Cells

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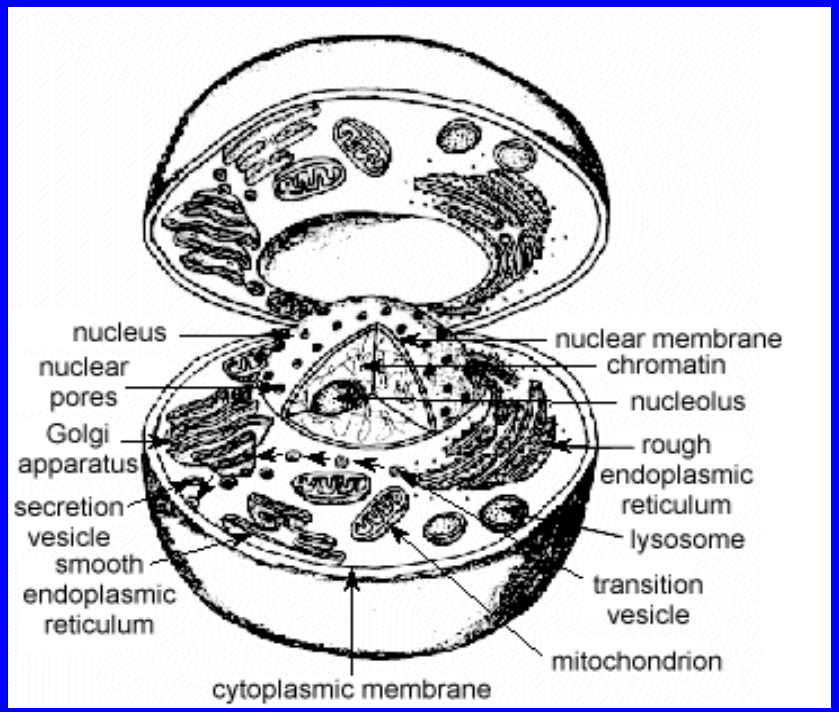
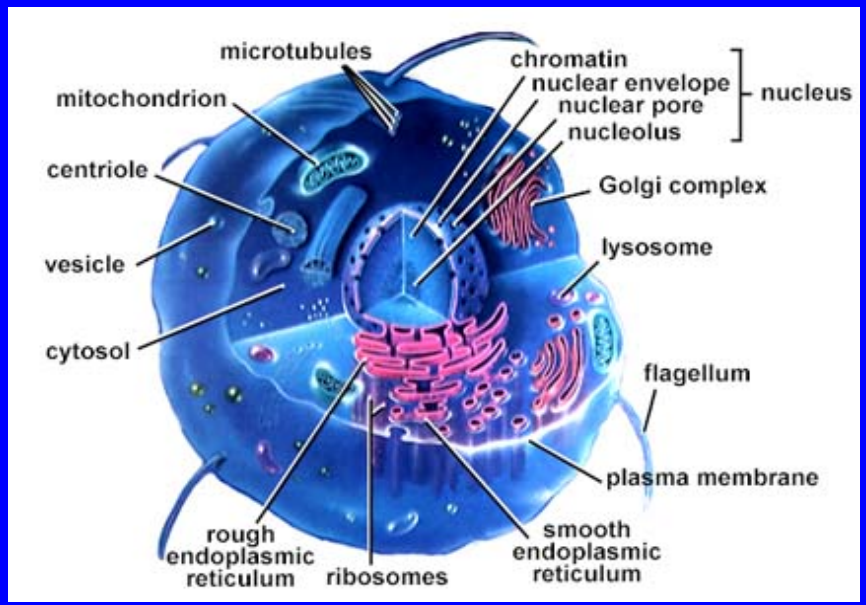


