Cell Transport Review Worksheet

Match the term with its correct description:

a. Energy
b. Facilitated diffusion
c. Endocytosis
d. Passive transport
e. Active transport
f. Exocytosis

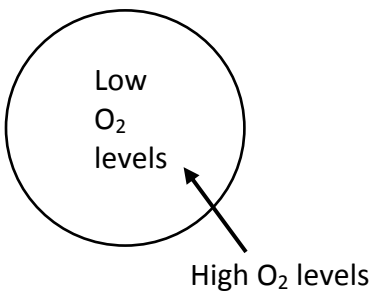
_____ 1. Is used during active transport but not passive transport
_____ 2. Process by which a cell takes in material by forming a storage container around it
_____ 3. Particle movement from an area of higher concentration to an area of lower concentration
_____ 4. Process by which a cell releases water from a storage container
_____ 5. A form of passive transport that uses transport proteins
_____ 6. Particle movement from an area of lower concentration to an area of higher concentration

Match the term with its correct description:

a. Transport protein
b. Active transport
c. Diffusion
d. Passive transport
e. Osmosis
f. Endocytosis
g. Exocytosis
h. Equilibrium

_____ 7. The diffusion of water through a cell membrane
_____ 8. The movement of substances through the cell membrane without the use of energy
_____ 9. Used to help substance enter of exit the cell membrane
_____ 10. When energy is required to move materials through a cell membrane
_____ 11. When the molecules of one substance are spread evenly throughout another substance to become balanced
_____ 12. A vacuole membrane fuses (becomes a part of) the cell membrane and the contents are released
_____ 13. The cell membrane forms around another substance, for example, how the amoeba gets its food
_____ 14. When molecules move from areas of high concentration to areas of low concentration

Label the diagrams of cells using the following terms: diffusion, facilitated diffusion, active transport, osmosis, equilibrium. The arrows show the direction of transport. Terms may be used more than once.



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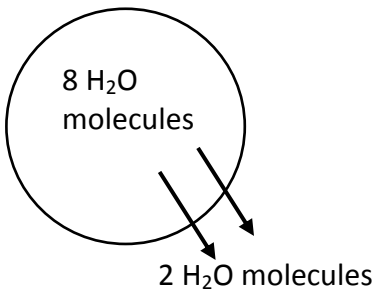

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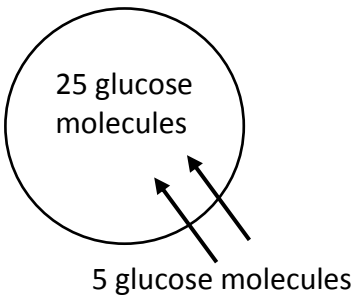

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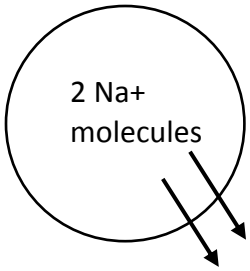
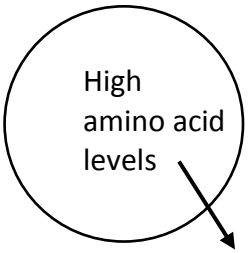
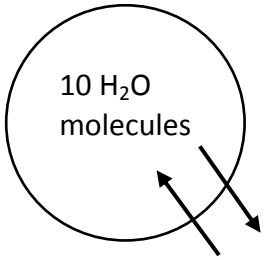


