



MAINE MUSEUM OF
INNOVATION
LEARNING +
LABOR

Brick Pattern Architecture Scavenger Hunt

Teacher's Guide and Worksheets

Brick Pattern Architectural Scavenger Hunt

Grades 6+

Time: 1-2 class periods (can be adjusted)

Learning Objectives:

Students will be able to:

1. identify and analyze different brick patterns used in local architecture.
2. practice observation skills and connect math concepts (geometry, symmetry, repetition) to real-world design.
3. explore historical and cultural reasons for brick patterns in architecture.

Materials Needed

- Clipboards
- Paper
- Pencils
- Copies of scavenger hunt worksheet
- Smart phones or tablets with cameras (optional)
- Rulers or measuring tape (optional for math extension)

Advance Preparation

1. Identify a safe walking route near the school with buildings that show a variety of brick patterns.
2. Print scavenger hunt worksheets.
3. Decide how students will document:

With tech: Photograph each example with a smart phone.

Without tech: Sketch each pattern on paper and note the building's location.

Lesson Instructions

Introduction (10–15 minutes)

1. Begin in the classroom with a slideshow or printed images of common brick patterns.
You may use the examples provided on the scavenger hunt sheet or images you collect.
2. Ask: *Why do you think builders use different patterns?* (Possible answers: strength, decoration, cultural traditions, math/geometry).
3. Go over scavenger hunt rules and safety expectations.

Activity: Scavenger Hunt (30–40 minutes)

1. Students work in pairs or small groups.
2. As they walk the route, students look for examples of each brick pattern.
3. With tech option: Take photos of each pattern. No tech option: Sketch and label the pattern on their worksheet.
4. Encourage students to note:
 - Where the pattern is located (building, wall, chimney, walkway).
 - Whether the pattern seems decorative or structural.

Lesson Instructions Cont.

Discussion & Reflection (15–20 minutes)

1. Back in the classroom, groups share their findings.
2. Project photos (if available) or display sketches.
3. Compare: Which patterns were easiest/hardest to find?
4. Discuss: What do these patterns show about design choices in architecture?

Extension Activities

History Extension

- Research when and where certain brick patterns were most popular.
- Connect to immigration/industry history: Which groups of workers built with brick locally?
- Compare local brickwork to historic examples (Roman, Colonial, Industrial Revolution).

Math Extension

- Calculate area: Estimate how many bricks are in a section of wall using measurements.
- Geometry: Identify lines of symmetry, angles, or tessellations in the brick patterns.
- Ratios: Compare dimensions of a brick to how many fit into a given space.

Assessment

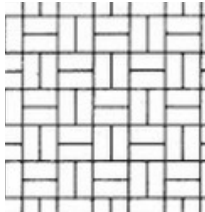
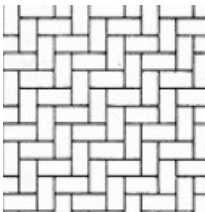
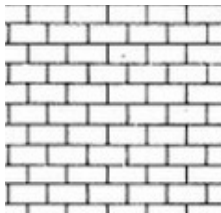
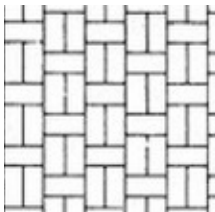
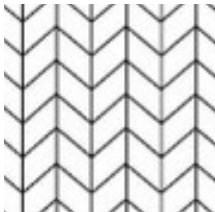
1. Completed scavenger hunt worksheet (photos or sketches).
2. Group discussion participation.

Optional: Short reflection paragraph—*What did you learn about how math, art, and history connect in brick architecture?*

Name: _____ Date: _____

Brick Pattern Architecture Scavenger Hunt

Use this worksheet to find different brick patterns on buildings. Work with your group to either take a photo (with a smartphone/tablet) or sketch the pattern you find. Write the building/location next to each pattern.

Pattern	Visual	Photo/sketch/location notes
Basket Weave		
Herringbone		
Running Bond		
Variation Basket Weave		
Chevron		
Stacked	