

**Cell Structure and Function** ▪ *Guided Reading and Study***Looking Inside Cells**

*This section describes cell structure and function in plant cells, animal cells, and bacteria.*

**Use Target Reading Skills**

*Before you read, preview Figure 12. Then write two questions that you have about the illustrations in a graphic organizer like the one below. As you read, answer your questions.*

**Plant and Animal Cells**

<b>Q.</b> How are animal cells different from plant cells?
<b>A.</b>
<b>Q.</b>
<b>A.</b>

**Introduction**

1. What are organelles?

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**Enter the Cell**

2. The rigid layer of nonliving material that surrounds plant cells is the

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## Cell Structure and Function ▪ Guided Reading and Study

3. Circle the letter of each sentence that is true about the cell wall.

- a. Cell walls are made of cellulose.
- b. Plant cells have cell walls.
- c. Animal cells have cell walls.
- d. Water and oxygen cannot pass through the cell wall.

4. What does the cell wall do?

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5. Where is the cell membrane located in cells that have cell walls?

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6. Where is the cell membrane located in cells that do NOT have cell walls?

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7. Is the following sentence true or false? The main function of the cell membrane is to control what comes into and out of a cell.

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## Sail On to the Nucleus

8. Circle the letter of each sentence that is true about the nucleus.

- a. Materials pass in and out of the nucleus through pores in the nuclear envelope.
- b. Chromatin contains the instructions that direct the functions of a cell.
- c. The nucleolus is part of the nuclear envelope.
- d. Ribosomes are made in the nucleolus.

## Organelles in the Cytoplasm

9. Circle the letter of the part of the cell that is the region between the cell membrane and the nucleus.

- a. organelle
- b. nucleus
- c. cytoplasm
- d. chromatin

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10. In the table below, describe the function of each organelle in the cytoplasm.

Organelles in Cytoplasm	
Organelle	Function
Mitochondria	
Endoplasmic reticulum	
Ribosomes	
Golgi bodies	
Chloroplasts	
Vacuoles	
Lysosomes	

**Specialized Cells**

11. The structure of each kind of body cell is suited to its \_\_\_\_\_.

**Bacterial Cells**

12. Circle the letter of each sentence that is true about bacterial cells.
- a. Bacterial cells are larger than plant or animal cells.
  - b. Bacterial cells have a cell wall and a cell membrane.
  - c. Bacterial cells do not have a nucleus.
  - d. Bacterial cells do not have genetic material.