1. A solution in which the salt concentration is LOWER outside the cell than the salt concentration inside the cell is called:

A. hypotonic

B. hypertonic

C. isotonic

2. The cell membrane is best described as a(n)

A. penetrable membrane

B. semi-permeable membrane

C. impenetrable membrane

3. What is the main function of the cell membrane? A. breaks down lipids, carbohydrates, and proteins from foods

B. keeps the cell wall in place

C. regulates which materials enter and leave the cell

4. DIFFUSION is the movement of molecules from:

A. an area of low concentration to an area of high concentration.

B. an area of equilibrium to an area of high concentration.

C. an area of high concentration to an area of low concentration.

5. Which method of transport moves substances in or out of the cell that REQUIRES ENERGY?

A. osmosis

B. Endocytosis

C. Diffusion

D. facilitated diffusion

6. When a cell needs to get rid of large waste products and push them OUT OF THE CELL, which term best describe the process by which cells release substances from the cell?

A. osmosis

B. Diffusion

C. Endocytosis

D. Exocytosis

7. A plant cell is placed in a HYPERTONIC solution, what will most likely happen to the cell?

A. water moves into the cell causing it to burst.

B. salt moves into the cell causing it to burst.

C. salt moves out of the cell causing it to shrink

D. water moves out of the cell causing it to shrink.

8. The only DIFFERENCE between diffusion and facilitated diffusion is:

A. facilitated diffusion uses protein channels to move substances in or out of the cell.

B. facilitated diffusion is the moves substances from an area of low concentration to an area of high concentration.

C. facilitated diffusion requires energy.

D. diffusion requires energy.

9. After eating a salty snack like potato chips, the cells in your mouth become saturated with salt. What happens to the cells in your mouth as they react to the ELEVATED salt environment?

A. water moves out of the cell causing them to shrink.

B. salt moves out of the cell causing them to shrink

C. salt moves into the cell causing them to burst.

D. water moves into the cell causing them to burst.

10. The diffusion of WATER across a selectively permeable membrane is called

A. facilitated diffusion.

B. active transport.

C. osmosis.

D. equilibrium

11. A solution in which the salt concentration is HIGHER outside the cell than the salt concentration inside the cell is called

A. an isotonic solution.

B. a hypertonic solution.

C. a hypotonic solution.

12. When the concentration of molecules on both sides of a membrane is the SAME, the solution

A. has reached an equilibrium

B. moves from an area of higher concentration to an area of lower concentration.

C. is hypotonic.

D. is hypertonic.

13. An animal cell placed in a hypotonic solution will:

A. lose water

B. stay the same

C. divide

D. take on water and possibly burst

14. What type of solution does a plant cell need?

A. hypertonic

B. hypotonic

C. isotonic

15. Active transport requires the use of:

A. salt

B. ATP

C. Water

16. Glucose molecules that cross the cell membrane with the help of a carrier protein are using what process?

A. endocytosis

B. diffusion

C. sodium pump

D. facilitated diffusion

17. All living things maintain a balance within their cells and the environment through the process of

A. diffusion

B. homeostasis

C. exocytosis

D. respiration

18. Molecules that are too large to be moved across a cell membrane can be brought into the cell by

A. endocytosis

B. protein carriers

C. channel proteins

D. potassium pump

19. Protein pumps use energy to bring in sodium when:

A. there is a high concentration of sodium outside the cell

B. sodium is too large to fit through the cell membrane

C. there are no carrier proteins

D. there is a high concentration of sodium inside the cell

20. Which form of transport allows cells to swallow chunks of material?

A. facilitated diffusion

B. endocytosis

C. exocytosis