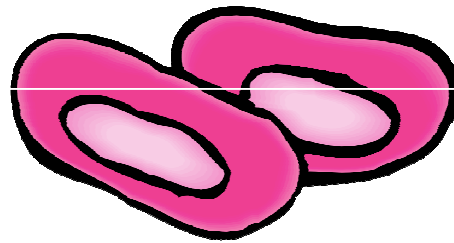
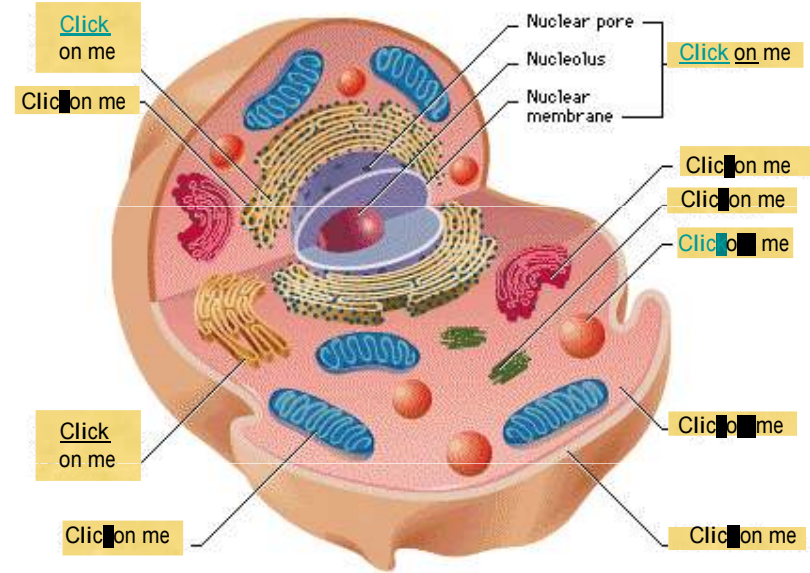


Parts of the Cell

In the cell there are many organelles, or little organs. These carry out many of the life's functions like your organs. Please move on to the next slide and click on the boxes to see the names and functions of the cells organelles.



