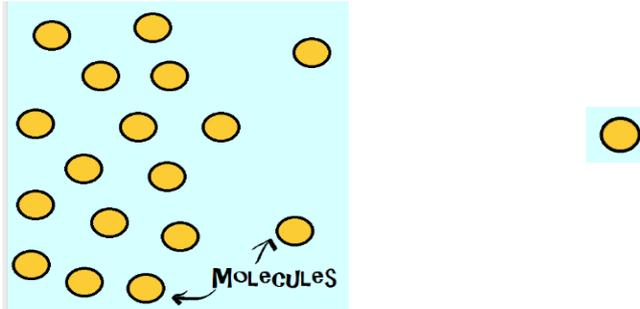


### Amoeba Sisters Video Recap of Osmosis

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.

High concentration -----> Low concentration



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 Higher concentration of **solute** molecules.

Why can it also be viewed this way?

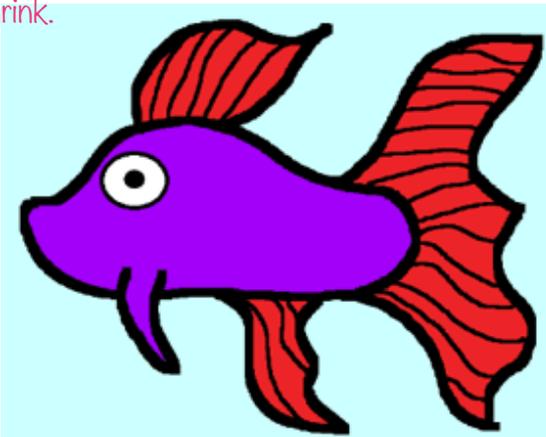
Water wants to balance the concentrations on both sides so it moves toward the solute to try and even things out.

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.”**

The freshwater fish would be being placed in a hypertonic environment which would cause its cells to shrink.



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 saline. You need to decide whether this blank should be the word hypertonic or hypotonic. Remember, you are trying to reduce the excessive fluid in the brain.

Explain your answer:

Hypertonic Saline can help to draw out the excess fluid surrounding the brain which can help reduce pressure and swelling.