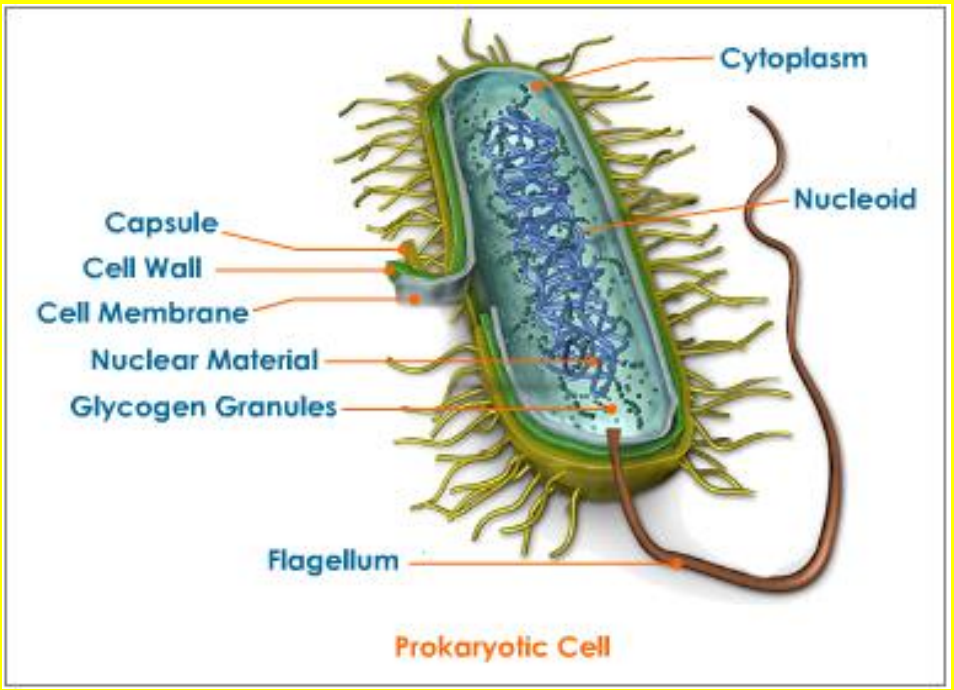
A eukaryote is an organism whose cells contain complex structures enclosed within membranes. The presence of a nucleus gives eukaryotes their name, which comes from the

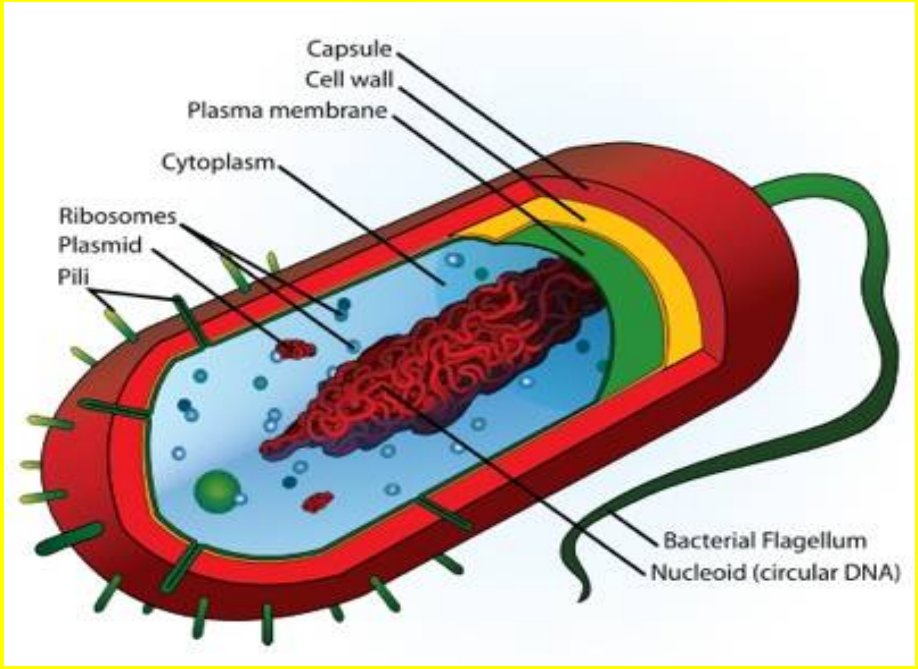
EUKARYOTIC

Cell division in eukaryotes is different from organisms without a nucleus. Eukaryotes appear to be monophyletic. They make up 1 of the 3 domains of life. The 2 other domains are the bacteria and archaea



