Students will gain knowledge of architectural vocabulary, including various building parts and their essential functions.
- Students will be able to identify these building parts on actual buildings.
- Using visual clues, students will be able to distinguish between different architectural styles which are common to the Upper West Side.
- Using knowledge of building parts and architectural styles, students will create a façade with a cohesive design.
- Students will display some understanding of the concept of historic preservation

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Lesson 1: Learning Styles through Visual Clues

Goal

To introduce students to new building parts and the concept of architectural styles. Using *My Preservation Journal*, they will explore visual clues to discover differences between styles and how different architectural elements inform the overall look of a building. Knowledge of basic architectural vocabulary is an essential foundation for this program, as students will later make observations on a neighborhood walk and then synthesize these ideas into a design of their own.

Materials

- Access to whiteboard to hang enlarged photocopies of historic buildings near the school
- If enlarged photocopies are not possible, bring color photos of buildings to show using the ELMO.
- Close-up Images of building parts for ELMO or whiteboard
- Individual photocopied handouts of relevant building style pages from *My Preservation Journal*
- Architecture Vocabulary handout

Space

Classroom meeting area or desks (depending on how you are showing images)

Procedure

- 1) Educator introduces him/herself and LW!, briefly talking about landmarks and what that means. Introduce the concept of an architectural style: just as everyone dresses in a certain combination of shirts, shoes, pants, etc., many of the landmark buildings in our neighborhood are also designed (or dressed) in a certain way to express something about themselves. By looking at a building's style, we can learn about when the building was built, where it was built, who built it, and what the building might be used for. Tell the students that at the end of the program they will be designing their own buildings using these historic building styles but before that can happen they need to know what kinds of elements to incorporate in their design. We will begin by working as a class to analyze a photograph that has nothing to do with architecture, so we can all get comfortable with the process of reading a building based on its parts.
- 2) Begin by projecting a photograph of cowboys (Adam uses a screen shot from a John Wayne movie), and asking the students who these people are in the photo (cowboys). What about the picture tells us that these are cowboys? Students may point out the desert/plains/Wild West setting and horses in the background – be sure to lead the students towards the clothes the cowboys are wearing and what each piece of clothing is used for (wide-brimmed hat for protection from sun and rain, bandana for dust, boots and spurs, jeans, leather vest, etc.).
- 3) Transition from the cowboys to a photograph of a landmark building in the neighborhood that fits one of the particular styles you will be discussing. Compare the clothing items of the cowboys to architectural features on a building – both clothes and architectural features are clues to tell us the story of the person/building. For each style discussed, show an image of a building of that style in the neighborhood and ask the students to make observations about its materials, shapes, ornaments, etc. Then introduce the name of the style and why it is named that way (i.e. a “revival” is when you bring something back, and “Romanesque” refers to the architecture of Rome). Show an image of a building that influenced the UWS building, for instance, for the Natural History Museum you can compare the Lessay Abbey in Normandy, France (Romanesque) and to the Roman Colosseum (Roman Empire). Discuss how architectural features are borrowed from the past (i.e. large rough stones, large arches, cylindrical drums and towers, etc.)
- 4) Repeat this format for however many architectural styles you are covering with the class. End by saying that at our next session we will be sketching buildings of these styles that are found in the neighborhood.

Note: Generally, a class will focus on between two and four architectural styles during this session to keep the material manageable. Featured buildings will vary depending on the location of the school and what is close enough to walk to for a sketching session. Below are some examples of Upper West Side/NYC buildings used in past lectures:

Dutch Revival

West End Collegiate Church (West 77th Street and West End)

Romanesque Revival

American Museum of Natural History (West 77th Street)
Claremont Stables (West 89th Street)

Gothic Revival

Studio Building (West 77th Street)
Church of the Holy Name of Jesus Christ (West 96th Street and Amsterdam)
P.S. 166, main entrance (West 89th Street)

Greek Revival

East River Savings Bank (now CVS, West 96th Street and Amsterdam)

Art Deco

55 Central Park West
Empire State Building

Modern/Brutalist

DNA House (West 96th Street)

Next Steps

Before the neighborhood walk in the next session, students should review the styles in pages 14-20, and examples of ornament in pages 12-13 of *My Preservation Journal* (use photocopies if MPJ copies are not available). They should also review the Architectural Vocabulary handout to remind themselves of different building parts discussed during the presentation.

