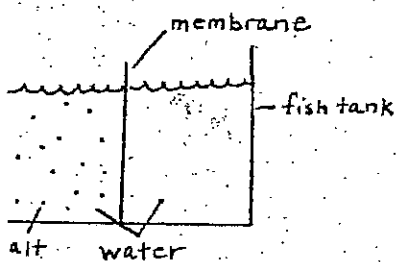


DIFFUSION

Cell membranes are semi-permeable, which means that some substances are able to move across membranes and some substances are not. Substances move across membranes so that they can create a balance with their environment. Substances such as water and salt are able to pass through membranes. Sugar molecules and protein molecules are not able to pass through membranes. This is because sugars and proteins are too large to fit through the channel proteins in the cell membrane.



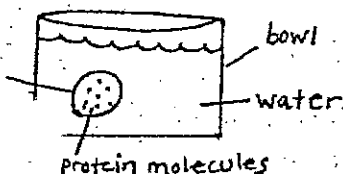
In this solution:

What is the solvent? _____

What is the solute? _____

Which way will the water move? _____

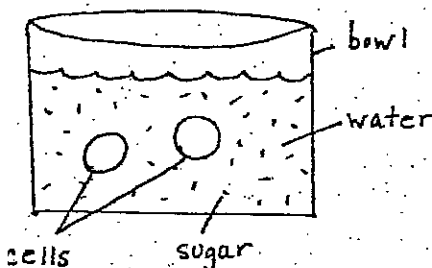
Which way will the salt move? _____



Is this solution hypotonic, hypertonic or isotonic? _____

Which way will the water move? _____

Will the proteins move? If so, which way? _____



Is this solution hypotonic, hypertonic, or isotonic? _____

In this solution:

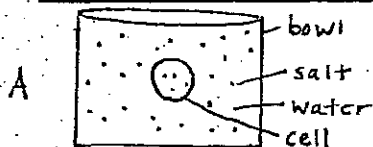
What is the solvent? _____

What is the solute? _____

Which way will the water move? _____

Will the sugar move? If so, which way? _____

Will the appearance of the cells change? _____

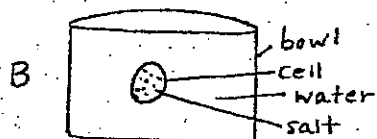


Which picture, A, B, or C, shows a cell in:

A hypertonic solution? _____

A hypotonic solution? _____

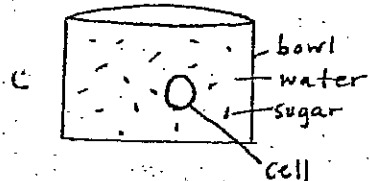
An isotonic solution? _____



In which picture, A, B, or C, would a cell:

Shrivel? _____

Swell? _____



Stay the same size? _____

Types of solutions in the cell

	Then the outside fluid is...	Water diffuses...	Effect on the cell
<p>There is ...</p>			
<p>...lower concentration of dissolved substance inside the cell/high amounts of water</p>		<p>...out of the cell</p>	<p>Cell Swells</p>
<p>...higher concentration of dissolved substance inside the cell/low amounts of water</p>	<p>...Isotonic</p>		
<p>...concentration of dissolved substance inside/ outside the cell</p>			