

## Section 7–4 The Diversity of Cellular Life (pages 190–193)



**TEKS FOCUS:** 5C Levels of organization in multicellular organisms and relating parts to the whole

*This section explains what cell specialization is. It also describes the four levels of organization in multicellular organisms.*

### Unicellular Organisms (page 190)

1. A single-celled organism is also called a(an) \_\_\_\_\_ organism.

### Multicellular Organisms (pages 190–192)

2. What is cell specialization in a multicellular organism? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Circle the letter of each sentence that is true about cell specialization.
  - a. Specialized cells perform particular functions within the organism.
  - b. Only unicellular organisms have specialized cells.
  - c. The human body contains many different cell types.
  - d. Some cells are specialized to enable movement.

### Levels of Organization (pages 192–193)

4. What are four levels of organization in a multicellular organism?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
5. What is a tissue? \_\_\_\_\_  
\_\_\_\_\_
6. What are the four main types of tissue in most animals?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
7. Groups of tissues that work together to perform a specific function are called a(an) \_\_\_\_\_.
8. What kinds of tissues can be found within a muscle in your body? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. What is an organ system? \_\_\_\_\_  
\_\_\_\_\_

### WordWise

Use the clues below to identify vocabulary terms from Chapter 7. Write the terms on the lines, putting one letter in each blank. When you finish, the words enclosed in the diagonal will reveal an important term related to cell structure and function.

#### Clues

1. An organelle that uses the energy from sunlight to make energy-rich food molecules
2. A structure in eukaryotic cells that acts like a specialized organ
3. A saclike structure in which cells store materials
4. A network of protein filaments that helps the cell maintain its shape
5. Cells that have a nucleus
6. The organelle that uses energy from food to make high-energy compounds
7. A theory that states that all living things are composed of cells
8. The diffusion of water through a selectively permeable membrane
9. The process of taking materials into the cell by means of infoldings of the cell membrane
10. A group of similar cells that perform a particular function

#### Vocabulary Terms

1.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.														
3.														
4.														
5.														
6.														
7.														
8.														
9.														
10.														