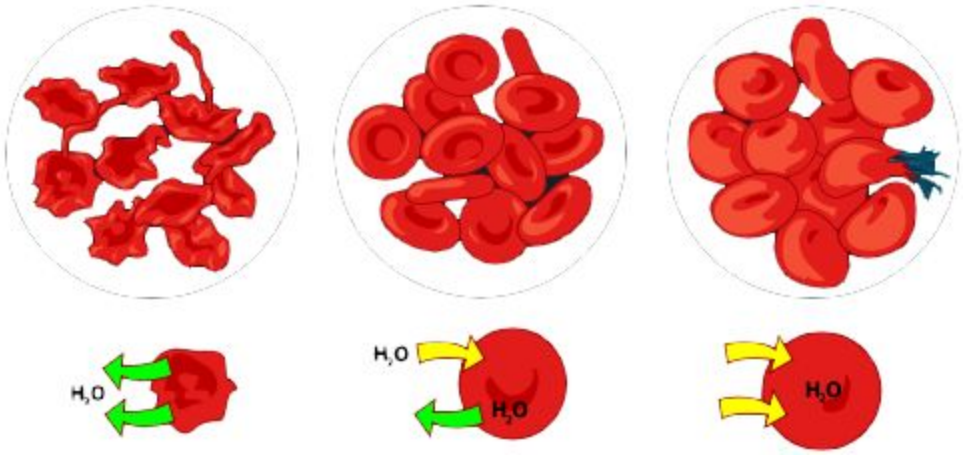
Name:_____

Chapter Review; Diffusion and Osmosis: What do you Know?

1. Label the three images below as isotonic/ hypertonic/ hypotonic (with regard to the solution the cell is placed in)



2. Movement across the cell membrane that does not require energy is called
[active / passive] transport.

3. The difference in the concentration of a substance across a space is called a concentration [equilibrium / gradient].

4. If there is a concentration gradient, substances will move from an area of high concentration to an area of [equal / low] concentration.

5. The cell membrane is [selectively permeable / impermeable].

6. [Equilibrium / Diffusion] is the simplest type of passive transport.

7. The diffusion of water through a selectively permeable membrane is called [osmosis / diffusion].

8. The direction of water movement across the cell membrane depends on the concentration of free water[molecules / solutions].

9. A solution that causes a cell to swell is called a [hypertonic / hypotonic] solution.

10. Organelles that collect excess water inside the cell and force water out are called
[diffusion organelles / contractile vacuoles]

11. The process of taking material into the cell by infolding the cell membrane is called [endocytosis / exocytosis]

12. In [facilitated / molecular] diffusion, membrane proteins help molecules across the membrane.

13. In diffusion, molecules [spread out / condense]

14. The lipid bilayer describes [a type of transport / the cell membrane]

15. Facilitated diffusion moves substances down their concentration gradient [with / without] using the cell's energy.

STUDY GUIDE

1. Know the parts of a solution (Solvent and solute)
2. Label a cell membrane (bilayer, proteins)

3. Explain what will happen to cells when placed in isotonic, hypertonic, and hypotonic solutions.

4. Know the definition of:

Diffusion
Equilibrium
Osmosis
Isotonic
Hypertonic
Hypotonic
Facilitated diffusion
Endocytosis
Phagocytosis
Pinocytosis
Exocytosis

5. Explain what happens when you place a bag full of starch (solution) into a solution of iodine.