

RAFT IDEAS

Topics: Ecology,
Adaptations, Natural
Selection

Materials List

- ✓ A variety of nest-building materials (i.e. - twigs, leaves, cotton fluff, yarn, fabric scraps, scraps of matte board, small containers baskets, branches)
- ✓ Grab-it Sticks (see RAFT Idea Sheet *Grab-it Sticks*), tongs, tweezers, or other objects that can be used to simulate a bird beak

This activity can be used to teach:

Next Generation Science Standards:

- Traits of organisms (Grade 3, Life Science 3-2; Middle School, Life Science 4-4)
- Characteristics & survival (Grade 3, Life Science 4-2, 4-3)
- Body structures (Grade 4, Life Science 1-1)
- Movement of matter in an ecosystem (Grade 5, Life Science 2-1)



Nesting Like a Birdbrain

Using RAFT Materials to Model Bird Nesting



In this modeling activity, students use RAFT materials to build “bird nests” for protection and comfort. Since birds mainly use their beaks for this survival activity, students use only a model “beak” for building. Who will make the best nest and have the best chances of having their baby birds survive?

Assembly

1. Gather a mixture of materials for students to use to build a nest.
2. Provide Grab-it Sticks (see RAFT Idea Sheet *Grab-it Sticks*), tongs, tweezers, or other items to simulate beaks.

To Do and Notice

1. Students use only the “beak” to build a nest.
2. Notice which materials hold the nest together (and how).

The Science Behind the Activity

Birds build their nests out of a variety of materials, such as sticks and twigs, mud, stones, leaves, feathers and string. They manage to construct a structurally sound and comfortable nest using only their beaks. Different types of birds build different types of nests, such as depressions on the ground, round mud “birdhouses”, twig nests on branches, and so on, depending on their needs and environment.

Bird nests are an important aspect of the survival of birds, insulating and protecting the eggs and baby birds from the elements and from predators. Birds who build more suitable nests for their environment are more likely to have their offspring survive and pass their genes to future generations. The location and the materials available to a bird will help dictate how the nest is built.

Taking it Further

- For students ready for an extra challenge, have them build a nest suitable for a particular bird species (such as a mud nest for a mud swallow, a twig nest for a mourning dove, and so on).
- Have students describe why the particular nest helps that bird species survive.

Web Resources (Visit www.raft.net/raft-idea?isid=242 for more resources!)

For an image gallery of 50 bird nests, plus images of bird babies and other useful information, visit: <http://www.50birds.com/GNest1.htm>