Section 1–3 Studying Life (pages 15–22)

- **C** Key Concepts
 - What are some characteristics of living things?
 - How can life be studied at different levels?

Introduction (page 15)

1. What is biology? _____

Characteristics of Living Things (pages 15–17)

- 2. What is a cell? _____
- 3. Circle the letter of each sentence that is true about cells.
 - a. A cell is the smallest unit of an organism that can be considered alive.
 - **b.** A multicellular organism may contain trillions of cells.
 - c. A living thing that consists of a single cell is a multicellular organism.
 - **d.** Organisms are made up of cells.
- 4. What are two types of reproduction?
 - a. _____

b. _____ 5. Living things are based on a universal _____

- 6. Circle the letter of each sentence that is true about living things.
 - a. The life cycle of many organisms involves development.
 - **b.** For bacteria, growth is mostly a simple increase in size.
 - **c.** Each type of organism has a distinctive life cycle.
 - d. Cells may change in number but never differentiate.
- 7. Why does an organism need energy and a constant supply of materials?
- 8. Is the following sentence true or false? All organisms respond to the environment in exactly the same ways.

Big Ideas in Biology (pages 18-20)

- 9. What is homeostasis?
- **10.** A group of organisms that changes over time is said to ______.

Branches of Biology (pages 20–21)

Match the different kinds of biologists with the focus of their study.

Kinds of Biologists Focus of Study

- a. Plants
- _____ **12.** Botanist **b.** Ancient life
- _____ 13. Paleontologist **c.** Animals
- 14. Label each of the illustrations below according to the level of study represented.



15. The largest level of biological study is the _____.

Biology in Everyday Life (page 22)

16. What kinds of information can the study of biology provide about matters affecting human society? _____