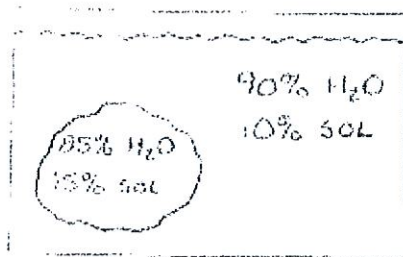


PASSIVE TRANSPORT REVIEW WORKSHEET

1. Diffusion is the process by which molecules move from an area of higher concentration to an area of lesser concentration.
2. Osmosis refers specifically to the diffusion of water.
3. The difference in the concentration of molecules across a space is called a concentration gradient.
4. When the concentration of solutes outside the cell equals the concentration of solutes inside the cell, the environment is said to be isotonic.
5. A solution that contains 15% solutes is 85 % water.

6.

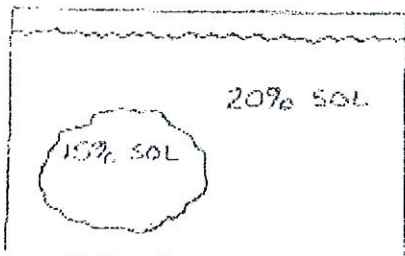


The environment is hypo tonic.

The cell is hyper tonic.

Water will move into the cell.

7.

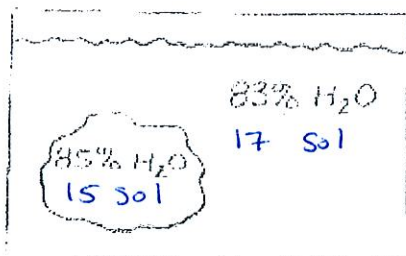


The environment is hyper tonic.

The cell is hypo tonic.

Water will move out of the cell.

8.



The environment is hyper tonic.

The cell is hypo tonic

Water will move out of the cell.

9. A cell containing 15% solutes is placed in a solution that is 12% solutes.

The environment is hypo tonic. The cell is hyper tonic.

Water will move into the cell.

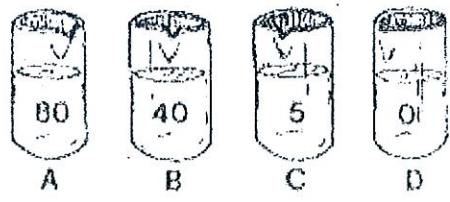
The environment is hypotonic. The cell is hypertonic.
 Water will move out of the cell.

11. A cell with high turgor pressure is probably in a hypotonic environment.

12. Examine the diagram to the right.

Solution B is isotonic relative to the cell.

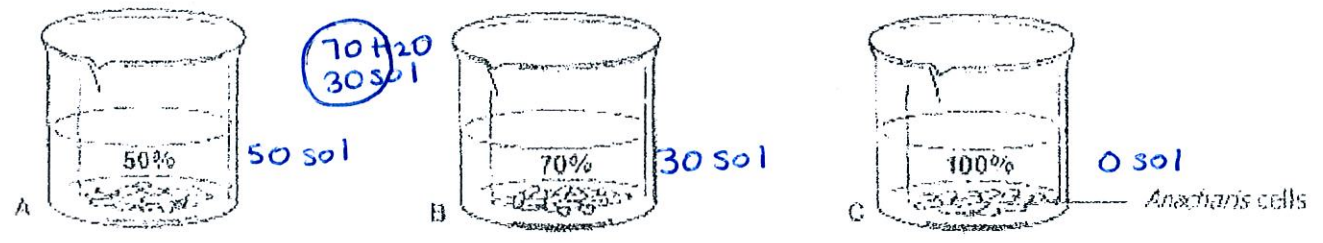
Concentration of Solute Molecules In a Cell and Four Beakers



13. Examine the diagram to the right.

The cell would be most likely to lose water if it were placed in solution A.

The cytosol of *Anacharis* cells is composed of 70% water molecules and 30% solutes.



Anacharis cells are put into a solution that is 50% water

Anacharis cells are put into a solution that is 70% water

Anacharis cells are put into 100% water.

14. The concentration of water in the *Anacharis* cells and their environment is the same in beaker B.

15. The concentration of water in the *Anacharis* cells is higher than the environment in beaker A.

16. The *Anacharis* cells will shrink in beaker A.

17. The *Anacharis* cells will swell in beaker C.

18. The *Anacharis* cells will remain the same size in beaker B.