

Major Components of the Cell

All Organisms can be classified into 3 domains:

- Bacteria
- Archaea
- Eukarya

Each w/ their own distinct cells

However, these are the organelles common in ALL of them

#1) - Plasma Membrane

- Double-membrane, selective barrier separating cell's inside and outside
↳ Rich in lipids and proteins

In addition to the membrane, some organisms have a cell wall

Cell Wall in Fungi:

- composed mostly of chitin
- some cells can grow a secondary cell wall

cell walls in plants:

- Made of cellulose and lignin
- Walls are connected by the middle lamella, composed of pectin, calcium, and hemicellulose

#2) - Cytosol

: gel-like substance that organelles are suspended in

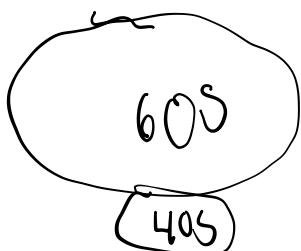
↳ Reducing Environment: makes disulfide bridges difficult

Cytoplasm: Consists of the cytosol AND organelles

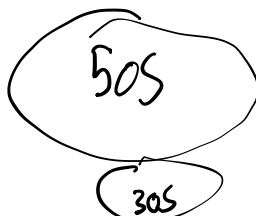
#3) - Ribosomes

: Tiny complexes scattered throughout the cell responsible for creating proteins from the Genetic information from DNA

↳ Categorized by Sedimentation Coefficient (S)



Eukaryotic 80S



Prokaryotic 70S