# Classroom Connections for 3rd & 4th Grade

**Focus:** Animal Characteristics and Food Chains



- Understand how to distinguish living from nonliving and how to use characteristics to sort common organisms into plant and animal groups. W
  - o (4) Describe the characteristics of organisms.
  - o (4) Describe and sort organisms using multiple characteristics.
  - o (4) Classify and sort common organisms into plant and animal groups.
- Understand that living things need constant energy and matter. W
  - o (4) Identify sources of energy and matter used by animals to grow and sustain life (e.g., air, water, light, food, mineral nutrients).
- Understand that that an organism's ability to survive is influenced by the organism's behavior and the ecosystem in which it lives. W
  - (3) Describe the characteristics of organisms that allow them to survive in an ecosystem.
  - o (3) Describe the role of an organism in a food chain of an ecosystem (i.e., predator, prey, consumer, producer, decomposer, scavenger).

EALR 2 Inquiry: Grade Level Expectations (GLE)

- Understand how to ask a question about objects, organisms, and events in the environment. W
  - (3, 4, 5) Ask questions about objects, organisms, and events based on observations of the natural world.

### Before you visit the Zoo:

- 1. Studies show that that more familiar your students are with their field trip destination, the more prepared they will be to learn during their visit. Show students a selection of slides from our **Zoo Preview** presentation on our website at <a href="www.pdza.org">www.pdza.org</a>. To request a CD of this PowerPoint presentation, contact us at <a href="cmcconnell@pdza.org">cmcconnell@pdza.org</a>.
- 2. Lead a discussion about **adaptations** (characteristics that living things have that help them to survive in its environment). Begin by asking students to name some of their adaptations and how they help them to survive. Then ask students to begin naming animal adaptations that they are familiar with. Finally, ask students to write about an imaginary animal and describe its habitat and the adaptations it has to help it to live there.
- 3. Review the vertebrate animal groups (mammals, birds, reptiles, amphibians and fish) and their **characteristics**. Ask students to bring pictures of animals from each of these animal groups. Create a classroom collage with each group of animals represented together.

## After your Zoo visit:

- 1. Have students generate of list of the animals that they saw at the Zoo. Ask students to create a chart with the headings **herbivore**, **carnivore**, **omnivore**, **predator** and **prey** (provide definitions if necessary). Ask students to sort their zoo animal list into those categories. They should follow up with research to make sure their chart is accurate.
- 2. If you are using the FOSS *Human Body* curriculum, ask students choose an animal that they saw at the zoo and draw what they think its skeleton would look like. Use a picture of the animal and a picture of a human skeleton as a guide.
- 3. If you are using the FOSS *Structures of Life* curriculum, ask students to compare each their classroom animals to at least one other animal they saw on their field trip. They should also be able to identify their classroom animals as **herbivores**, **carnivores**, **omnivores**, **predators** or **prey**.

# Field Investigations at the Zoo for 3<sup>rd</sup> 4 4<sup>th</sup> Grade Chaperones



**Focus:** Animal Characteristics and Food Chains

Dear Chaperone,

Please guide your students through the following observations. As you ask them the following questions allow them to think about their answers and encourage them to come up with questions of their own. The purpose of this activity is not for them to get all the "right" answers but rather to allow them to practice questioning and observation skills.

Feel free to check off each observation task as you complete them during your Zoo tour. The Thinking About Food Chains questions can be discussed during lunch or snack time or on your way back to school on the bus. Enjoy learning with your students!

### Explore the Zoo and Find:

- ☐ An animal to observe.
  - Where is the animal in its habitat? Why do you think it chose this spot to be in?
  - o What is the animal doing? How would this behavior help this animal to survive?
- $\Box$  Two mammals One that is a predator and one that is a prey animal.
  - o What characteristics do these animals both have that make them mammals?
  - o What are some differences that you notice?
- □ One bird.
  - o How are birds similar to mammals? How are they different?
- □ One fish.
  - o Do you think fish are more like birds, mammals, reptiles or amphibians?
- □ One reptile.
  - o How do you know this animal is a reptile?
  - o How are reptiles different from birds? How are they similar?
- ☐ An animal that you think might eat only plants (an herbivore).
  - o Do you think this animal gets most of its food from the ground or from trees?
- ☐ An animal that you think might eat only other animals (a carnivore).
  - o How do you think this animal finds and captures its prey?

#### Thinking About Food Chains:

- ☐ All animals are consumers. This means that they need to eat to get enough energy to survive. How do plants get their energy?
- ☐ If there were no plants in the world, would we still have animals?