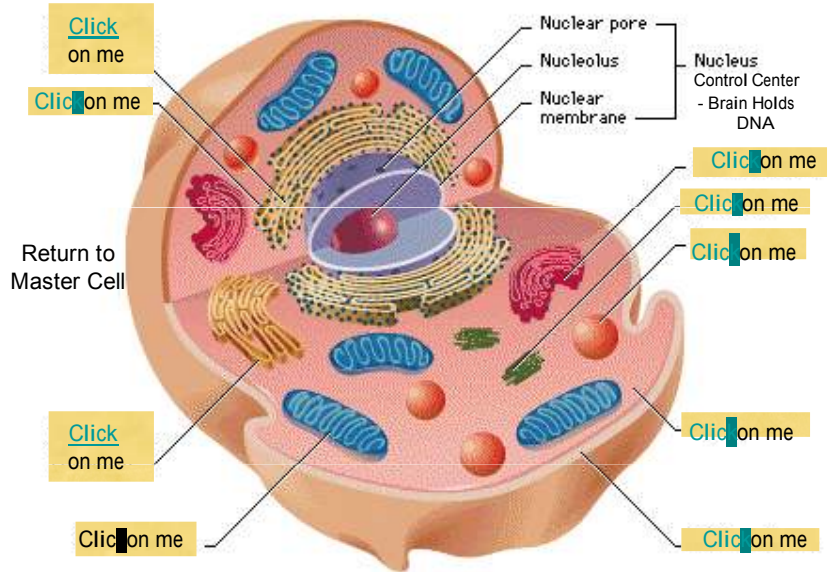
Red Blood Cell



Click on a box to see its name and function

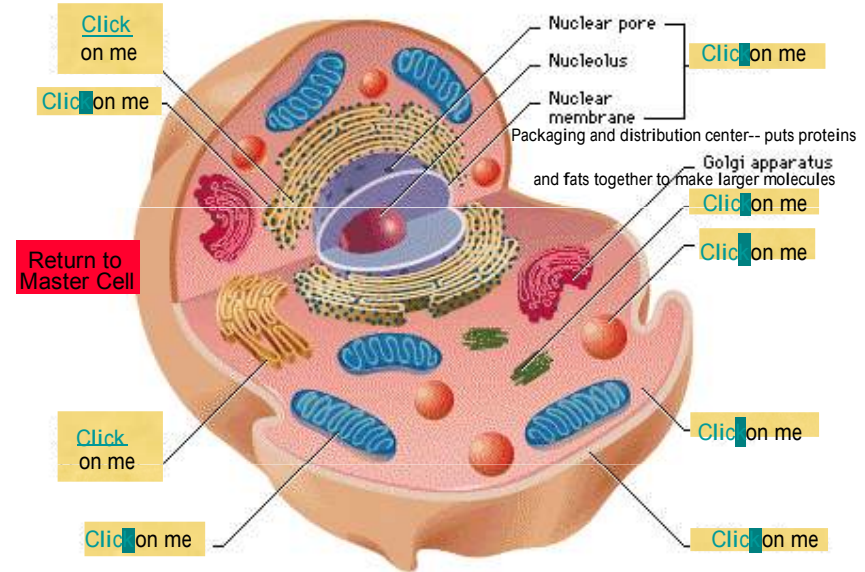
Parts of an animal cell

Click on me to go to plant cell



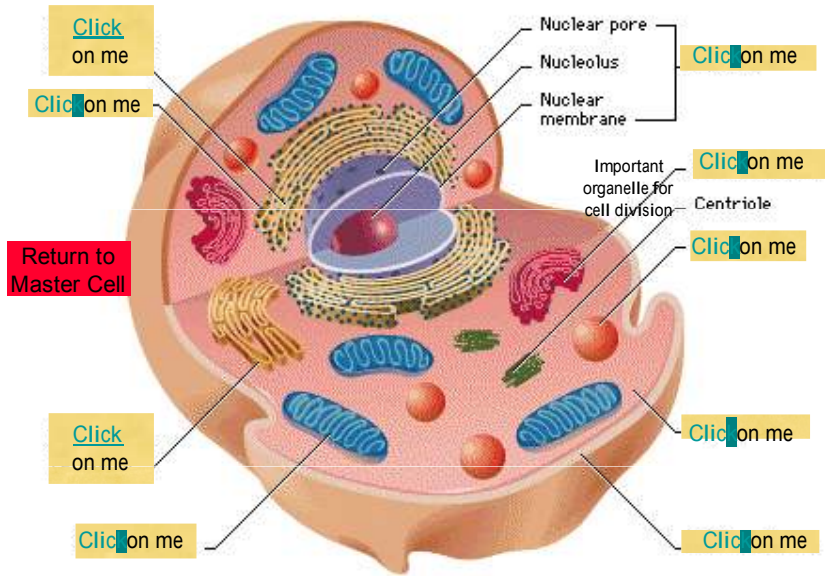
Click on a box to see its name and function

Parts of an animal cell



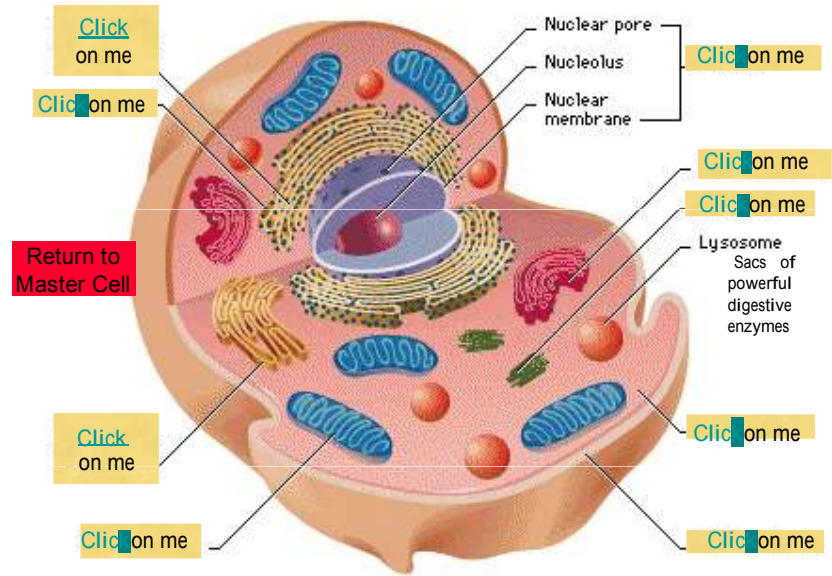
Click on a box to see its name and function

