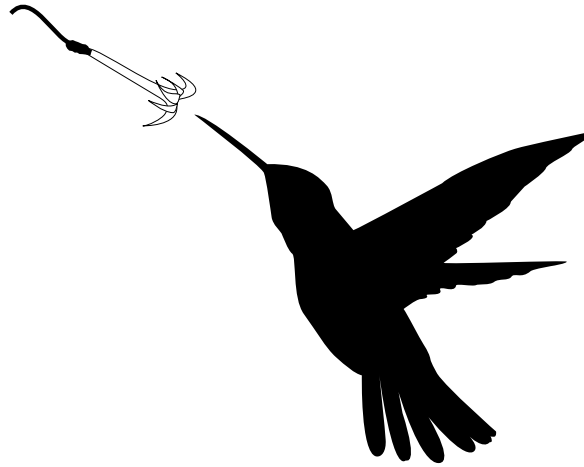


Animal Adaptations



Objectives

- ▶ identify different types of bird beaks
- ▶ demonstrate ways in which different beaks are adapted to feed on different foods

Vocabulary

adaptations

Background

Living organisms adjust or change to help them survive the conditions particular to their rainforest ecosystem. Extreme environmental conditions, such as deforestation, strongly influence the changes animals experience. These changes are known as adaptations. Some adaptations help organisms adjust to changes in water and temperature. Other adaptations help organisms obtain food from particular sources. Camouflages and certain body structures protect organisms from becoming prey. As an ecosystem changes, organisms either adapt or migrate in order to survive.

Materials

"bird foods," *i.e., rice, styrofoam chunks, nuts, puffed rice*

"bird beaks," *i.e., tweezers, chopsticks, pliers, eyedropper, slotted scoop*

small log

vase

Activity

1. Discuss examples of physical features animals have that assist them in finding food, moving around, or staying alive. Point out that these characteristics are adaptations.
2. Explain that one of the best ways to see how animals adapt to their habitats is to examine bird beaks. Beaks come in all shapes and sizes and each is specially suited for finding and eating the type of food its owner needs.
3. Have students review the list of rainforest animals on page 13. Ask them to identify the birds on the list.
4. If possible, display photographs of each bird. Discuss the different bird beaks and how beaks help birds survive. (The woodswallow has a large, gaping mouth that acts like a net to catch insects by the wing; the cassowary has a long, thick beak for picking up fallen fruit.)
5. Explain the different classifications of bird beaks: chisel (for plucking insects from cracks in barks of trees), spear (for catching fish), cracker (for cracking shells of seeds), prober (for sucking nectar), or strainer (for gathering tiny aquatic plants and animals).
6. Set up stations, each with a different type of food: rice spread on a log (to represent insects), styrofoam chunks floating in water (to represent fish), nuts or seeds, water in a tall, thin vase (to represent nectar), and puffed rice floating in water (to represent tiny aquatic plants and animals).
7. Place tools to represent bird beaks at each station: tweezers (chisel), chopsticks (spear), pliers (cracker), eyedropper (prober), and slotted scoop (spoon).
8. Invite students to take turns picking up the foods with the various beaks (tools). Have them note the results on the Animal Adaptations Worksheet. Have them decide which beak is best for getting each food.
9. Conclude the activity by discussing beak adaptations in general. Ask: How can specialized beaks help some birds stay alive? How might a specialized beak hurt a bird?

Extend the Activity

Have students identify different types of bird feet and explain how each helps a bird survive in its habitat.

Animal Adaptations Worksheet

Name: _____

Type of Beak	insects (rice)	fish (styrofoam)	nuts/ seeds	nectar (water)	aquatic plants (puffed rice)
chisel (tweezers)					
spear (chopsticks)					
cracker (pliers)					
prober (eyedropper)					
spoon (slotted spoon)					