

• Organelles of the Cell •

Endoplasmic Reticulum (ER) - 2 types: Rough ER, Smooth ER

Rough ER: Has Ribosomes on it. Lipid Components are made/created.

 Transports material throughout the cell. Protein is also created.

Smooth ER: No Ribosomes on it. Also transports material throughout the cell. Makes lipid components for the cell membrane.



Golgi Apparatus (Golgi Body): Modify and sort, and package proteins



from the ER, in and out of the cell.
(Think of UPS, Fedex, Amazon)

Lysosome (Lysol): Cleaning crew of the cell. Disposes of useless organelles, and breaks down waste.



Nucleus (Brain): Main Control center of the cell. Contains DNA/
genetic information, forms Chromosomes.

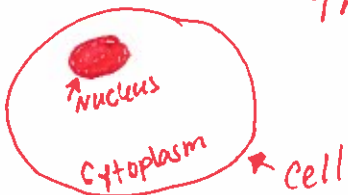


Mitochondria: Powerhouse of the cell. Makes ATP by combining glucose and oxygen. found in muscles that are used the most. Ex: Football players have more mitochondria in their leg muscles.

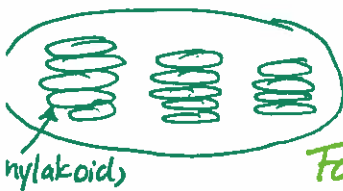


Cytoplasm: Provides support to the internal structure of a cell, transports genetic material; protects organelles.

(Inside body of the cell) Jelly-like material in the cell.

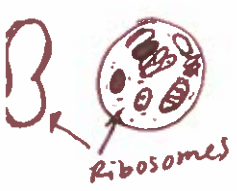


Thylakoids



which allows the plant to make its own food from sunlight. Has thylakoids that assist in photosynthesis and chlorophyll is the green pigment found in the chloroplast
Found in plant cell only! Thylakoids help with light reaction
Hydrolysis ($H_2O \rightarrow O_2$)

Ribosomes: (Think of Ribs \rightarrow they have meat, meat is protein!) Involved in protein



Synthesis by pairing each codon in the mRNA strand to the appropriate amino acid. (makes protein for the cell)
Most numerous organelle

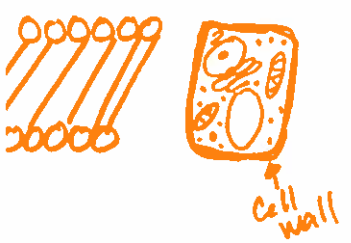
Cell membrane: Protects and organizes the cell. Regulates/controls what enters and exits the cell.



Vacuole (Think of a vacume): Stores nutrients like water and minerals, also stores waste to protect the cell from contamination.



Cell Wall: Protection and structure for the cell



Found in plant cell only!