Parts of an animal cell



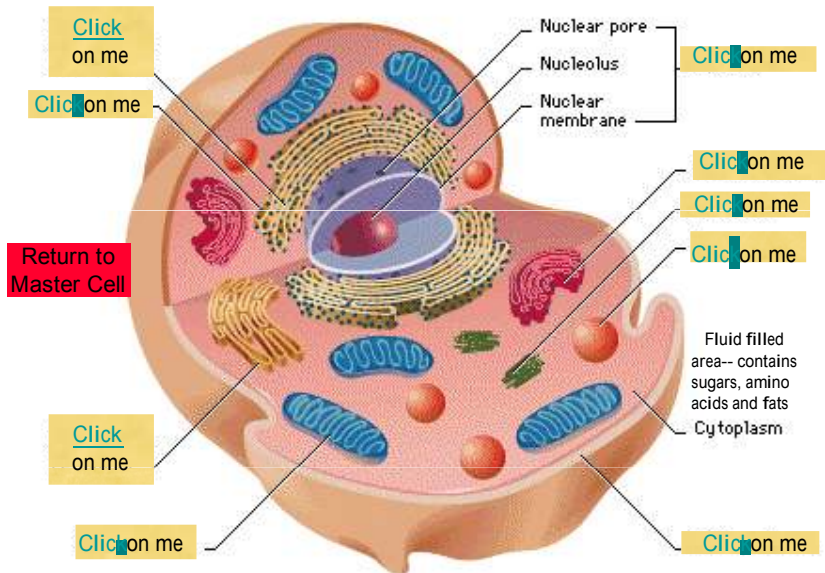
Click on a box to see its name and function

Parts of an animal cell



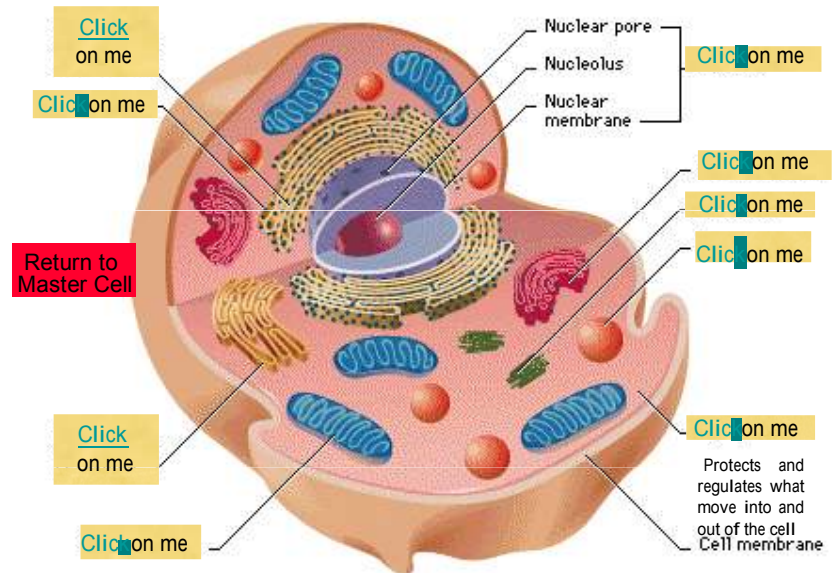
Click on a box to see its name and function

Parts of an animal cell



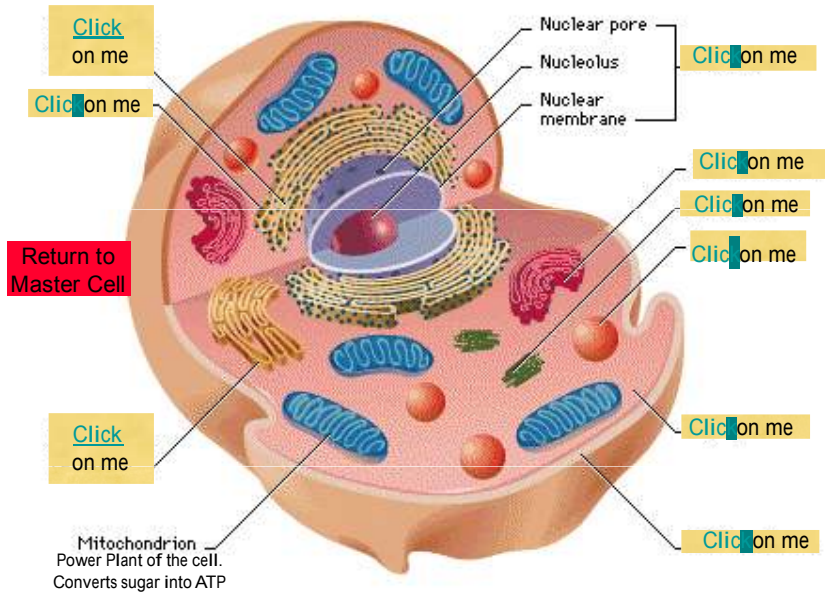
Click on a box to see its name and function