Prokaryotic Cell



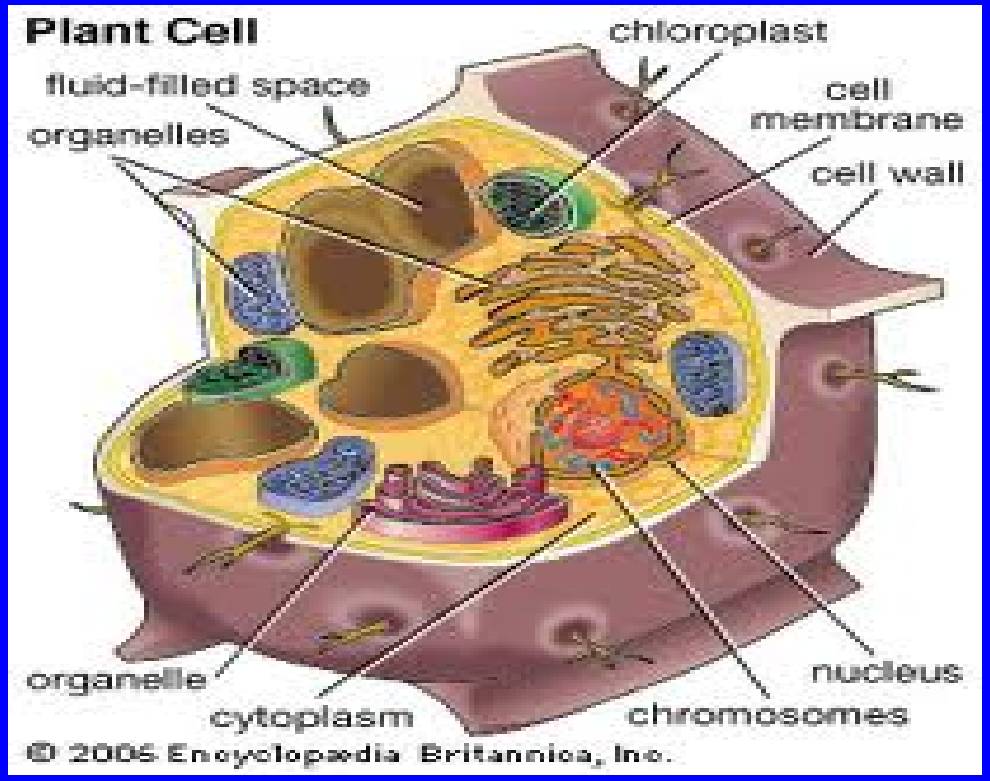


The prokaryotes are a group of organisms that lack a cell nucleus or any other organelles. The prokaryotes are divided into two domains: the bacteria and the archaea. The prokaryotes has an absence of a nucleus.

Plant Cells

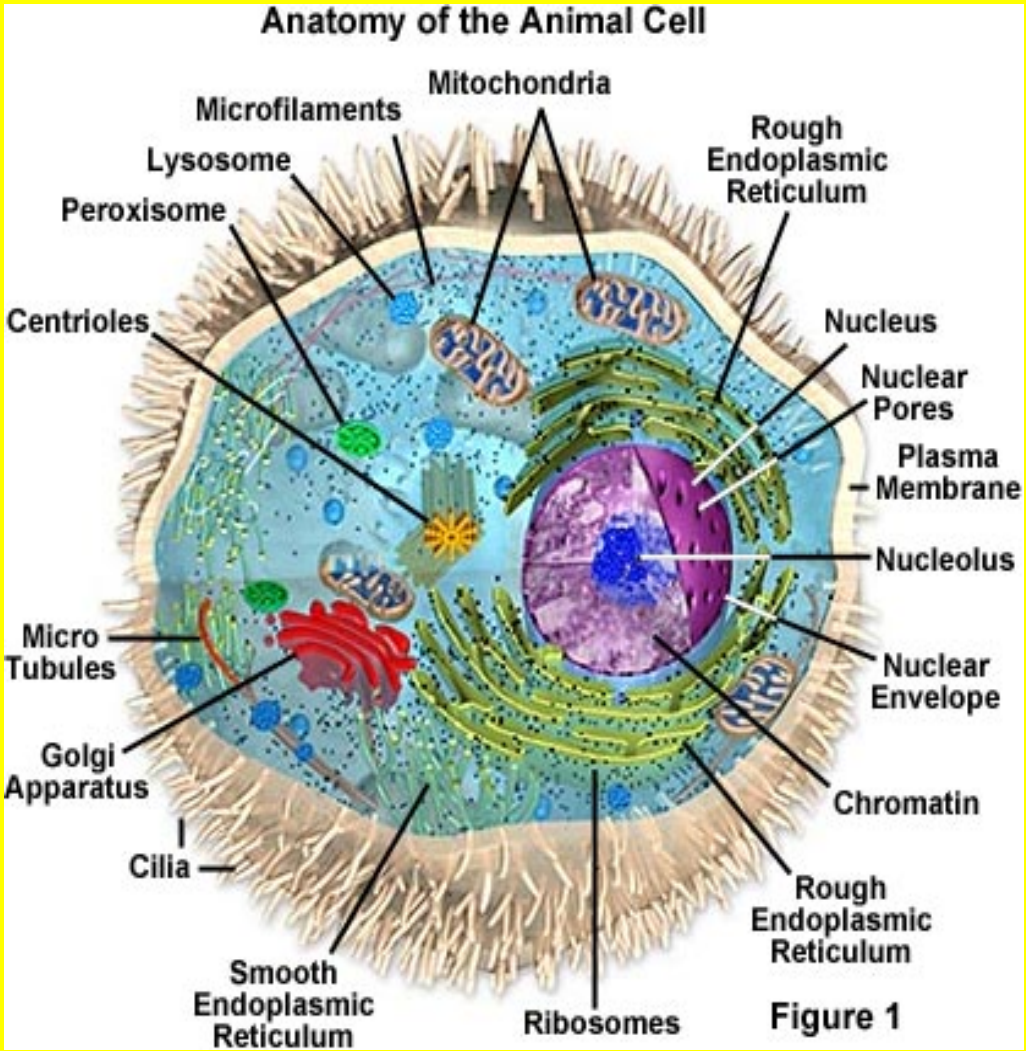
Plant cells are eukaryotic and have many of the structures found in animal cells.
Plant cells have plastids, cell walls, and large vacoules.
Plant cells differ from animal cells in lacking:

- centrioles
- intermediate filaments



Unlike animal cells, plant cells are stationary. Plant cells make their own food in a process called photosynthesis.

