



Shaping Dinosaurs

7th Grade

Duration

Pre-Visit: 20 minutes

Museum Visit: 60 minutes

Post Visit: 45 minutes

Location

Dinosaur Hall

Supplies

- Tessellation examples
- Worksheet
- Pencil
- Clipboard (optional)
- Ruler (optional)

Standards

[CCSS Math](#)

G.A.1

[CA State](#)

Math Grade 7

Measurement and
Geometry 2.1

Vocabulary

Repetition

Geometric shape

Equilateral

Tessellation

Concepts

- Tessellations are a pattern of plane figures that fill the plane with no overlaps or gaps.
- The perimeter and area of a shape can be calculated using basic geometric knowledge.

Objectives

- Students will know what tessellations are and be able to identify them.
- Students will create a tessellation pattern and use it in a drawing exercise.
- Students will calculate the perimeter and area of their drawing.

Outline

1. In one classroom session before visiting the Museum, review what a tessellation is and show examples. Ask students if they can think of any examples themselves (tiled floors or ceilings, brick walls, etc.). Introduce the worksheet.
2. At the Museum students will explore the Dinosaur Hall. Using the exhibit as inspiration, they will complete the worksheets. Note, only the initial portion of the worksheet needs to be completed at the Museum.
3. Back in the classroom (or as homework), finish the worksheet if necessary and have students share their tessellations with the class. As a class, talk about how to calculate the perimeter and area of their drawing using what they know about the geometric shapes.
4. Optional extension or alternate activities:
 - Have students create their own tessellation pattern using specimens from the Dinosaur Hall for inspiration.

A Tessellation Dinosaur

First, choose a specimen from the Dinosaur Hall and draw it lightly in pencil below. Keep your drawing simple, a basic outline with a few key characteristics represented.

Next, pick a tessellation to fill your drawing. You may choose one from below, or look up other examples to use. Pick a pattern with shapes that fit into the smallest parts of your drawing and fill it without going over the edges. Use a ruler to help get straight lines. When your drawing is filled, erase the parts of your original outline that are not part of the pattern.

Finally, color your dinosaur to share with the class (keep the tessellation's pattern obvious!).