Parts of an animal cell



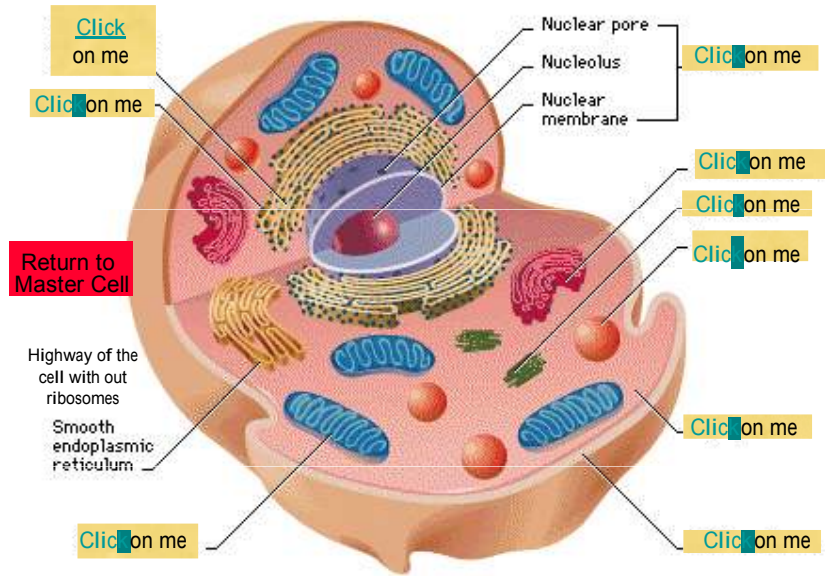
Click on a box to see its name and function

Parts of an animal cell



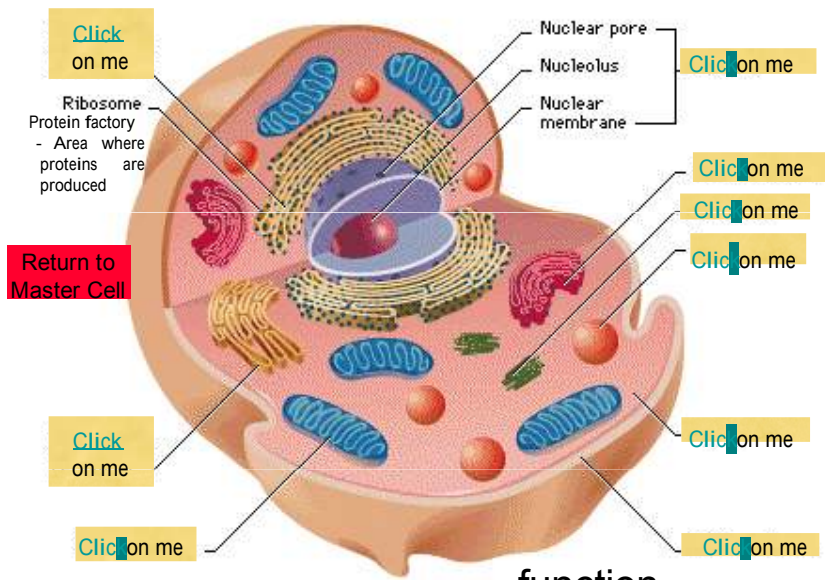
Click on a box to see its name and function