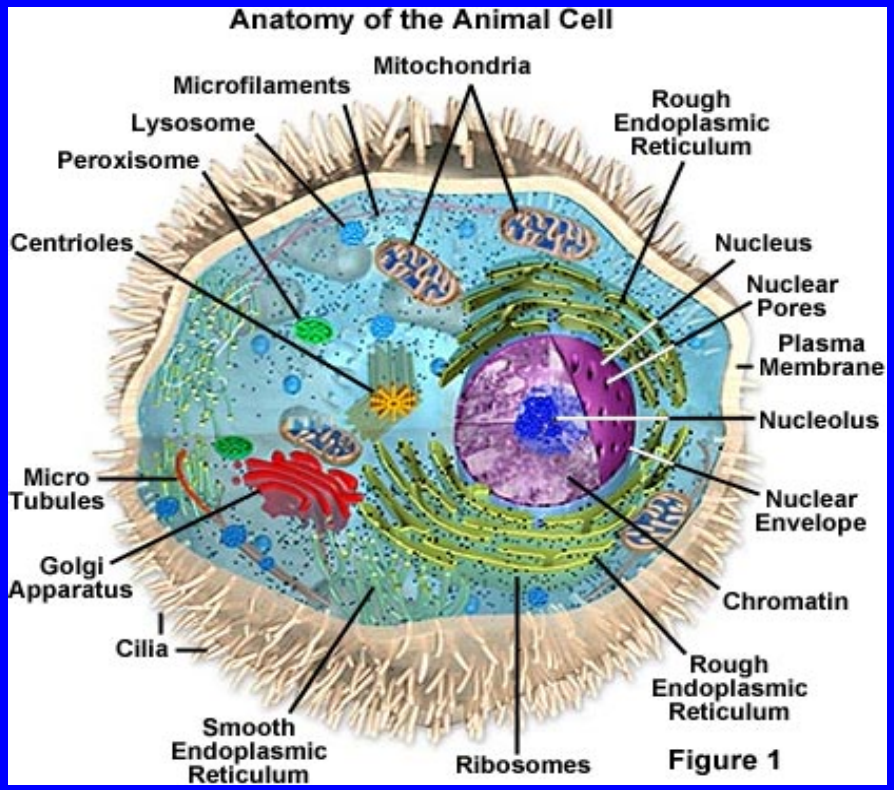
Animal Cells



Animal cells are the cells found in animals. You are made up of trillions of animal cells. Animal cells don't make up their own food like the plants. The animals find the food.The animal cells use the food to make the energy they need to reproduce and carry out basic functions. This process takes place in a part of the cell called the mitochondrion.

Cells

A cell is like a city. Both have vital parts. When one thing is missing everything will fall apart.



Organelle

An organelle is a little part of a cell that has its own function.