8 Na+ molecules



Low amino acid levels



10 H_2O molecules

Osmosis Review

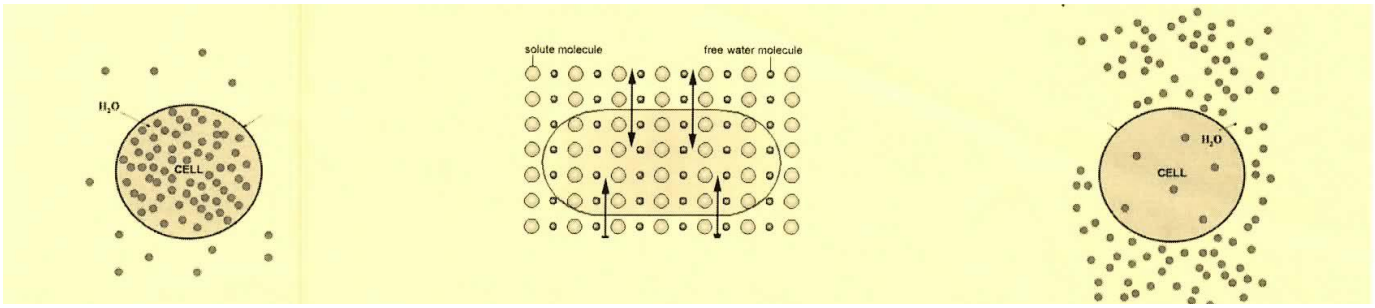
1. Complete the table by checking the correct column for each statement:

Statement	Isotonic Solution	Hypotonic Solution	Hypertonic Solution
Causes a cell to swell			
Doesn't change the shape of a cell			
Causes osmosis			
Causes a cell to shrink			

2. The diagrams below show the concentration of water and salt inside the cell and the concentration of water and salt surrounding the cell. Complete the sentences below by comparing the concentration of the water inside the cell and the concentration outside the cell. Then, draw an arrow(s) on the diagram to show the direction of water movement.

Cell and Environment	Questions
5% NaCl 95% H2O 95% NaCl 5% H2O	a. Water will flow _____ (into the cell, out of the cell, in both directions) b. The cell will _____ (shrink, burst, stay the same)
5% NaCl 95% H2O 5% NaCl 95% H2O	a. Water will flow _____ (into the cell, out of the cell, in both directions) b. The cell will _____ (shrink, burst, stay the same)
95% NaCl 5% H2O 5% NaCl 95% H2O	a. Water will flow _____ (into the cell, out of the cell, in both directions) b. The cell will _____ (shrink, burst, stay the same)

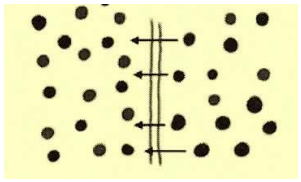
3. Label each diagram with the correct environmental solution name: *Hypotonic, Hypertonic, Isotonic*



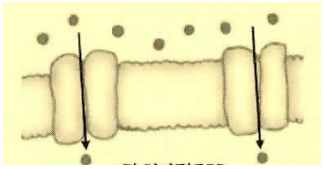
_____ _____ _____

Additional Cell Transport Review

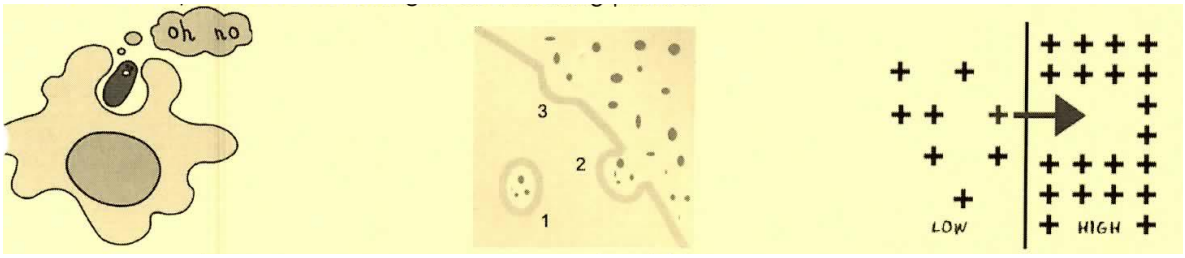
4. Which type of transport is moving from a high to a low concentration? _____



5. Which type of transport uses a transport protein to move particles across the membrane from high to low concentration? _____



6. Describe the processes occurring in the following pictures:



_____ _____ _____