

Building Detectives

Program Overview

Grade Level: Second

Focus: Architectural features of brownstones (or apartment buildings if school is not near brownstone blocks)

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

Common Core Learning Standards:

- Know and apply grade-level phonics and word analysis skills in decoding words. (CCSS English Language Arts – Literacy RF.2.3)
- Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups. (CCSS English Language Arts – Literacy SL.2.1)
- 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. (CCSS English Language Arts – Literacy SL.2.3)
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. (CCSS English Language Arts – Literacy L.2.4)
- Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.¹ Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. (CCSS Math Content 2.G.A.1)

Description: Explore the basic elements of buildings and how these parts contribute to the larger structure. What is the job of a cornice? Why are stoops so special? In the first session, students learn about these building elements and then draw their own imagined buildings. In the second session, students go outside to identify parts and sketch building facades. Finally, using both their background knowledge and first-hand experience, students create a three-dimensional brownstone façade, which combine to create a streetscape model.

Goals:

- Students will gain knowledge of architectural vocabulary, including various building parts and their functions.
- Students will be able to identify these parts on actual buildings.
- Using their knowledge of building parts and ornament, students will create a brownstone façade with a cohesive design.
- Students will display understanding of the importance of architecture and its preservation.

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Lesson 1: Façades

Goal

To introduce students to the different parts of buildings and their special functions. Students will be able to identify certain building parts and describe what architectural role they play.

Materials

- Whiteboard or Easel Paper and a marker
- Row house/apartment building labeling worksheet
- Pencils for students

Space

Classroom Meeting Area/Classroom Tables

Procedure

- 1) Educator explains that today we're going to look at one special kind of building in the neighborhood: the brownstone (also called a "row house"). Ask students if they already know anything about brownstones (students may live in one or know someone who does, be able to tell you that they are around 4-5 stories, don't have a doorman, etc.). Explain that we can call these buildings either a brownstone or a row house because brownstones are brick row houses (houses built right up next to each other in a row) that have brown sandstone for decoration. When row houses were being built in NYC in the 1870s-1880s, many were faced with brown sandstone because it was soft enough to be easily carved with beautiful designs.

Say that we are going to learn about the parts of the building on the "façade" of a row house. Ask the students if they have ever heard that word before? It's what you see when you look straight at a building. A façade of a building is like the face of a person. They are even spelled similarly.

- 2) "What shape should I draw for a brownstone?" Draw a large rectangle, oriented vertically, with the bottom open (complete once the stoop and sidewalk have been added). Draw the street level a bit below the rectangle. Ask, what parts of a building are like a part of your face? Door = Mouth, Eyes = Windows.
- 3) Draw building parts as they are said. Label the following: Door, window, bay window, stoop, cornice, dentils, and arch. Students usually say fire escape, water tower, awning, etc, which can be drawn but not labeled.
- 4) Stoop raises building up (add basement window); Bay windows make rooms very bright; Cornice protects the building from rain and hides the gutter. Review all of the parts drawn and their specific functions. Mention ornament – decorates the building, makes it different from others. Add ornament to the building.
- 5) Send students back to their desks to complete a worksheet to label the parts of a brownstone. Students should match the vocabulary words to the correct building parts (spelling counts!) and check with you or their teacher that they are correct. With remaining time, they may turn over the paper and draw a building of your choice. It can be the building they live in, the school, a building they have seen and liked, etc. Students should think about the building parts and label them.
- 6) Conclude with a share (if time allows), and by saying that next time we will draw buildings that we see outside.

Evaluation

- Did students understand that separate components come together to form a whole?

- Was it clear to students that every building part has a different, important job?
- How did students incorporate different building elements into their drawings?

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Lesson 2: Outdoor Sketching of Façades

Goal

Through a close observation of the buildings near their school, and using their background knowledge from lesson one, students will identify and sketch both individual building parts and an entire façade of a brownstone or apartment building.

Materials

- Enlarged photocopies of pages 10 and 11 of *My Preservation Journal*
- Image of a window with different elements – panes, ornament, etc.
- Clipboards, 1 per student
- *Building Parts Sketch Sheet*, 1 per student
- Pencils for students

Space

Classroom Meeting Area/Outside of the school or a nearby block.

Procedure

- 1) In the meeting area, review the building façade parts using MPJ or the row house worksheet. Ask students to identify the parts that they learned last time.
- 2) Quickly go over the Building Parts Sketching Sheet, and read the directions aloud.
- 3) To model drawing detail, display a photo of a window that has a lot of detail. Then draw a simple rectangle. “Does this look like the window? What else can I add?” Add one more detail then ask again. It does not have to be very intricate, but most details should be included.
- 4) Hand out clipboard with Building Parts Sketching Sheet and pencils. Have the class line up to go outside.
- 5) Once outside, have students sit in a pre-planned spot with a wide sidewalk and a good view of row houses. For many schools, this will be on the same block.
- 6) Before beginning to sketch, look at a building and let the students discover the parts they have learned about.
- 7) Allow 20-30 minutes for sketching. Following the worksheet, students should first focus on individual parts and ornament and then on the entire façade.
- 8) Give a five minute warning for any “finishing touches,” then line up and go back to the classroom.
- 9) If the teacher would like, conclude with a share. Otherwise, ask students to keep thinking about and looking at buildings, because next time we will make our own.

Evaluation

- How were the students’ sketches resembling the actual structures?
- How did the students divide their time between looking at individual parts and focusing on the façade as a whole?

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Lesson 3: Building Brownstone Façades

Goal

Students will draw on their own knowledge of and experience with building parts to create a brownstone/apartment building with a detailed façade.

Materials

- 30 sheets cardstock, cut into 6x11" – different colors
- Building Parts cut outs: Doors, windows, stoops, bay windows, and cornices
- Glue sticks, 1 per student
- Pencils, colored pencils, markers, crayons
- Completed Building Parts Sketching Sheet
- Optional: Cereal boxes, milk cartons, etc., brought in by students

Space

Classroom Meeting Area/Classroom Tables

Procedure

- 1) Explain to the students that today, we will be constructing and designing our own buildings.
- 2) Show students the supplies they will be using: Cardstock, which will be the base of their brownstones, building part cut outs, and drawing utensils.
- 3) Still in the meeting area, create a sample building – using some but not all of the parts. Glue on some of the parts that have been cut out, and draw on ornament and detail. Explain that before anyone touches the glue, you should make a plan for where you want all your parts to go, get approval from an adult, THEN glue, THEN decorate.
- 4) Have students go to their tables and begin working. If they want, they can consult their sketch sheets to remember the parts that they saw previously. Allow 30-40 minutes, depending on what works best for the teacher.
- 5) Encourage students to add ornament to decorate their buildings.
- 6) Optional: As a final step, students can tape or glue their façades to a box so that it can stand up. When all of the boxes are put together, a streetscape is created.
- 7) Conclude with a discussion of, "Why is it important to protect historic buildings? What is a landmark?"

Evaluation

- a. How did students draw on their background knowledge and experiences from the sketching session?
- b. Did their brownstones contain appropriate parts and details?