

**Chapter 7 Cell Structure and Function**

**Section 7-1 Life Is Cellular (pages 169-173)**



**Key Concepts**

- What is the cell theory?
- What are the characteristics of prokaryotes and eukaryotes?

**Introduction (page 169)**

1. What is the structure that makes up every living thing? \_\_\_\_\_

**The Discovery of the Cell (pages 169-170)**

2. What was Anton van Leeuwenhoek one of the first to see in the 1600s? \_\_\_\_\_

\_\_\_\_\_

3. What did a thin slice of cork seem like to Robert Hooke when he observed it through a microscope? \_\_\_\_\_

\_\_\_\_\_

4. What did the German botanist Matthias Schleiden conclude? \_\_\_\_\_

\_\_\_\_\_

5. What did the German biologist Theodor Schwann conclude? \_\_\_\_\_

\_\_\_\_\_

6. How did Rudolph Virchow summarize his years of work? \_\_\_\_\_

\_\_\_\_\_

7. What are the three concepts that make up the cell theory?

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

**Exploring the Cell (pages 170-172)**

8. Why are electron microscopes capable of revealing details much smaller than those seen through light microscopes? \_\_\_\_\_

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**Prokaryotes and Eukaryotes (pages 172–173)**

9. Circle the letter of each sentence that is true about prokaryotes.
- a. They grow and reproduce.
  - b. Many are large, multicellular organisms.
  - c. They are more complex than cells of eukaryotes.
  - d. They have cell membranes and cytoplasm.
10. Are all eukaryotes large, multicellular organisms? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

11. Complete the table about the two categories of cells.

**TWO CATEGORIES OF CELLS**

Category	Definition	Examples
	Organisms whose cells lack nuclei	
	Organisms whose cells contain nuclei	