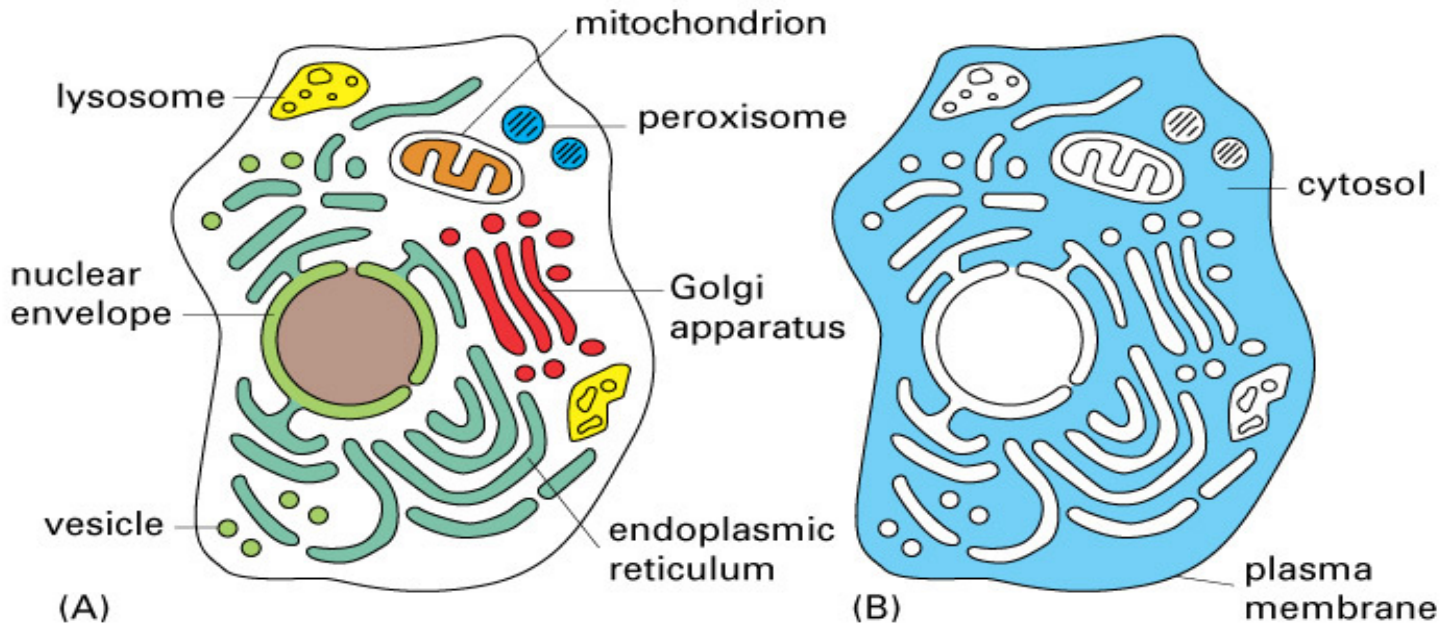
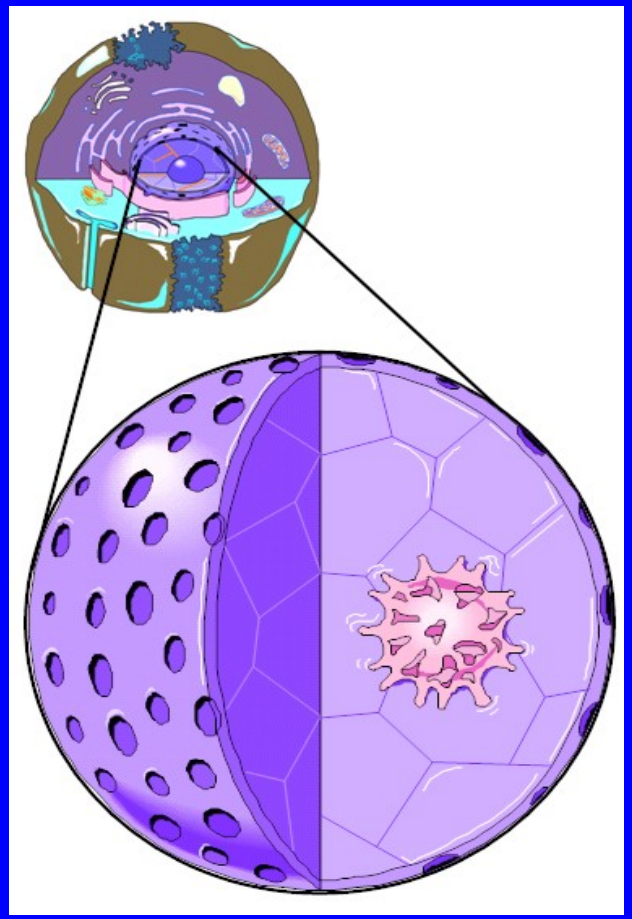


Figure 1-24 Essential Cell Biology, 2/e. (© 2004 Garland Science)

Nucleus

A nucleus is the center of a cell. It has the cell's DNA in it.

