

Name _____

Chapter 7-3 Cell Boundaries

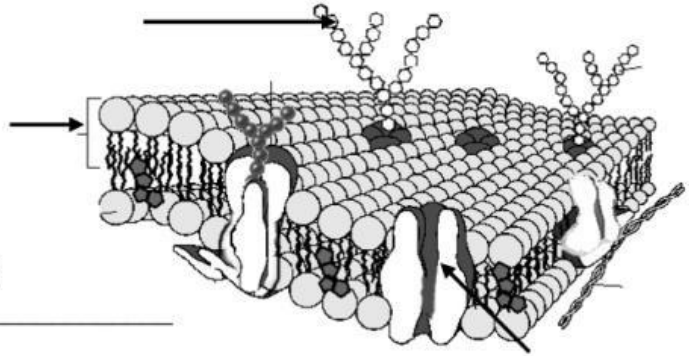
1. Name two functions of the cell membrane:

2. The cell membrane contains _____ molecules that are embedded in the lipid bilayer.

3. Why do scientists call the membrane a "mosaic"? _____

4. On the image, label the

- a. lipid bilayer
- b. protein channel
- c. carbohydrate chains



5. What three types of organisms have cell walls? _____

6. What is the main function of the cell wall? _____

7. What are plant cell walls composed of? _____

8. One of the most important functions of the cell membrane is to _____ the movement of dissolved _____ from the liquid on one side of the membrane to the liquid on the other.

9. A solution is a _____ of two or more substances.

10. Define diffusion: _____

11. When the particles are the same throughout, the system has reached _____

12. Diffusion depends on _____ particle movements, therefore it [does | does not] (circle) require energy.

OSMOSIS

13. If a substance is able to diffuse across a membrane, the membrane is said to be _____

14. Define osmosis: _____

15. Isotonic means _____

Hypertonic means _____

Hypotonic means _____

16. Because cells are hypertonic in relation to fresh water, _____ produces a net movement of water into the cell. If that happens, the cell will become _____ and can even burst.

17. In plant and bacteria cells, what keeps them from bursting due to osmotic pressure? _____

FACILITATED DIFFUSION

18. Cell membranes have _____ that make it easy for certain molecules to cross the membrane.

19. When proteins help molecules move across the membrane, it is called _____