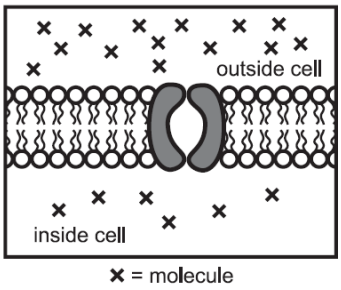
Passive & Active Transport Target Check

Cell Membrane & Transport Review #2

Name: _____ Date: _____ Block: _____

Refer to the diagram to the right, which shows a cell membrane composed of a phospholipids bilayer with a channel protein. Each x represents the same type of molecule inside or outside the cell. ***Facilitated diffusion moves this molecule across the cell membrane.***



1. In what direction will these molecules move and through which structure?
    a. Into the cell through the transport protein
    b. Into the cell through the phospholipid bilayer
    c. Out of the cell through the transport protein
    d. Out of the cell through the phospholipid bilayer

Refer to the transport mechanisms below for questions 2 and 3.

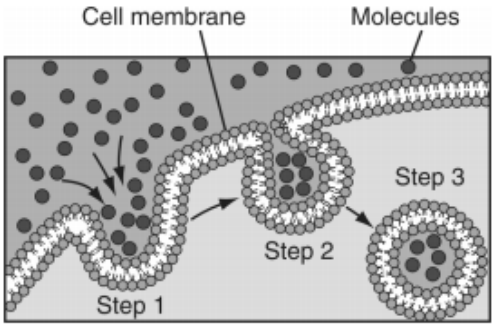
2. Which type of transport moves molecules **against** a concentration gradient?
    a. I only
    b. II only
    c. II and IV only
    d. II, III, IV only
    e. I, II, III, and IV

Word Bank:

I. Active Transport
II. Diffusion
III. Facilitated Diffusion
IV. Osmosis

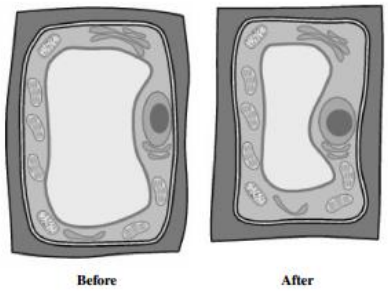
3. Which of the above types of transport moves molecules by **passive transport**?
    a. I only
    b. II only
    c. II and IV only
    d. II, III, IV, only
    e. I, II, III, IV

4. Which process is illustrated to the **right**?
    a. Diffusion of water into a cell
    b. Endocytosis
    c. Exocytosis
    d. Facilitated diffusion



5. In **pure water**, a red blood cell from an animal will swell and burst, but a leaf cell from a **plant** will not. Which structure in the leaf cell is responsible for this difference?
    a. Cell Membrane
    b. Cell Wall
    c. Mitochondria
    d. Nucleus

Use the picture to the right to answer question 6.



6. The diagram to the right shows a **plant cell** before and after it is placed in a solution. After the cell is placed in the solution, it changes shape. Which table shows the initial concentration of solute in the cell and in the solution that would cause the cell to change shape as shown in the diagram?

A.

Location	Solute Concentration
Inside cell	12%
Outside cell	12%

B.

Location	Solute Concentration
Inside cell	3%
Outside cell	6%

C.

Location	Solute Concentration
Inside cell	7%
Outside cell	5%

D.

Location	Solute Concentration
Inside cell	0%
Outside cell	0%

Word Bank:

A. Active transport
B. Osmosis
C. Facilitated diffusion
D. Passive transport
E. Exocytosis
F. Phagocytosis
G. Endocytosis
H. diffusion

Match the following terms to the correct definition:

7. _____ Active transport of materials **out** of the cell
8. _____ Water moves across a semi-permeable membrane
9. _____ a specific type of endocytosis
10. _____ A molecule other than water is passively transported using a protein
11. _____ Active transport of materials **into** the cell
12. _____ A molecule other than water passively moving in or out of the cell
13. _____ Movement across the membrane from **high** to **low** and with no energy used.
14. _____ Movement across the membrane from **low** to **high** and with energy used

Match the following terms to the correct example: When in doubt, draw it out!

A. Active Transport **B. Facilitated Diffusion** **C. Osmosis** **D. Simple Diffusion**

15. **Fresh water** moves from an area with **80%** water into a single-celled organism with an internal concentration of **75%.** What type of transport is this? _____

16. **Transport proteins** carry glucose into a muscle cell. _____

17. Carbon dioxide molecules move from the lungs where there are **95 units** into the bloodstream where there are only **25 units** (not proteins involved). _____

18. Sodium ions are **pumped** out of red blood cell from an area with **35 ions** to an area with **125 ions**. What type transport is this? _____