

Skills Worksheet

Directed Reading B**Section: Eukaryotic Cells** (pp. 120–127)**CELL WALL**

1. What rigid structure surrounds a plant cell membrane and provides support to the cell?

the cell wall

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

The cell wall of plants and algae are made of a complex sugar called cellulose.

CELL MEMBRANE

the cell membrane

3. What protective barrier separates a cell's contents from the cell's environment?

- a. the ribosomes
- b. the cytoskeleton
- c. the cell membrane
- d. the organelle

phospholipid layers

4. What two layers make it difficult for materials to pass through the cell membrane?

- a. phospholipid layers
- b. cytoskeleton layers
- c. hydrophilic layers
- d. hydrophobic layers

5. How do materials, such as nutrients and waste, pass through the cell membrane?

through passageways made of proteins..

CYTOSKELETON

cytoskeleton

6. A web of proteins in the cytoplasm of plant and animal cells is known as the

- a. phospholipid.
- b. cytoskeleton.
- c. cell membrane.
- d. organelle.

Directed Reading B *continued*

the cytoskeleton

7. What gives animal cells their shape?
- a. the cell wall
 - b. the cytoskeleton
 - c. the cell membrane
 - d. the exoskeleton

NUCLEUS

nucleus

8. In eukaryotic cells, genetic material called DNA is found in a membrane-bound organelle called the
- a. nucleus.
 - b. nucleolus.
 - c. nucleotide.
 - d. cytoplasm.

endo = within
plasmic = made of phospholipids
reticulum = folded

control chemical reactions

9. 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.

nucleolus

10. A dark area of the nucleus where a cell begins to make its ribosomes is the
- a. mitochondrion.
 - b. nucleolus.
 - c. nucleotide.
 - d. cytoplasm.

RIBOSOMES

11. Organelles that make proteins are called ribosomes.

12. Proteins are made of amino acids.

13. Why do all cells have ribosomes?

All cells must make proteins to carry out chemical reactions. Without ribosomes a cell could not make any proteins, without proteins to do reactions the cell would die.

ENDOPLASMIC RETICULUM

14. A system of folded membranes found in a cell's cytoplasm, in which proteins, lipids, and other materials are made, is the endoplasmic reticulum.