

ETSU Eagle Cams – Learning Activities

MAKE A NEST

Grade: Pre-K, K

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ETSU Eagle Cams: <https://www.etsu.edu/cas/biology/eagle-cam/cameras.php>

Summary

What are nests made with? What shape are they? Where do birds usually build their nests, and why? Can we make our own eagle's nest? These are some of the questions that young students might have related to eagle homes that could be explored using the ETSU eagle cams.

Learning Objectives

- Students will identify that the shape of the nest, which is concave or like a bowl, is related to its function, which is holding the eggs or keeping eaglets from falling out.
- Students will engage in the science and engineering practices of asking questions and conducting investigations.

Science Standards

- NGSS. Science. K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- TN. K.ESS3.1 Earth and Human Activity. Use a model to represent the relationship between the basic needs (shelter, food, water) of different plants and animals (including humans) and the places they live.

Math Standards

- Common Core & TN:
 - K.G.A.1 Describe objects in the environment using names of shapes. Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, between, and next to.
 - K.G.B.5 Model shapes in the world by building and drawing shapes.

Materials

- Sticks, leaves
- Outdoor space

Preparation

Consider reading books about birds, like *Nesting*, by Henry Cole, or notice students' interests in birds, eagles, and/or nests. Explore the width of the eagle's nest shown in the eagle cams prior to this activity, so students have an idea of about how wide the nests are in real life. The class

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should have an item like a string that is the length of the eagle nests that can be used to make a model of the eagle’s nest that is the correct width.

Part 1

- Engage students by viewing the ETSU Eagle Cams and discussing the nest.
- Help generate a conversation with essential questions such as, “What are nests made with?” or “What do you think is the purpose of bird nests?” or “What shape are they?” or “Can we make our own eagle nest?” or “Where do birds usually build their nests, and why?” and so on.



Part 2

- Next, invite the students to explore and collect natural materials from outside such as sticks, twigs, grasses/plants, feathers, leaves, and anything else a bird might use to construct a nest.
- Alternatively, invite students to explore a bird sensory bin of pre-collected natural materials.
- As the students examine the materials, allow some extra time for discussion and inquiry. Questions to ask might include the following: How do the materials feel? What shapes do you notice? How do these materials stick together in a nest?
- Further explain the purpose of bird nests as well as their general materials, shapes, locations, etcetera through a book reading, visuals, and an educational video.
- This will also be an opportune moment to pause for additional discussion and inquiry.
- Using the provided materials, students can begin to design and construct their own bird nests (optional: prior to this, students may draw a “blueprint” of their nests to reference as they construct them).

Part 3

- Once students have completed their nests, ask them to compare them to the visuals or videos shown earlier, and then assess their nests in their science journals.
- Assist students in evaluating themselves with guiding questions such as, “Which materials did I use the most, and why?” or “How strong is my nest?” or “What types of birds could fit in my nest?”

EXTENSION IDEAS

- Test students’ nests in certain conditions such as wind and rain.
- Watch a video of a bird making a nest.
- Explore nests of other birds, make comparisons, discuss how the size of the nest might be related to the size of the bird.

