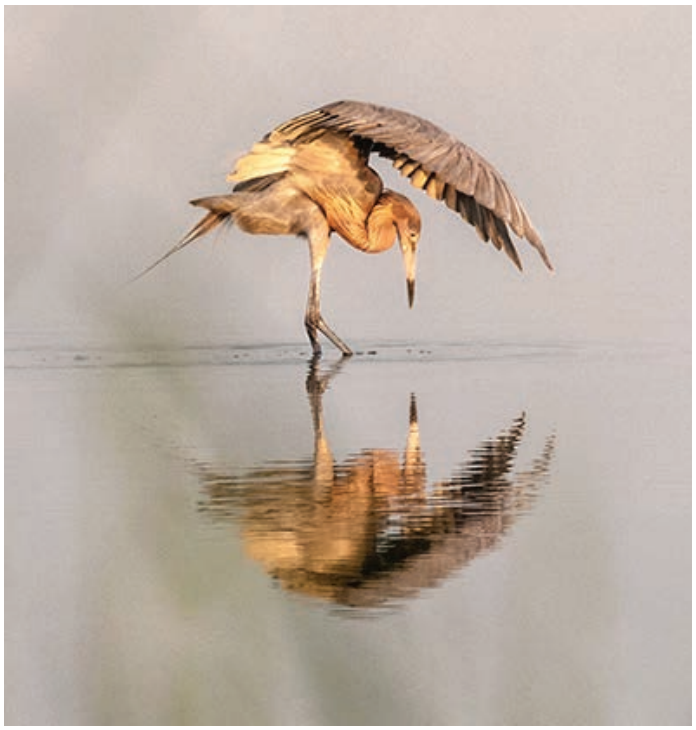
Activity 1

Adaptations: A Matter of Survival

Teacher-led Classroom Activity
Life Science, Reading, Reasoning



How are animals' physical characteristics related to their habitats and behaviors?

Objective:
Students match descriptions of animals' physical and behavioral characteristics to adaptations that help those animals survive, and then identify the animals.

Students will need:
- "Adaptations Match Challenge" reproducible (one for each students)
- Pencils

Suggested time:
20 minutes

What to do:

1. Have students re-read the cover story and the article "See, Feel, Grab, Stab" on page 2 of the student magazine "The Watery World of Wading Birds." Use those as the starting place for a whole-class discussion of adaptation. Ask students to point out the physical characteristics of wading birds. Extend the discussion to cover the idea that physical and behavioral characteristics help not just birds, but all animals—including humans—to get food and survive in a particular kind of habitat. Focus on specific examples by asking such questions as, "Why do wading birds have feet with spread-out toes? How does a Wood Stork use its beak to get food?"
2. Distribute copies of the reproducible "Adaptations Match Challenge."
3. After students have completed the activity, review the answers and discuss the specific examples of adaptations introduced. Broaden the discussion by inviting students to describe other examples of adaptations in birds and other animals.

Extension:
Have students conduct research to learn about wading bird species that inhabit the local area. They can then create field guide presentations giving detailed information about the birds they've identified.

Audubon adventures

Name: _____

Date: _____

Adaptations Match Challenge

Each clue below starts with an animal describing itself. Find an adaptation in the list of adaptations that would help that animal survive. Write the letter of the adaptation in the space provided. Then look at the list of animals and write the name of the animal described by each clue.

Clues

1. I can't run very fast, and my body could easily be hurt by the strong teeth and claws of big predators. I need to be able to protect myself and also to catch prey that is stronger and faster than I am.

   Adaptation: _____ **Animal:** _____

2. I move so slowly that it's impossible for me to run away from predators. I need a good way to protect myself when a predator threatens.

   Adaptation: _____ **Animal:** _____

3. I build my home from trees and branches I cut myself.

   Adaptation: _____ **Animal:** _____

4. I drink nectar for food. I have to be able to get the sweet liquid that's deep inside flowers.

   Adaptation: _____ **Animal:** _____

5. I spend all of my life underwater. I have to be fast to catch my food and to get away from predators that think I'm food.

   Adaptation: _____ **Animal:** _____

6. I live in a very cold place. I have to stay warm even while I'm hunting on frozen ice, and I have to blend in, too.

   Adaptation: _____ **Animal:** _____

7. I find my food in shallow water, but I don't swim. I like to keep my feathers dry.

   Adaptation: _____ **Animal:** _____

8. I can fly, but I catch my food in water, so I have to be a good swimmer.

   Adaptation: _____ **Animal:** _____

9. I spend most of my time underground, digging my way through the soil looking for worms and insects to eat.

   Adaptation: _____ **Animal:** _____

Adaptations

A. Feet with sharp claws that work like shovels

B. Long, tube-like beak that works like a straw

C. Highly developed brain that makes it possible to design, build, and use all kinds of tools, machines, and structures

D. Body covered by a very hard shell into which head and legs can be pulled

E. Webbed feet that work like paddles

F. Long legs and long neck

G. Streamlined body that moves easily through water

H. Large, sharp teeth for gnawing through wood

I. Hollow-shafted white fur that collects heat from the sun

Animals

- Human being
- Duck or other bird with webbed feet
- Mole, armadillo, or woodchuck
- Wading bird
- Turtle or tortoise
- Fish, seal, or whale
- Beaver
- Polar bear
- Hummingbird