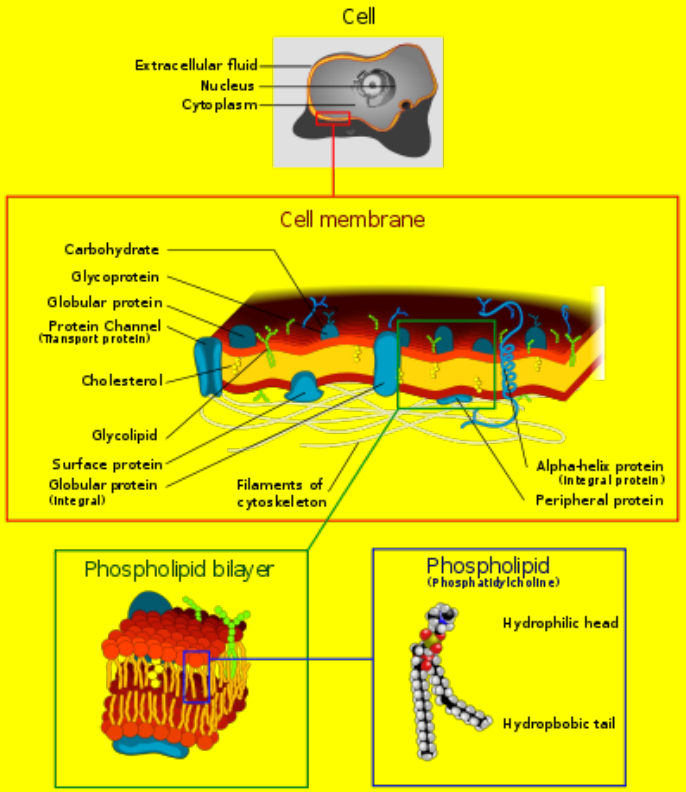


A nucleus is like city hall. Its the center of a city, as a nucleus is the center of a cell. All the information goes through city hall and the nucleus.

Cell Membrane

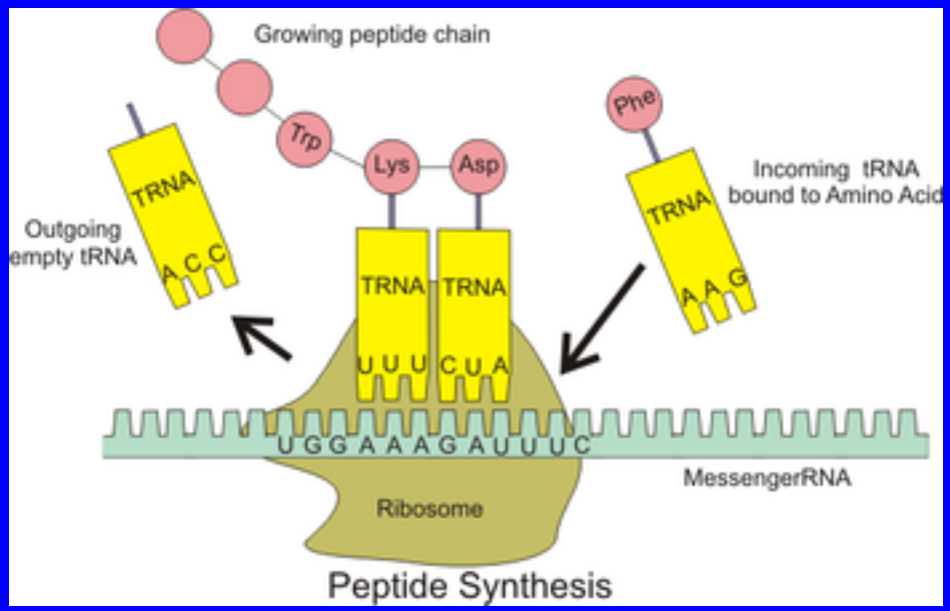
A cell membrane regulates all that enters and leaves a cell.

A cell membrane is like the police. Both are in charge.



Ribosome

Ribosomes make proteins for the cell.

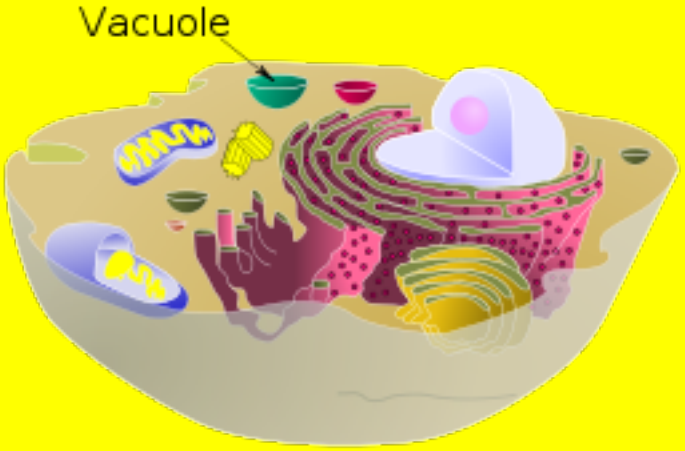


Ribosomes are the food producers of the cell. They are the Gordon's of the cells.

