

Cell Theory

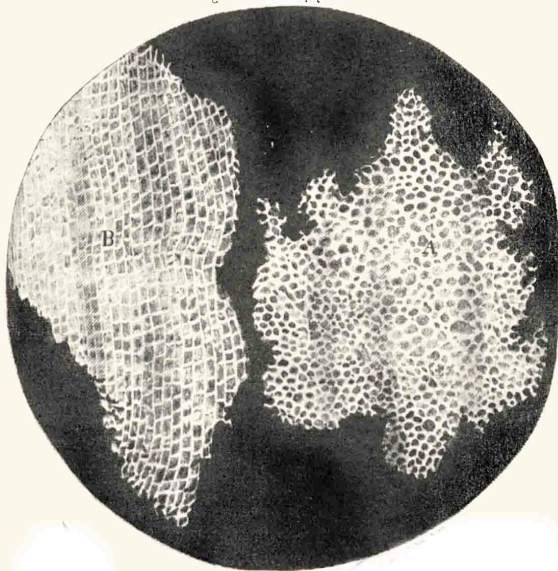
The basic unit of life is the cell

All living organisms are made of cells

All cells come from cells

Drawing of Cork Cells

by Robert Hooke



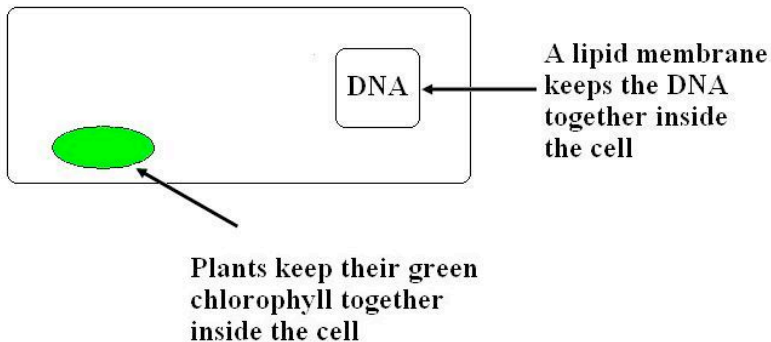


Outside of cell is mostly water

**Inside of cell is
mostly water**

**← A thin layer of
lipid surrounds
the cell**

There are lipid membranes inside of certain cells too



Notes



Membranes are made of lipids

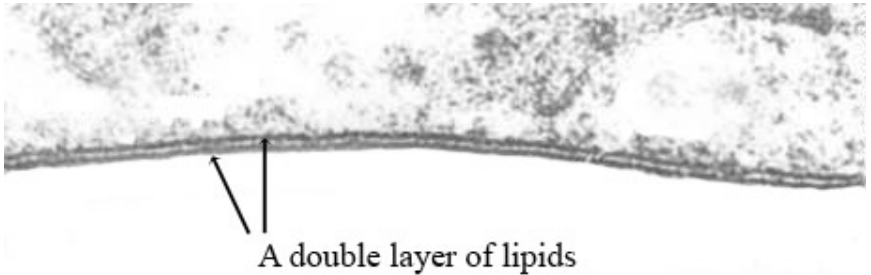
The inside of a cell is mostly water

Lipids are not soluble with water

Oils, waxes, and fats are examples of lipids

Lipids are 'hydrophobic', meaning they dislike water

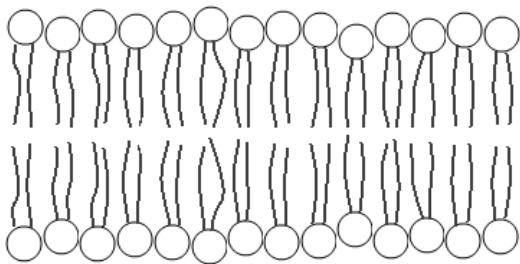
Cell Membrane is a Lipid Bilayer



The Cell Membrane

Lipid Bilayer

Outside the Cell

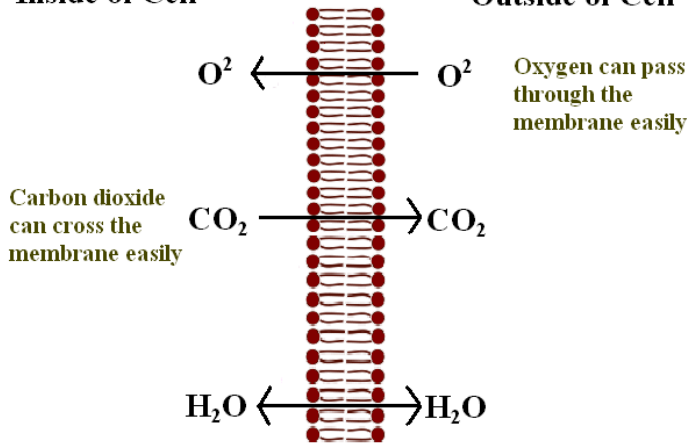


Inside the Cell

What can Pass Through the Membrane?

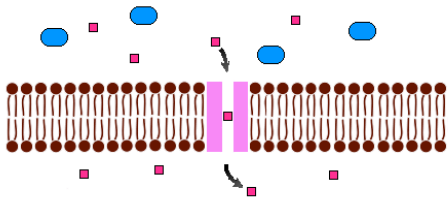
Inside of Cell

Outside of Cell



Water can easily pass through the membrane in both directions

Selective Permeability



Inside the cell

- The blue molecules don't have the right shape to fit into the protein channel
- The red molecules fit perfectly in the channel, and can enter the cell