

Why is it important?

Cells are the basic unit of life. If we can understand cells, we can understand life's processes

Cell Membrane

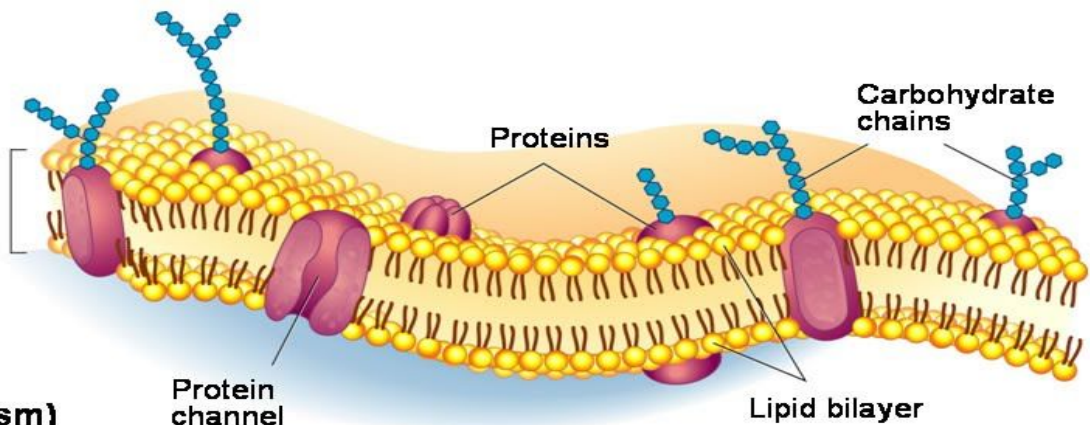
1. Is the outside boundary of each cell
2. Also called a phospholipic bilayer
3. Is selectively permeable

For videos and full notes, go to Luzierscience.weebly.com - ch. 7

Outside
of cell

Cell
membrane

Inside
of cell
(cytoplasm)



Each organelle in a eukaryotic cell has a specific function for the cell. It is similar to organs in your body having specific functions for your body

The Effects of Osmosis on Cells		
Solution	Animal Cell	Plant Cell
Isotonic: The concentration of solutes is the same inside and outside the cell.	Water in → Water out	Water in → Water out Vacuole Cell wall Cell membrane
Hypertonic: Solution has a higher solute concentration than the cell.	Water out	Water out
Hypotonic: Solution has a lower solute concentration than the cell.	Water in	Water in

Effects of Osmosis Cells placed in an isotonic solution neither gain nor lose water. In a hypertonic solution, animal cells shrink, and plant cell vacuoles collapse. In a hypotonic solution, animal cells swell and burst. The vacuoles of plant cells swell, pushing the cell contents out against the cell wall. **Predicting** What would happen to the animal cell in the isotonic solution if it were placed in pure water?