

## Section 1–3 Studying Life (pages 16–22)



**TEKS FOCUS:** 1A Safe practices; 3C Impact of research on society and environment; 11A Feedback and homeostasis; 11B Response to stimuli

*This section describes the characteristics of living things. It also explains how life can be studied at different levels.*

### Introduction (page 16)

1. What is biology? \_\_\_\_\_  
\_\_\_\_\_

### Characteristics of Living Things (pages 16–20)

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 asexual 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. What is metabolism? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. Is the following sentence true or false? All organisms respond to the environment in exactly the same ways. \_\_\_\_\_

10. What is homeostasis? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

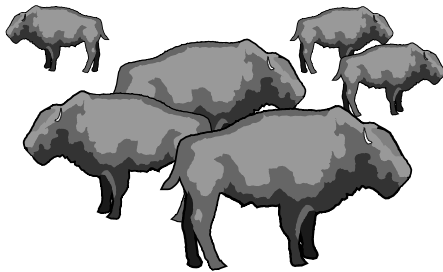
11. A group of organisms that changes over time is said to \_\_\_\_\_.

### Branches of Biology (pages 20–21)

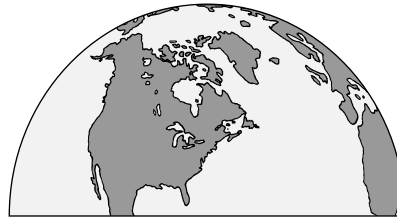
Match the different kinds of biologists with the focus of their study.

Kinds of Biologists	Focus of Study
_____ 12. Zoologist	a. Plants
_____ 13. Botanist	b. Ancient life
_____ 14. Paleontologist	c. Animals

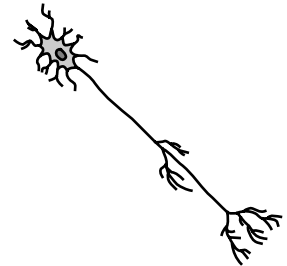
15. Label each of the illustrations below according to the level of study represented.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

16. The largest level of biological study is the \_\_\_\_\_.

### Biology in Everyday Life (page 22)

17. What kinds of information can the study of biology provide about matters affecting human society? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_