Vacuoles

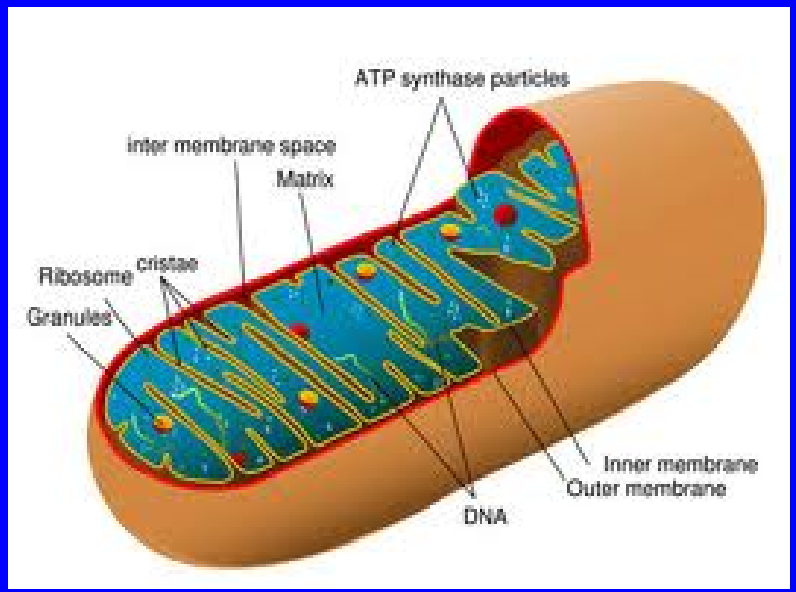
Vacoules have enzymes. They also store things in them such as water.

Vacuoles are the water towers. Both vacuoles and water towers store water in them.



Mitochondria

Cellular respiration takes place here. They make most of the cell's ATP, which is used as energy.

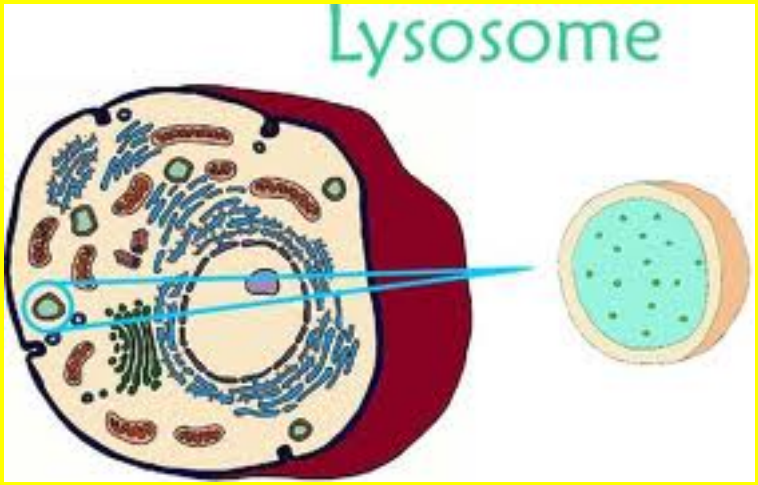


Mitochondria are like power plants. Both mitochondria and power plants produce energy.

Lysosome

Lysosomes contain enzymes that break up materials and cellular debris.

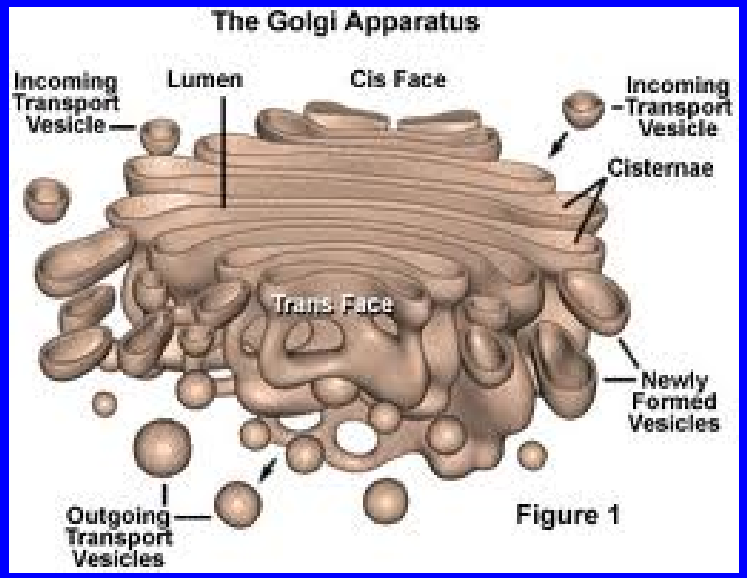
Lysosomes are like garbage men. They both clean up messes.



Golgi Apparatus

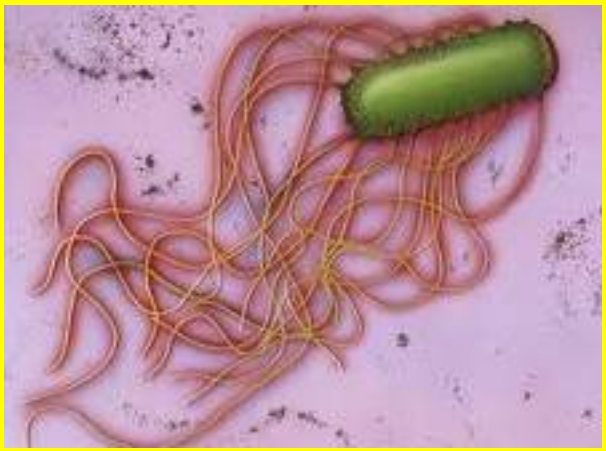
Golgi apparatus disperses proteins.

