



Raptor Resource Project Lesson Plans

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Lesson Plan: Nest Shapes and Nest Building

Grade/Level	Lower Elementary
Time Allotment	2 to 3 days for half an hour each day
Content Area(s)	Math and Science

Objectives

- Students will observe that Bald Eagles build their nests in 4 different geometric solids
- Students will produce drawings of Bald Eagle nests in the 4 geometric solids
- Students will construct model Bald Eagle nests

Curricular Connections

Geometry, Measurement and Data

Instructional Materials

- Photos of nests
- Paper and colored pencils/crayons
- Cardboard or wooden base for the model nests
- Sticks, grass, corn husks/corn cobs, pine needles

Resources

- Photos of nests - included in lesson plan and these slides: <https://bit.ly/34hKGFW>

Background Knowledge

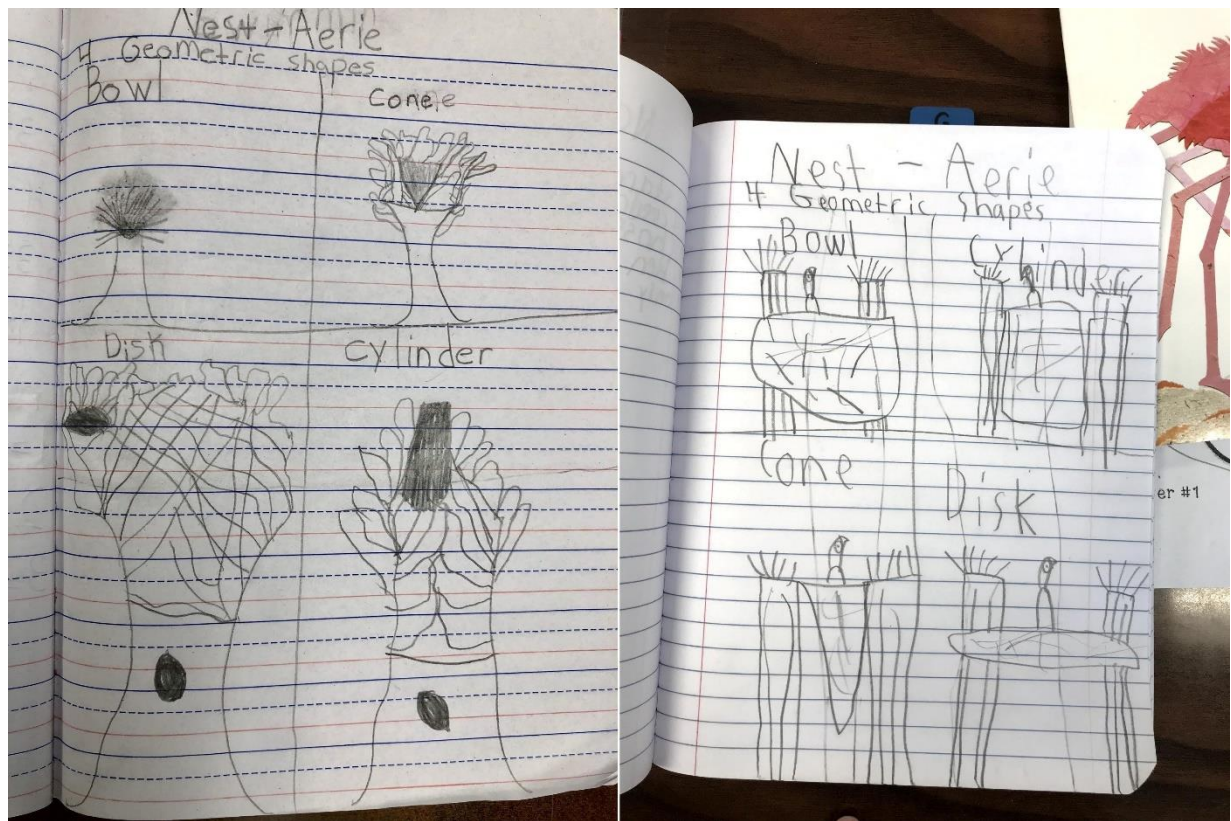
Review the geometric solids that have been previously taught to the class and find objects in the room that exhibit these solid shapes.

Opener

- Display pictures of 4 nest shapes: <https://bit.ly/34hKGFW> or see the end of this lesson plan.
- Discuss the shapes with students. Can they see the shapes in the structure of each nest?

Procedure/Method/Activity

Students will work individually to draw and color examples of the 4 nest shapes. This can be done on paper that has been folded into four sections or drawn in their Bald Eagle journals.



Day 2 and 3 - Students work in small groups of 4 or 5 to construct a model nest. Refer to pictures of nests and discuss how eagles use their beaks and feet to arrange sticks and nesting material and that the rails around the outside are higher than the nest bowl. Observe how they overlap sticks to make a nest that will withstand strong winds.

Assessment

Have the class look at completed nests and identify the geometric solid. Have students

share their observations and discuss the challenges of building a model nest. If time allows, students can write about the nest building experience in their journals.



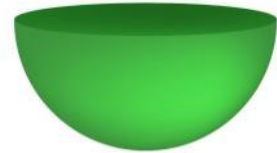
Extension

Students can look for pictures of nests to share with the class and identify the solid shapes. The teacher can carefully pick up the nest and gently shake to see if it is strongly constructed. Discuss what could have been done to make the nest stronger.

You can use the photos on the following pages or access the lesson slides here:
<https://bit.ly/34hKGFw>



**A
Hemispheric
Bald Eagle
Nest**



hemisphere



**A
Disk-Shaped
Bald Eagle
Nest**



disk



**A
Cone-Shaped
Bald Eagle
Nest**



cone



**A
Cylinder-Shaped
Bald Eagle
Nest**



cylinder