

Read pages 161 - 174.

Assignment #1

Write the answers on your own paper, not on this sheet.

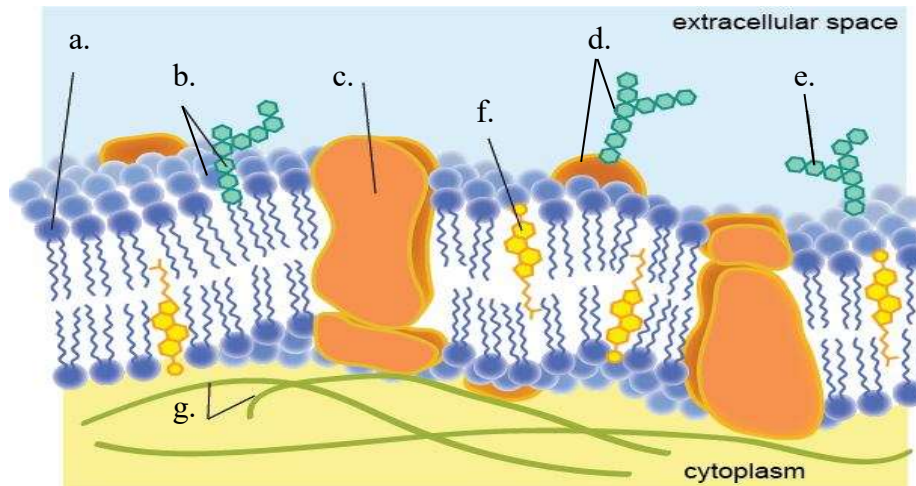
1. What is cytology?
2. List the 11 major cell functions and explain what each is.
3. List the function of each organelle listed below and tell whether it is located in a plant cell, animal cell, or both.
 - a. Cell wall
 - b. Middle lamella
 - c. Plasma membrane
 - d. Cytoplasm
 - e. Mitochondria
 - f. Lysosome
 - g. Ribosome
 - h. Smooth endoplasmic reticulum
 - i. Rough endoplasmic reticulum
 - j. Golgi bodies
 - k. Leucoplasts
 - l. Chromoplasts
 - m. Central vacuole
 - n. Waste vacuole
 - o. Phagocytic vacuole
 - p. Pinocytic vacuole
 - q. Centrioles
 - r. Nucleus
4. What is cytoplasmic streaming?
5. What is chromatin?
6. In what two locations inside the cell will you find DNA?
7. What is a cytoskeleton?
8. What is a cytoskeleton made up of?

Read pages 175- 189.

Assignment #2

Write the answers on your own paper, not on this sheet.

1. What is the plasma membrane made of?
2. What is the difference between a regular lipid and a phospholipid?
3. What makes it possible for the plasma membrane to self-assemble?
4. What is the difference between active and passive transport?
5. Identify the structures pointed out below:



6. For each solution, indicate whether the concentration of solutes in the solution is greater than, less than, or equal to the concentration of solutes in the cell:
a. Isotonic b. Hypertonic c. Hypotonic
7. What is the difference between cytolysis and plasmolysis?
8. If a cell is in a hypertonic solution, will it die by cytolysis or plasmolysis? Why does this happen?
9. If a cell is in a hypotonic solution, will it die by cytolysis or plasmolysis? Why does this happen?
10. Write the chemical equation for the reaction cell's use to make energy.
11. What is activation energy?
12. What is cellular respiration?
13. List the four stages of aerobic cellular respiration, in order, and include the number of ATPs that are made in each step.
14. What is ATP and what do cell's use it for??
15. If a cell has no oxygen, what stage of aerobic respiration can still run? How many ATPs can make?
16. What organelle is responsible for breaking polysaccharides into monosaccharides?