Evaluation

- Did students exhibit an understanding of the functions of building parts?
- Did students make relevant observations?

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Lesson 2: Neighborhood Walk

Goal

For students to see firsthand the buildings in the immediate neighborhood surrounding the school, reinforcing the content covered in the first lesson. Looking at façades, students will note the individual parts they see and how they come together to create an architectural style.

Materials

- Enlarged photocopies of 2 style pages from *My Preservation Journal* (those specific to the buildings to be seen on the walk) OR student copies of MPJ
- Walking Tour Handouts, 1 per student
- Clipboards, 1 per student
- Pencils, 1 per student

Space

Classroom meeting area and the neighborhood immediately surrounding the school.

Procedure

- 1) Before leaving for the neighborhood walk, gather in the meeting area for a quick review of architectural styles. Students, either as a class or independently, should have looked over the building styles after the previous lesson. Together, look at the styles of the building(s) to be seen on the walk. Alternatively, this could be done with at their desks with MPJ rather than in the meeting area with enlarged photos.
- 2) Before leaving the classroom, distribute the Walking Tour Handout and briefly review. On side one, students will be looking for the building parts that were discussed last time. Tell students to keep a lookout for these parts, to check them off when spotted, and to make a brief sketch of their two favorite parts.
- 3) Leave the school and walk to the pre-chosen building(s). Along the way, students should complete side one of the walking tour handout. Looking at the buildings of particular styles, ask students for observations and to identify the buildings' features and style.
- 4) For their façade drawings, ask students to focus on the details, to include features that make this particular building different from its neighbors.
- 5) Return to the classroom. Ask students to identify important features of the buildings seen as well as the differences between them.

Evaluation

- Were students able to identify building parts and architectural styles?
- How were their drawings representative of the actual parts and buildings?

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Lesson 3: Creating Façades

Goal

For students to incorporate their knowledge of building parts and architectural styles into the creation of a building façade. Using their copies of *My Preservation Journal* as well as their completed Walking Tour Handouts, students will draw on their experiences from the first two sessions to create a cohesive design.

Materials

- Student copies of *My Preservation Journal*, or copies of architectural style pages
- Student copies of completed Walking Tour Handouts
- Building façade sketching worksheets
- Pencils and colored pencils

Space

Classroom Meeting Area/Classroom Tables

Procedure

- 1) Explain to the students that in order to create a cohesive building design, they need to draw upon what they have learned in the previous two sessions. Think about the buildings they have seen in the neighborhood. They can use their Journals and completed Walking Tour Handouts as references.
- 2) Still in the meeting area, show the students the façade worksheet (from pages 32-33 in MPJ) and have the students make observations about the buildings shown on the sheet (they look old, have lots of ornaments, about five stories tall, residential). Ask them to point out the building parts and visual clues as to the architectural “style.” Explain that we will be designing a building for the vacant lot between the two buildings. The new building should adhere to one of the architectural styles we discussed in class, and should be designed in a similar “scale” (size and proportion) to its neighbors on either side. Before starting with their drawing, students should spend a few minutes thinking about their overall design and come up with a rough plan for what they want to draw.
- 3) Have students go to their tables and begin working. Encourage them to add ornament to their designs and to add color. If time permits, the students can do a second version of the worksheet, but this time design a façade in an architectural style different from their first building.
- 4) Finish with asking for volunteers to share their work. Students should make observations about their classmates’ designs.

Evaluation

- How did students draw on their background knowledge and experiences?
- Were the façade designs cohesive, exhibiting knowledge of architectural styles and building parts?