

Volunteer Teaching Outline: Feathering the Nest

Although all birds' nests are designed to contain and conceal the eggs, the materials, placement, size and shape of nests varies greatly and is characteristic for each species.

UNIT VOCABULARY

Incubate	Nestling
Cavity nest	Platform nest
Cup nest	Pensile
Pendulous	Altricial
Precocial	

SUGGESTED OUTDOOR ACTIVITIES

Construction Challenge
Upper Grades Challenge: Bluebird Nest Boxes
For the Birds (Extension Activity)
Nest Search (Extension Activity)

THIS MONTH'S ACTIVITIES

Puppet Show: meet some common birds and learn about the differences in their nest designs.

Nest Detectives and Journal Activity: examine a variety of birds' nests, record observations and inventory the materials used in their construction.

That's My Nest!: match bird puppets with their nest.

Keying Out Nests: use a dichotomous key to identify five birds' nests.

Bird Nest Slide Show: review some of the different types of nests and the habitats in which they are located.

Construction Challenge: try to construct a nest with dried vegetation in order to appreciate the difficulties faced by a bird when building its nest.

Upper Grades Challenge: Bluebird Nest Boxes: construct a home for a cavity-nester.

BOOKS FOR KIDS

- Boring, Mel, *Birds, Nests and Eggs*, Cooper Square Publishing, 1998. (Informational; Age 5-10; Grade K-5)
- Eastman, P.D., *The Best Nest*, Random House, 1968. (Fiction; Age 3-7; Grade K-2; Lexile 280L)
- Harrison, Hal H., and Ned Smith (Illustrator), *A Field Guide to the Birds' Nests* (Peterson Field Guide), Houghton Mifflin, 1998. (Informational)
- Jenkins, Priscilla, and Lizzy Rockwell (Illustrator), *A Nest Full of Eggs*, Harper Trophy, 1995. (Informational; Age 4-8; Grade K-3; Lexile 630L)
- Pascoe, Elaine, and Dwight Kuhn (Photographer), *How and Why Birds Build Nests*, Creative Teaching Press, 2000. (Informational)



FOUR WINDS
NATURE INSTITUTE

FEATHERING THE NEST ALIGNMENT WITH NEXT GENERATION SCIENCE STANDARDS

Grades K-2

- **Core Idea LS1A:** All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find and take in food, water and air. p.144
- **Core Idea LS1B:** Plants and animals have predictable characteristics at different stages of development. Plants and animals grow and change. Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. p.146
- **Core Idea LS1C:** All animals need food in order to live and grow. They obtain their food from plants or from other animals. p.147
- **Core Idea LS1D:** Animals have body parts that capture and convey different kinds of information needed for growth and survival – for example, eyes for light, ears for sounds, and skin for temperature or touch. Animals respond to these inputs with behaviors that help them survive (e.g. find food, run from a predator). p.149
- **Core Idea LS2A:** Animals depend on their surroundings to get what they need, including food, water, shelter, and a favorable temperature. Animals depend on plants or other animals for food. They use their senses to find food and water and their body parts to gather, catch, eat, and chew the food. p.151
- **Core Idea LS2D:** Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size. p.156
- **Core Idea LS3A:** Organisms have characteristics that can be similar or different. Young animals are very much, but not exactly, like their parents and also resemble other animals of the same kind. p.158
- **Core Idea LS4D:** There are many different kinds of living things in any area, and they exist in different places on land and in water. p.166

Grades 3-5

- **Core Idea LS1A:** Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior and reproduction. p.144
- **Core Idea LS1B:** Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles that include being born (sprouting in plants), growing, developing into adults, reproducing, and eventually dying. p.146
- **Core Idea LS1C:** Animals and plants alike generally need to take in air and water, animals must take in food, and plants need light and minerals; anaerobic life, such as bacteria in the gut, functions without air. 3-5 p.148
- **Core Idea LS1D:** Different sense receptors are specialized for particular kinds of information, which may then be processed and integrated by an animal's brain, with some information stored as memories. Animals are able to use their perceptions and memories to guide their actions. Some responses to information are instinctive – that is, animals' brains are organized so that they do not have to think about how to respond to certain stimuli. p.149
- **Core Idea LS2D:** Groups can be collections of equal individuals, hierarchies with dominant members, small families, groups of single or mixed gender, or groups composed of individuals similar in age. p.156
- **Core Idea LS4D:** Scientists have identified and classified many plants and animals. p.167

Grades 6-8

- **Core Idea LS1B:** Organisms reproduce, either sexually or asexually, and transfer their genetic information to their offspring. Animals engage in characteristic behaviors that increase the odds of reproduction. p.146
- **Core Idea LS2A:** Organisms and populations of organisms are dependent on their environmental interactions both with other living things and with nonliving factors. Growth of organisms and population increases are limited by access to resources. In any ecosystem, organisms and populations with similar requirements for food, water, oxygen, or other resources may compete with each other for limited resources, access to which consequently constrains their growth and reproduction. Similarly, predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. p.152
- **Core Idea LS4D:** Biodiversity is the wide range of existing life forms that have adapted to the variety of conditions on Earth, from terrestrial to marine ecosystems. Biodiversity includes genetic variation within a species, in addition to species variation in different habitats and ecosystem types (e.g., forests, grasslands, wetlands). p.167

Note: The Disciplinary Core Ideas listed above are taken from Grade Band Endpoints in *A Framework for K-12 Science Education*. Additionally, our activities give children opportunities to engage in many of the Science and Engineering Practices and reflect on the Crosscutting Concepts as identified in the Next Generation Science Standards.

FEATHERING THE NEST ALIGNMENT WITH COMMON CORE STANDARDS

Grades K-2

- **Common Core Mathematics Standard 2.MD:** Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- **Common Core Writing Standard 8:** Recall information from experiences or gather information from provided sources to answer a question.

Grades 3-5

- **Common Core Reading Standard for Informational Text 7:** Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

Note: The Common Core Standards listed here are in addition to the ones that our activities typically address, as listed in the Four Winds document, *The Nature Program: Alignment with Learning Standards*.

