**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_ Class Period:\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Diffusion and Osmosis Video Questions:**

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| 1. The below picture represents **diffusion** of molecules. Place the following labels in the diagram**: high concentration**, **low concentration**, and **an arrow** showing the direction that the molecules would travel before equilibrium is reached.   | 2. **Osmosis** is a type of diffusion, but it involves the movement of water. Similar to diffusion, osmosis is the movement of molecules (water molecules if osmosis) from a high concentration to a low concentration. The video clip explains that you can also look at water as moving to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration of **solute** molecules. Why can it also be viewed this way?  |
| 3. **Osmosis Scenario:** The video clip mentioned a disaster scenario of a saltwater fish being placed in fresh water. What would occur if, instead, a freshwater fish was placed in saltwater? Your answer needs to have an **arrow** indicating the direction of water flow in osmosis, a label for “**hypertonic**,” and a label for “**hypotonic**.”  | 4. **Osmosis Scenario:** Fluid movement into the brain after traumatic brain injury can result in dangerous brain swelling. One treatment that can be used in some of these cases is adding a **hypertonic/hypotonic** (circle the correct answer) saline drip. Remember, you are trying to reduce the excessive fluid in the brain. Explain your answer:  |

**Hypertonic, Hypotonic, or Isotonic? Oh My!**

These red blood cells have all been placed in different solutions! Based on their appearance after being placed in these solutions for a period of time, place on each line (A) for **hypertonic**, (B) for **hypotonic**, or (C) for **isotonic**

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| 7. The cells are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ compared to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ solution.  | 8. The cells are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ compared to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ solution.  | 9. The cells are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ compared to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ solution.  |