Scientists have developed a system for classifying the great diversity of living things.

Key Concepts

SECTION 1
**Scientists develop systems for classifying living things.**
Learn about why scientists classify living things and about taxonomy.

SECTION 2
**Biologists use seven levels of classification.**
Learn about scientific names, how to classify organisms in seven levels, and dichotomous keys.

SECTION 3
**Classification systems change as scientists learn more.**
Learn how classification systems have changed based on features of cells.

**FCAT Practice**
Prepare and practice for the FCAT
- Section Reviews, pp. 305, 314, 323
- Chapter Review, pp. 326–328
- FCAT Practice, p. 329

CLASSZONE.COM
- Florida Review: Content Review and FCAT Practice
How Are Fingerprints Different?

Make fingerprints of your thumb and the thumbs of several classmates on separate index cards.

Observe and Think What traits do all fingerprints have in common? What traits of fingerprints allow you to tell them apart?

How Would You Sort Pennies?

Place 20 pennies in a plastic cup. Place your hand over the cup and shake it. Gently pour the pennies onto a table. Without flipping the pennies over, use one trait of the pennies to sort them into groups A and B. Again, without flipping them over, use a second trait to sort the pennies in group A into groups A1 and A2.

Observe and Think What traits do the pennies in each group share? Which group has the largest numbers of pennies?

Internet Activity: Linnaeus

Go to ClassZone.com to learn more about Carolus Linnaeus, who, over 200 years ago, laid the groundwork for how today’s scientists classify things.

Observe and Think What evidence did Linnaeus use to classify organisms?
CONCEPT REVIEW

- Living organisms are divided into six kingdoms by scientists.
- Bacteria are the smallest living things.
- Viruses are nonliving things that copy themselves by using materials within living cells.
- Protists are a diverse group of organisms that include algae and protozoa.

VOCABULARY REVIEW

- **kingdom** p. 257
- **virus** p. 260
- **bacteria** p. 262
- **protozoa** p. 280

TAKING NOTES

SUPPORTING MAIN IDEAS

Make a chart to show main ideas and the information that supports them. Copy each blue heading. Below each heading, add supporting information, such as reasons, explanations, and examples.

VOCABULARY STRATEGY

Place each vocabulary term at the center of a description wheel diagram. Write some words describing it on the spokes.

Scientists classify millions of species.

Taxonomy is the science of classifying and naming organisms.

Classification is the process of arranging organisms in groups.

To classify organisms, scientists compare their characteristics.

See the Note-Taking Handbook on pages R45–R51.