

Diffusion and Osmosis

Name:

Date:

Block:

DIFFUSION:

Classroom:

Remember! The _____ states that particles are always _____!

Diffusion in cold water...

At the beginning...	While it was happening...	At the end...
		

Diffusion in hot water...

At the beginning...	While it was happening...	At the end...
		

Why do you think the speed of diffusion was different with cold and hot water?

In the cell membrane...



Animal (Eukaryotic) Cell

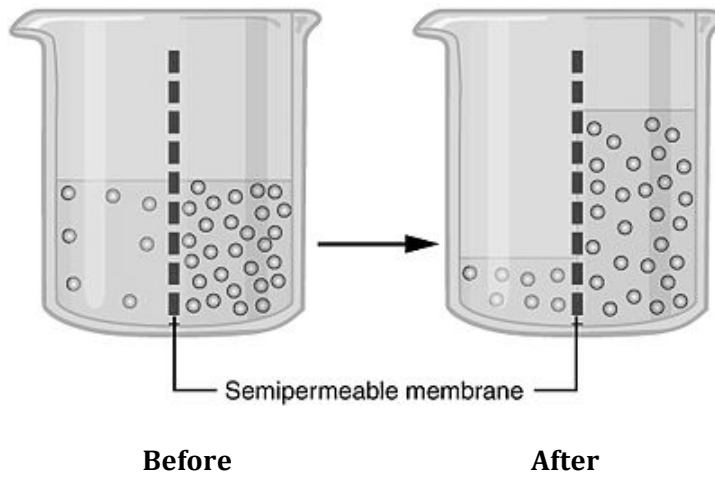
Selectively permeable membrane:

Particles pass across the SPM if there is a greater number on one side than the other side.

OSMOSIS:

The _____ of _____ through a _____.

Consider the diagram below.



Look at the **BEFORE** picture.

- Which side has a higher concentration of particles?
- In order to even out the concentration of particles, which way must the water move?

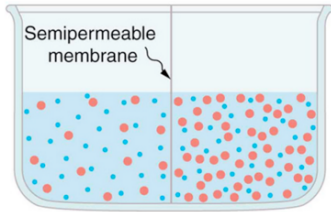
Look at the **AFTER** picture.

- Which side has a higher concentration of particles?
- Which side has more water?

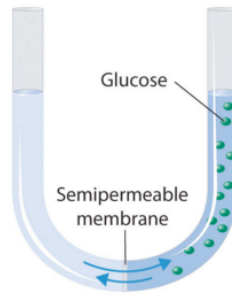
Over time, _____ will be reached where the rates of the movement of water particles will stay the same.

For the pictures below, which direction do you think the water will move? Show your answer with an arrow.

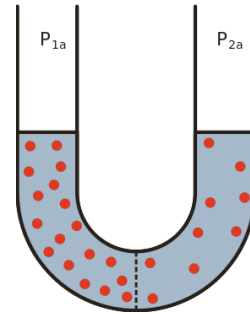
(1)



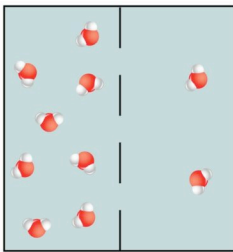
(2)



(3)



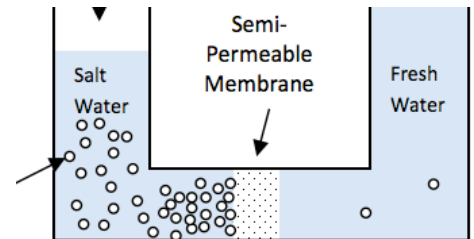
(4)



(5)



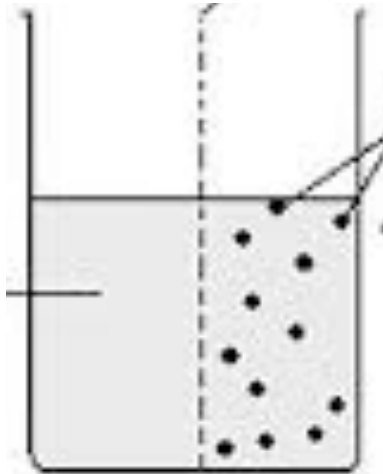
(6)



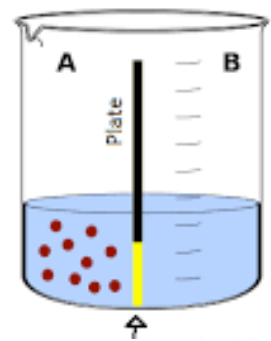
(7)



(8)



(9)



There are three situations where there is a movement of water particles through a membrane.

<p>1. Concentration inside and outside of the cell is the same.</p> <p>Inside = Outside</p>	<p>Before Osmosis</p>	<p>After Osmosis</p>
<p>2. Concentration of particles inside the cell is higher than the solution outside the cell.</p> <p>Inside > Outside</p>	<p>Before Osmosis</p>	<p>After Osmosis</p>
<p>3. Concentration of particles inside the cell is lower than the solution outside the cell.</p> <p>Inside < Outside</p>	<p>Before Osmosis</p>	<p>After Osmosis</p>