

CHAPTER 1
ASSESSMENT

The Organelles in Cells

Goal • This page assesses your knowledge of organelles and their functions.

What to Do

- Answer the questions as instructed for Parts A and B.

Part A

Beside each function on the left-hand side, place the letter representing the organelle on the right-hand side that best matches the function. (8 marks)

Function

- ___ 1. a selectively permeable barrier
- ___ 2. made of cellulose and helps provide rigidity
- ___ 3. uses sugar to make energy in the cell
- ___ 4. responsible for directing all the cell's activities
- ___ 5. contains the green pigment needed for photosynthesis
- ___ 6. jellylike substance that surrounds all the organelles
- ___ 7. may contain extra water or nutrients
- ___ 8. tubelike system that transports nutrients within cells

Organelle

- (a) mitochondria
- (b) cell membrane
- (c) vacuole
- (d) cell wall
- (e) endoplasmic reticulum
- (f) chloroplast
- (g) nucleus
- (h) cytoplasm

Part B

Answer the following questions in the spaces provided.

1. Why is it important for an organelle to "direct" a cell's activities? Which organelle performs this function? (2 marks)

2. What is meant by the term "selectively permeable"? (1 mark)

3. Name two structures that are found only in plant cells. (2 marks)

4. Think of hardworking, energy-burning muscle cells. Which organelle would you expect to see a lot of in muscle cells? Why? (2 marks)

Total: /15