

Skills Worksheet

Directed Reading A

Section: Eukaryotic Cells

CELL WALL

1. What is the function of a cell wall?

2. What are the cell walls of plants and algae made of?

3. What are the cell walls of fungi made of?

CELL MEMBRANE

4. What is a cell membrane?

5. What are three types of compounds contained in the cell membrane?

6. What two substances control the movement of materials into and out of the cell?

CYTOSKELETON

_____ 7. A web of proteins in the cytoplasm is known as the

a. phospholipid.

c. cell membrane.

b. cytoskeleton.

d. organelle.

8. What are the two functions of the cytoskeleton?

Directed Reading A *continued*

NUCLEUS

- _____ **9.** What is the genetic material contained inside a cell's nucleus?
- a.** protein
 - b.** lipids
 - c.** DNA
 - d.** nucleolus
- _____ **10.** The function of proteins in a cell is to
- a.** control chemical reactions.
 - b.** store genetic information.
 - c.** cover the nucleus.
 - d.** copy messages from DNA.
- _____ **11.** What is the nucleolus?
- a.** the opposite of the nucleus
 - b.** another name for DNA
 - c.** a network of fibers in the cytoplasm
 - d.** a dark area of the nucleus that stores materials and begins to make ribosomes

RIBOSOMES

- 12.** Organelles that make proteins are called _____.
- 13.** Proteins are made of _____.

ENDOPLASMIC RETICULUM

- 14.** A system of folded membranes in which proteins, lipids, and other materials are made is the _____.
- 15.** Two forms of endoplasmic reticulum are _____ and _____.

MITOCHONDRIA

- _____ **16.** What function does a mitochondrion perform?
- a.** It breaks down sugar to produce energy.
 - b.** It makes proteins.
 - c.** It breaks down toxic materials.
 - d.** It stores material used to make ribosomes.
- 17.** The site of cellular respiration is the _____.
- 18.** Energy produced in mitochondria is stored in a substance called _____.

Directed Reading A *continued*

CHLOROPLASTS

- _____ **19.** Chloroplasts are organelles that are found in the cells of
a. animals. **c.** mitochondria.
b. plants and algae. **d.** all eukaryotic cells.
- _____ **20.** Which process happens inside a chloroplast?
a. production of ATP **c.** photosynthesis
b. production of DNA **d.** formation of animal cells
- _____ **21.** Chloroplasts are green because they contain
a. sugar. **c.** chlorophyll.
b. proteins. **d.** DNA.

GOLGI COMPLEX

- _____ **22.** The function of the Golgi complex is to
a. produce sugar and water.
b. package and deliver proteins.
c. produce oxygen.
d. trap energy from the sun.

CELL COMPARTMENTS

- 23.** A small sac that surrounds material to be moved into or out of a cell
is a(n) _____.

CELLULAR DIGESTION

- 24.** What is a lysosome?

- 25.** What is the function of lysosomes?

- 26.** What function do vacuoles perform in plant and fungal cells?

Section Review

Eukaryotic Cells

USING KEY TERMS

1. In your own words, write a definition for each of the following terms:
ribosome, lysosome, and cell wall.

UNDERSTANDING KEY IDEAS

- _____ 2. Which of the following are found mainly in animal cells?
- a. mitochondria
 - b. lysosomes
 - c. ribosomes
 - d. Golgi complexes
3. What is the function of a Golgi complex? What is the function of the endoplasmic reticulum?

CRITICAL THINKING

4. **Making Comparisons** Describe three ways in which plant cells differ from animal cells.

5. **Applying Concepts** Every cell needs ribosomes. Explain why.

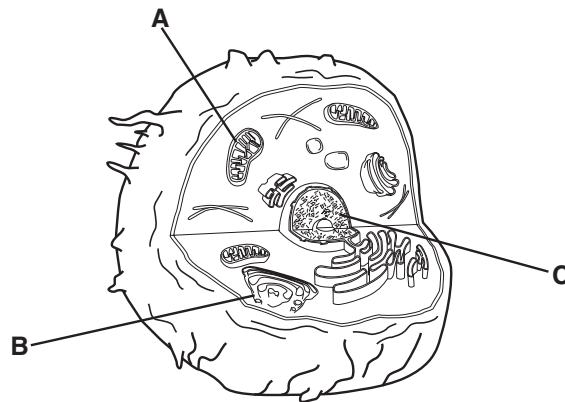
Section Review *continued*

6. Predicting Consequences A certain virus attacks the mitochondria in cells. What would happen to a cell if all of its mitochondria were destroyed?

7. Expressing Opinions Do you think that having chloroplasts gives plant cells an advantage over animal cells? Support your opinion.

INTERPRETING GRAPHICS

Use the diagram below to answer the questions that follow.



8. Is this a diagram of a plant cell or an animal cell? Explain how you know.

9. What organelle does the letter *B* refer to?