Parts of an animal cell

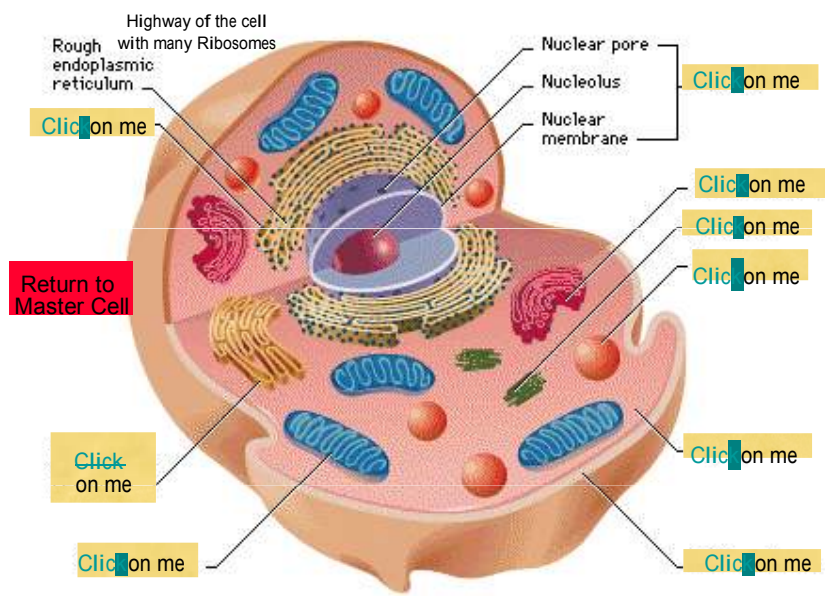


Click on a box to see its name and function

Parts of an animal cell



Click on a box to see its name and function



Parts of an animal cell

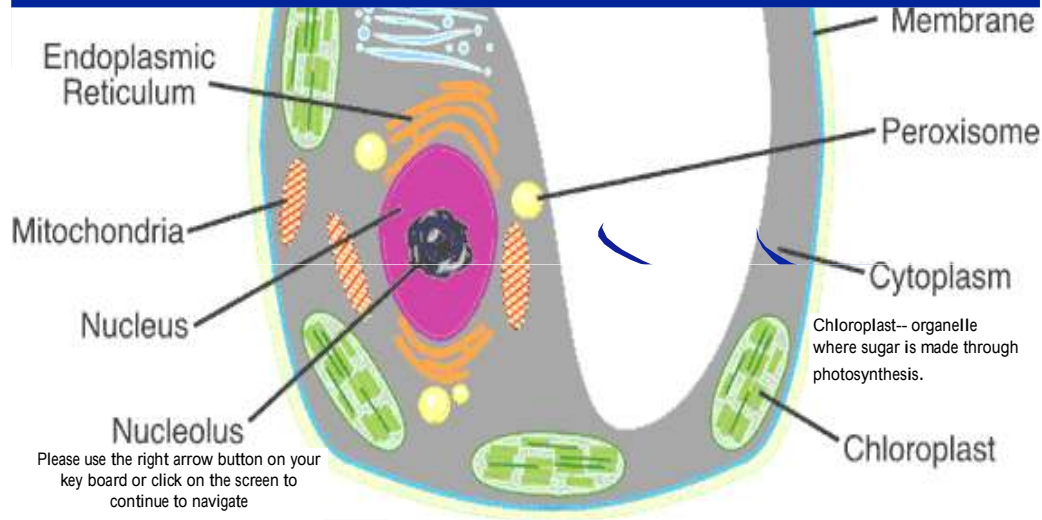
Click on a box to
see its name and
function

Parts of an
anima
l cell

Here are three more organelles that only plant cells have.

