**DIFFUSION/OSMOSIS VIRTUAL LAB**

**View the diffusion animation attached to the website mrgeauvreau.weebly.com for March 13 and answer the questions below.**

1. Is diffusion active or passive transport of molecules across the cell membrane? Passive

2. Wear do molecules move when in solution? From an area of High concentration to an area of Low concentration

3. Eventually the two sides will come to equilibrium. What is equilibrium? Equilibrium means balance, at some point the 2 sides will have the same concentrations of dissolved molecules on either side fo the membrane

4. What happens to the movement of molecules when their temperature is raised? Make sure to click on temperature in the animation.

As temperature increase so does the rate of diffusion, as the dissolved particles become excited

**View the osmosis website located on the website above, directly below the diffusion link. Scroll down to osmosis!**

5. What is osmosis? The Movement of water across a membrane

6. Why are they assuming the large molecules will stay on their own side of the

membrane?

We assume that large molecules are too big to move freely across the membrane.

7. Because molecules will move from one side to another to come to an equilibrium, or

balance of concentration, the water moves from the side with fewer molecules to

the side with a higher concentration of molecules, so the water level on the side with fewer molecules in solution goes goes down.

8. In living things, cells must be in a Isotonic Solution solution where water

leaves and enters the cell at the same time

9. How can osmosis be used to preserve food? Some foods are salted so that bacteria that come in contact will have water leave their cells and they will die; fruits and vegetables are moistened to keep their cells plump

10. Define *dynamic equilibrium:* a state of balance between continuing processes, such as diffusion where concentrations on each side of a cell membrane may become the same but molecules will still difuse across the membrane due to their random movements..