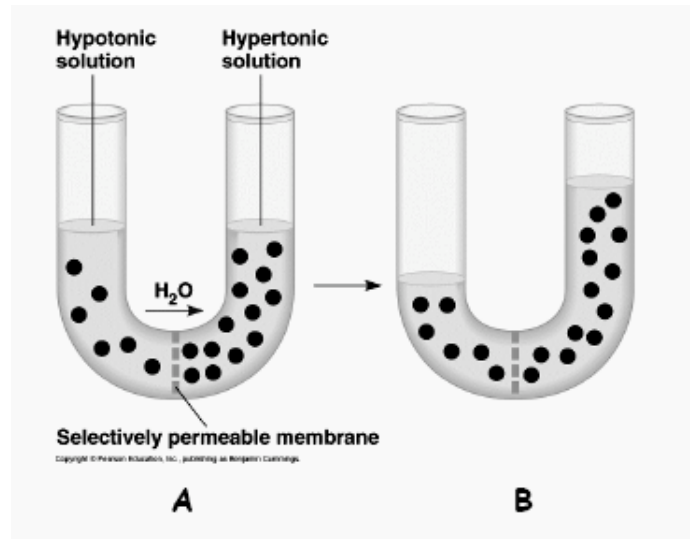


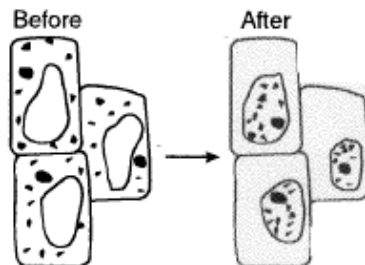
**Biology: In & Out of Cells Unit Review**

Given the following Diagram



1. Define hypotonic, hypertonic and isotonic.
2. Using appropriate terminology (osmosis, diffusion, etc.) describe why "U" tube "B" has an increased volume of water on the right side.

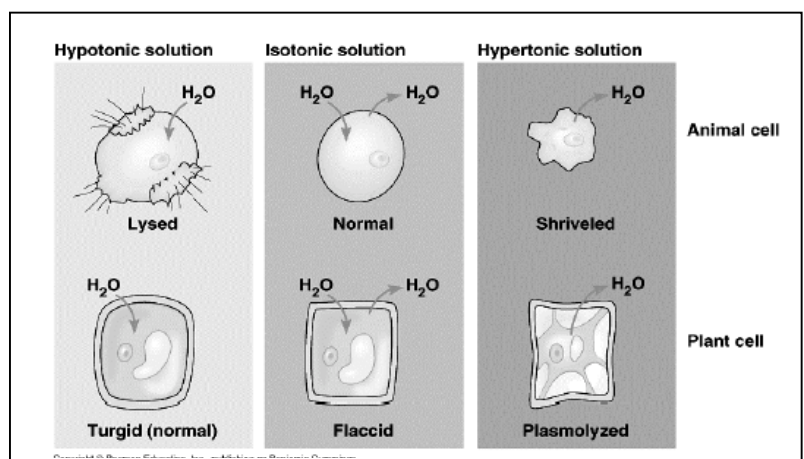
The diagram below represents the change that occurred after a fluid was added to a wet mount of some elodea leaf cells. Notice that all the organelles are "bunched up" in the center after the fluid was added.



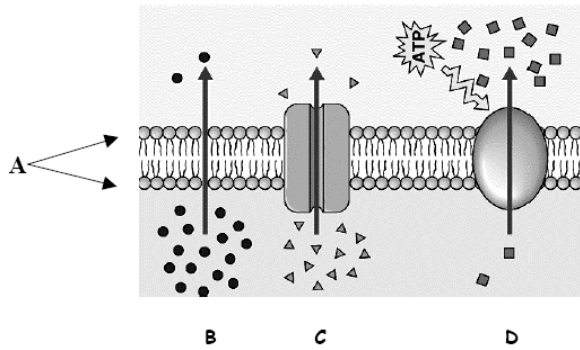
3. Describe in terms of a hypotonic, hypertonic or isotonic solution what probably happened

Given the cells placed in the indicated solutions:

4. Describe what happened to the animal cell in the hypotonic solution:
5. Describe what happened to the animal cell in the hypertonic solution:
6. Describe what happened to the plant cell in the hypertonic solution:
7. Which solution is best for the plant cell and why:
8. Which solution is best for the animal cell and why:



The following diagram is of a cell membrane. Answer the questions that follow:



The inside and outside of the cell membrane is represented by "A" in the above diagram.

9. Describe the position of the "head" and the "tail" in terms of hydrophobic and hydrophilic.

10. What forms of transport do B, C and D represent?