Cell Wall--rigid wall made of cellulose

Vacuole -- large area for storage of carbohydrates



Cell Structures



Cell Boundaries

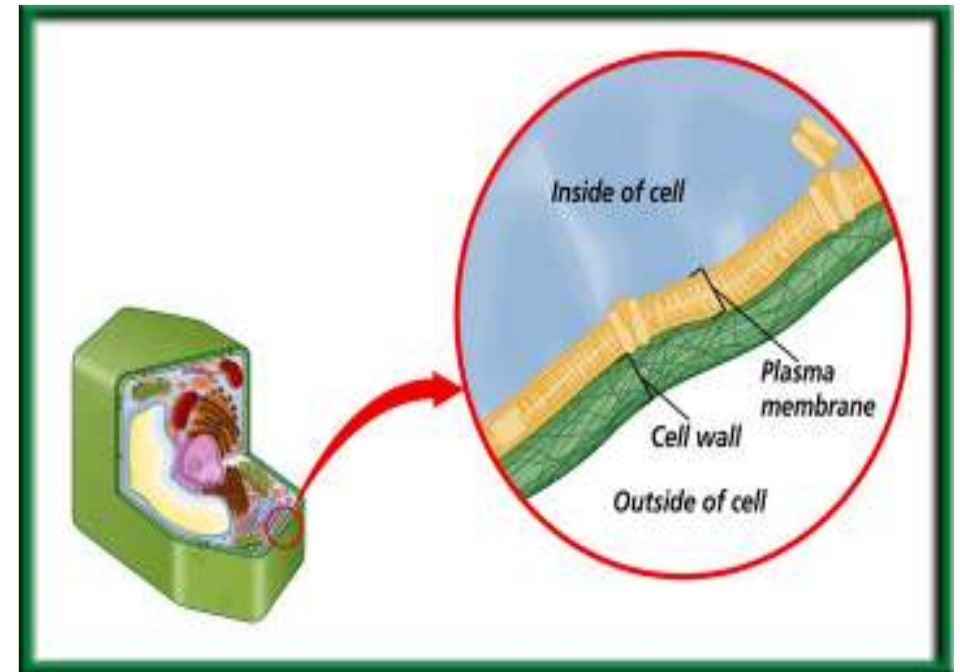
- ϕ Plasma Membrane = a flexible boundary that is selectively permeability. It helps to maintain homeostasis.
- ϕ plants, bacteria, and fungus have an additional boundary--the cell wall

Cell Wall

- ϕ rigid structure located outside of the plasma membrane
- ϕ provides support & protection
- ϕ not flexible
- ϕ composed of cellulose (a polysaccharide)
- ϕ porous--therefore molecules can still flow in and out of the cell

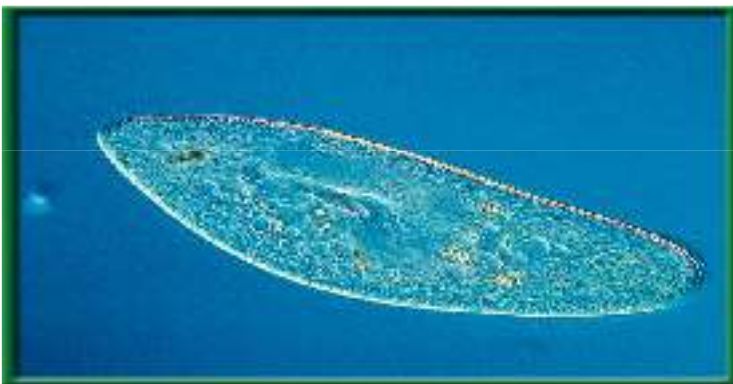
Nucleus and Cell Control

- ⌘ Nucleus = control center of a eukaryotic cell
- ⌘ surrounded by a double membrane (nuclear envelope), perforated with nuclear pores
- ⌘ contains chromatin-strands of uncondensed DNA. When condensed it forms chromosomes
- ⌘ holds the directions for making proteins



Cytoplasm

- ⌘ Gelatinous fluid between the nucleus and plasma membrane
- ⌘ suspends cell organelles
- ⌘ site of most cell metabolism



