**Diffusion and Osmosis Quiz Review**

**Vocabulary:**

**Diffusion -** the process by which molecules spread from areas of high concentration (lots of it), to areas of low concentration (only a little bit of it).

-When the molecules are even throughout a space - it is called **EQUILIBRIUM**

**Selectively Permeable** –

**Osmosis** –

* Water will move in the direction where there is a high concentration of solute (and hence a lower concentration of water.)

**Why are diffusion and osmosis both considered types of PASSIVE TRANSPORT?**

A simple rule to remember is: **SALT SUCKS! (Basically:** Salt is a solute, when it is concentrated inside or outside the cell, it will draw the water in its direction.)

**What would happen if I put a saltwater fish in fresh water? Why?**

**Why did the lettuce take up water in cold water?**

**Type of Solutions:**

Isotonic (**"ISO"** means same):

Hypotonic ("**HYPO"** means less):

Hypertonic (**"HYPER"** means more):

**What happens if you put a red blood cell in salt water?**

**What is the solution called?**

**In fresh water:**

**What is the solution called?**

**In a solution the same concentration as the red blood cell is:**

**What is the solution called?**

**Why do cells that take up water in a hypotonic environment not explode? (*hint think of the organelle we watched a video on*)**

**Why it is dangerous to drink seawater? What happens to our bodies and why?**

**Surface to Volume Ratio:**

**What is Surface-to-volume ratio?**

**In the Jell-O lab, how did cell size affect the rate of diffusion into and out of a cell?**

**Why did the small cube turn all pink and the large cube only turn pink on the edges?**

**Explain in your own words why cells have to be so small:** *(yes this will be on the test!)*

**What does the semipermeable membrane have to do with it?** (Include info on cell waste, oxygen and nutrients)