Grade 4, Chapter 1

Classifying Plants and Animals

Summary
The cell is the smallest unit of a living thing—the building block from which all living things are made. Cells combine in different ways to form organisms. Scientists classify organisms by common characteristics into six kingdoms, two of which are plants and animals. Each kingdom is further subdivided into other categories. Two major categories of plants are vascular and nonvascular. The two major categories of animals are vertebrates (with backbones) and invertebrates (without backbones). Many animals have adaptations, physical features or behaviors passed on from parents, which help them survive.

Before Reading

Activate Prior Knowledge

Provide background for students by previewing the book. Discuss the text features and preview the key vocabulary and concepts.

Vocabulary

cell, chloroplast, cytoplasm, genus, invertebrates, nucleus, species, vertebrates

Comprehension Skill: Compare and Contrast

Tell students that when they read about different kinds of plants, they should think about how vascular and nonvascular plants are the same and different.

During Reading

Think Critically

Have students answer the *What Did You Learn?* questions located on the inside back cover of their book.

1. **What parts does a plant cell have that an animal cell does not have?** A plant cell has chloroplasts and a cell wall, which an animal cell does not have.
2. **What are six kingdoms used for classification?** The six kingdoms for classification are ancient bacteria, true bacteria, protists, fungi, plants, and animals.
3. **How does an animal get its scientific name?** An animal gets its scientific name from the genus and species names, the two smallest groups within a kingdom.

After Reading

Writing in Science

Animals have adaptations to help them survive in their environment. Describe on your paper adaptations that some animals have to protect themselves from predators. Use examples from the book to support your answer.

Organize Information

Graphic Organizer: Compare and Contrast
Have students complete the Compare and Contrast chart on the BLM for this Leveled Reader to tell how vascular and nonvascular plants are the same and different.

Related Resources

Vocabulary Cards
Every Student Learns
Activity Flipchart
Graphic Organizer Transparencies
Quick Activity Transparency
www.pearsonsuccessnet.com
Equipment Kit
LabZone
Quick Study

Write your answers.

1. Name two ways plants reproduce.
   Plants reproduce by making seeds and making spores.
2. Describe the life cycle of a python.
   A female python lays eggs. She keeps the eggs warm until they hatch. The young pythons grow and reproduce.
3. What is migration? Give an example of an animal that migrates.
   Migration is traveling in search of food or a place to reproduce. An animal that migrates is the Canada goose.
4. How are vascular and nonvascular plants the same? How are they different? Use the graphic organizer to help you.
   Possible answer:

Compare and Contrast