Golgi apparustus is like a truck or train delivering cargo.



Flagella/Cilia

Its the tail. It allows the cell to move.

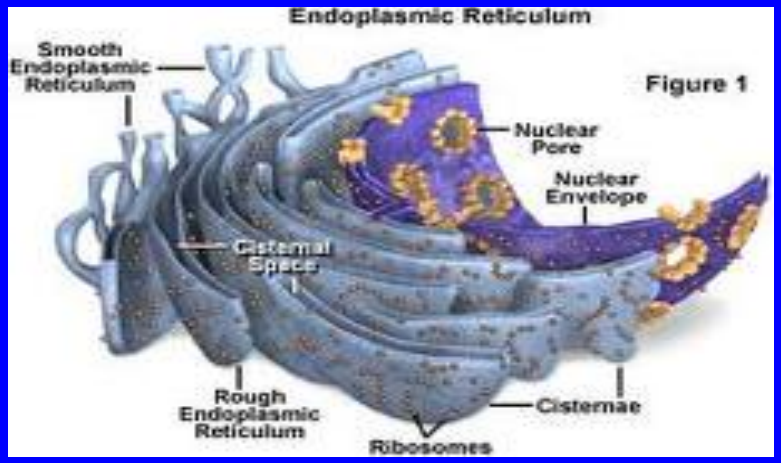


Cilia is like an airplane. They both allow things to travel.

Endoplasmic Reticulum

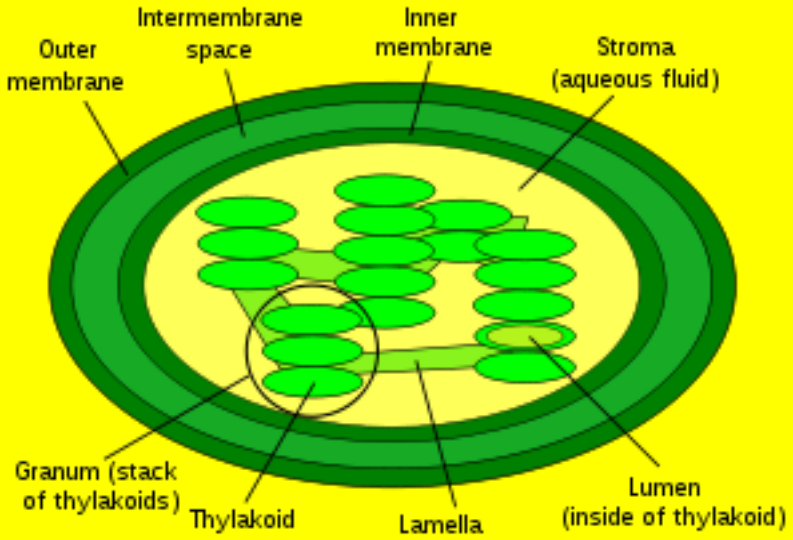
The endoplasmic reticulum is a series of membranes connected within the cell. Tubules and vesicles are connected.

Its like a highway.



Chloroplast

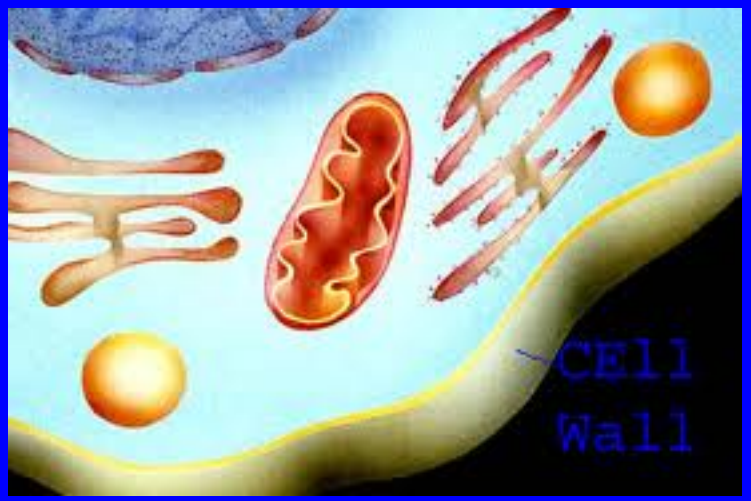
Photosynthesis takes place here.



Chloroplast is a fast food restaurant. Such as mcdonalds or burger king.

Cell Wall

Its provides structural support and protection.



A cell wall is a border. It won't let stuff in and lets on the stuff thats in stay in. Its like the border of Mexico.