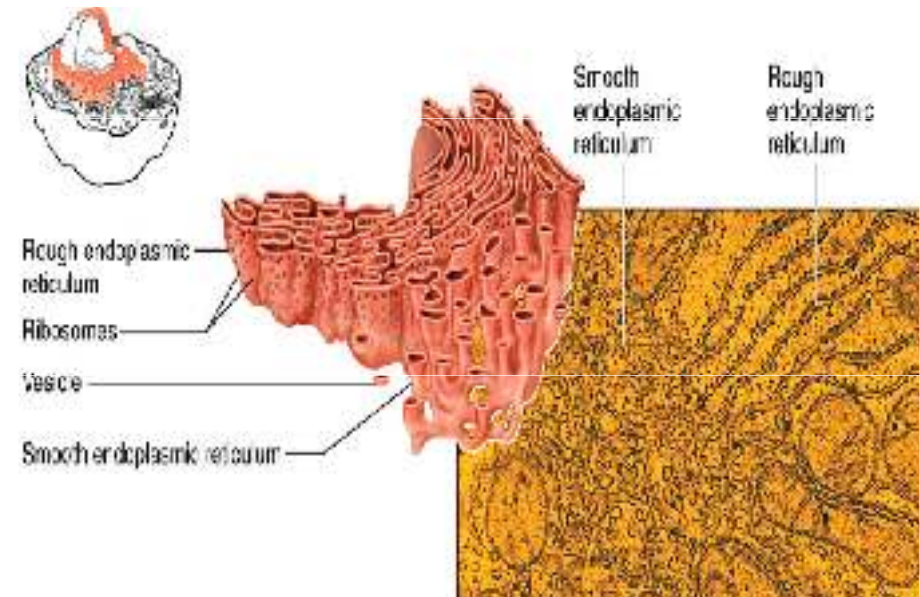
Endoplasmic Reticulum

- ⌘ interconnected network of folded membranes extending from the nucleus to the plasma membrane
- ⌘ this added surface area allows for a large amount of ER to do work in small space
- ⌘ two kinds of Endoplasmic Reticulum
 - ⌘ smooth
 - ⌘ rough

Smooth Endoplasmic Reticulum

- ⚡ no ribosomes
- ⚡ function = makes/stores lipids
- ⚡ contains enzymes that detoxify drugs & poisons

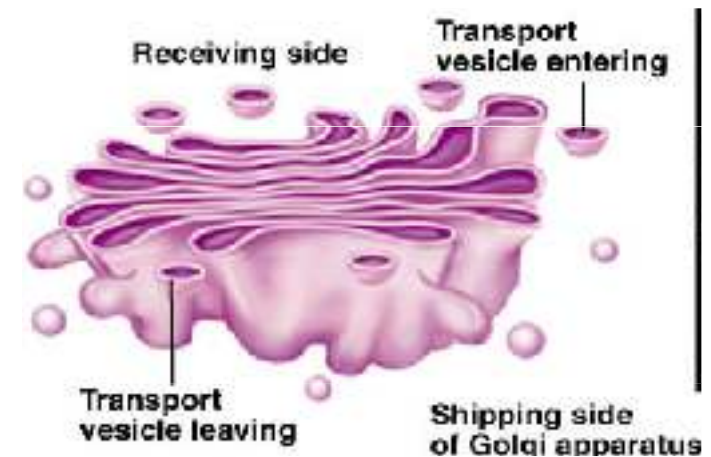
Endoplasmic Reticulum



Golgi Apparatus

- ⚡ Flattened stacks of membranes
- ⚡ function = package and process proteins
- ⚡ proteins are packaged in membrane bound vesicles and then sent to their destinations

Golgi Apparatus

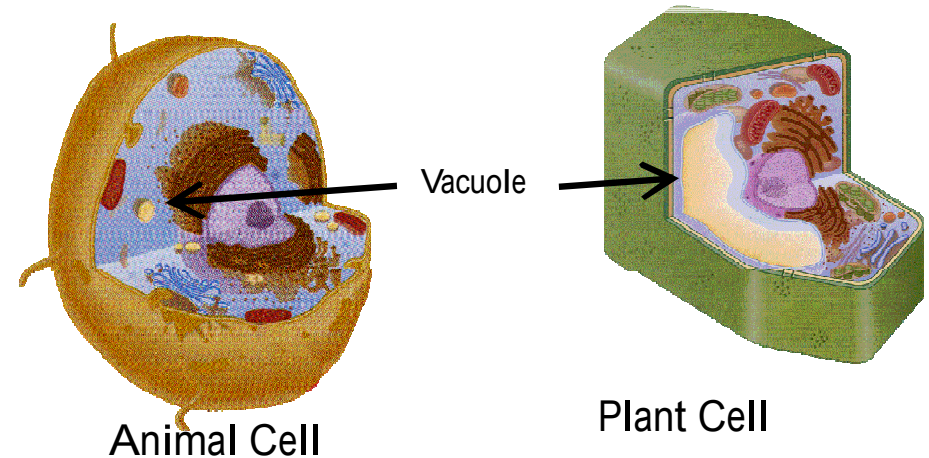


Vacuoles

- ☞ function = designated area that stores food, enzymes, and other materials
- ☞ Small vacuoles for animal cells. Stores food, food wastes and digestive enzymes.
- ☞ Large vacuoles for plant cells. Storage for sugars and carbohydrates made by photosynthesis.

