CHAPTER 3Cell Structure and Function

SECTION

CELL THEORY

3.1 **Study Guide**

KEY CONCEPT

Cells are the basic unit of life.

VOCABULARY		
cell theory	organelle	eukaryotic cell
cytoplasm	prokaryotic cell	

MAIN IDEA: Early studies led to the development of the cell theory.

In a phrase, tell what each scientist did to help develop the cell theory.

Scientist	Contribution to Cell Theory
1. Hooke	
2. Leeuwenhoek	
3. Schleiden	
4. Schwann	
5. Virchow	

- **6.** What are the three parts of the cell theory?
- **7.** Give two reasons why the cell theory is important.

STUDY GUIDE, CONTINUED

MAIN IDEA: Prokaryotic cells lack a nucleus and most internal structures of eukaryotic cells.

In the top left side of the Y shape below, write the characteristics of eukaryotic cells. In the top right side of the Y shape below, write the characteristics of prokaryotic cells. At the bottom of the Y shape below, write the characteristics that both kinds of cells have in common. Then lightly cross out those characteristics at the top of the Y.

Eukaryotic cells	Prokaryotic cell	s
\	Both	

Vocabulary Check

- **8.** What is cytoplasm?
- **9.** Where do you find organelles?
- **10.** What statements summarize scientists' concepts of cells?
- **11.** Which type of cells have no nucleus?