Vacuoles

- ☞ function = designated area that stores food, enzymes, and other materials



Lysosomes

- ☞ function = digest damaged organelles, cellular byproducts, and invading microbes
- ☞ recycling center of the cell

Chloroplast

Convert sunlight to usable energy (ATP) through the process of photosynthesis

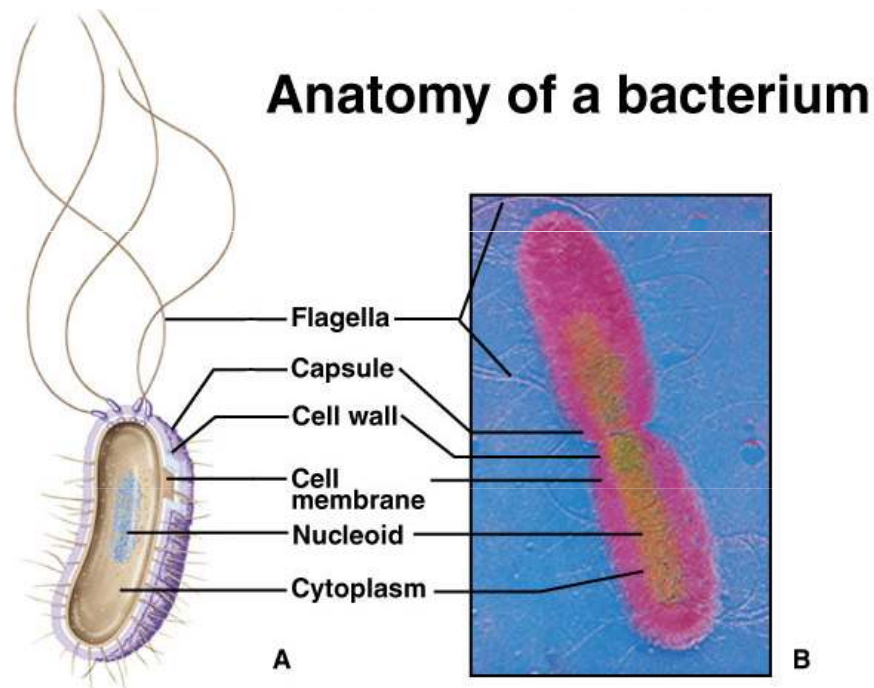
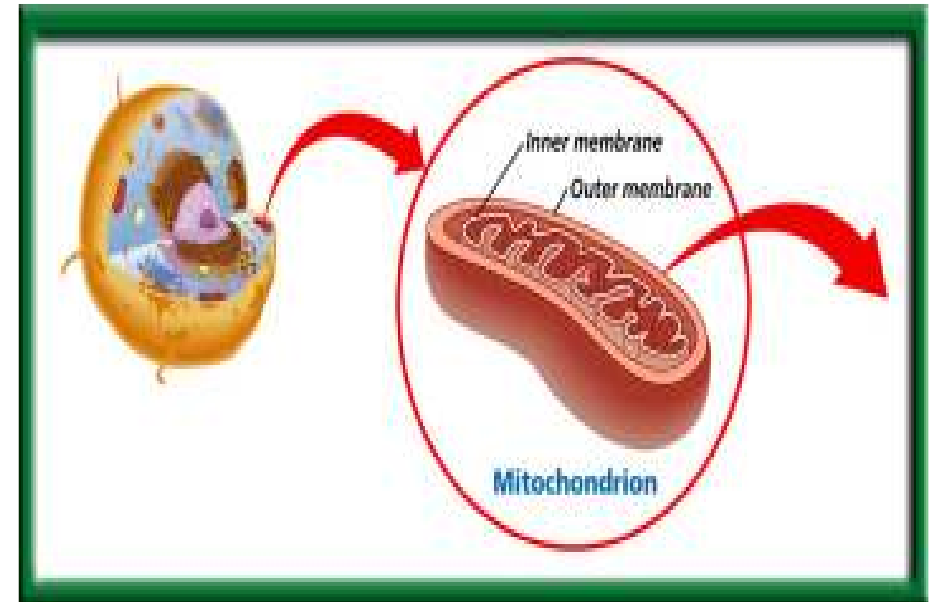
thylakoid = sight of light “harvesting”

grana = thylakoids folded into stacks



Mitochondria

- ⚡ break down sugars to form ATP (usable energy) -- The energy of life.
- ⚡ power house of cells



Thank you for viewing my presentation;
a peek into the world of the unseen.

