

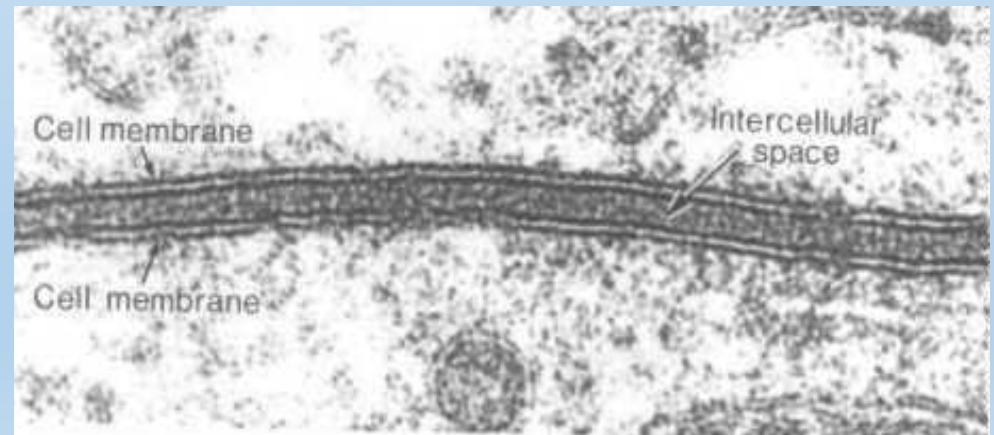
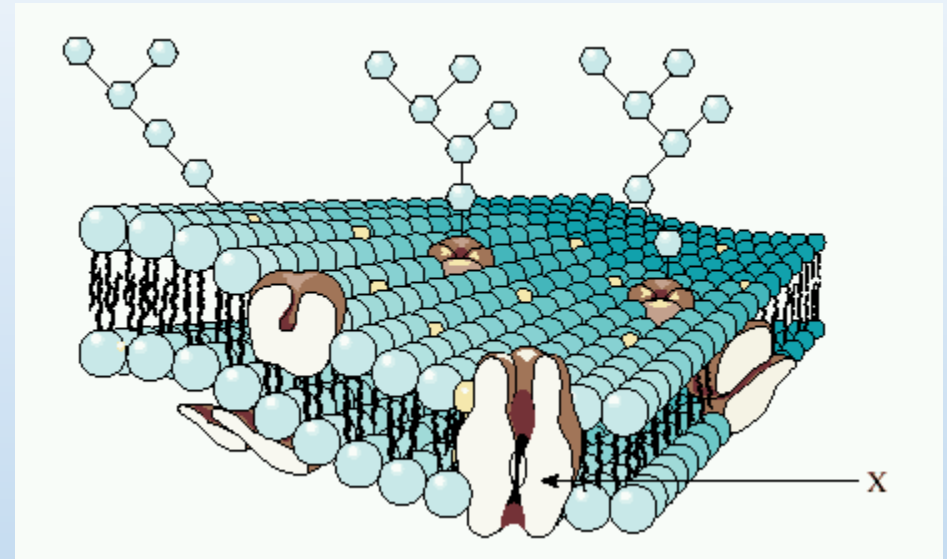
Cell Parts and Functions

- Cells are composed of a number of parts each with specific functions.
- Some of the internal parts of the cell are called “organelles”.
- An organelle is defined as a membrane-bound compartment in a cell.



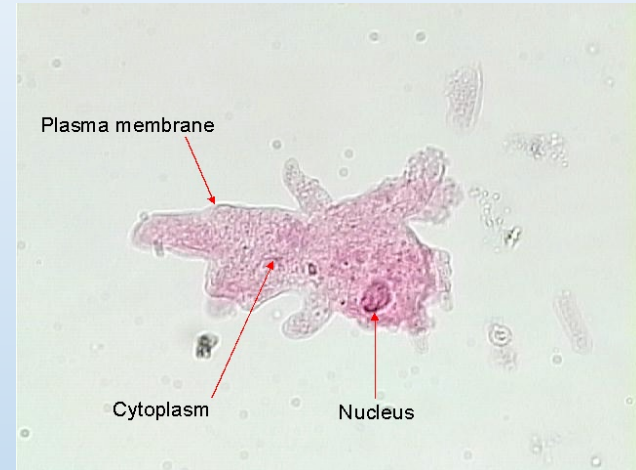
The Cell Membrane

- “The gatekeeper of the cell”
- A thin, outer covering of the cell.
- Controls what goes in and out of cell.



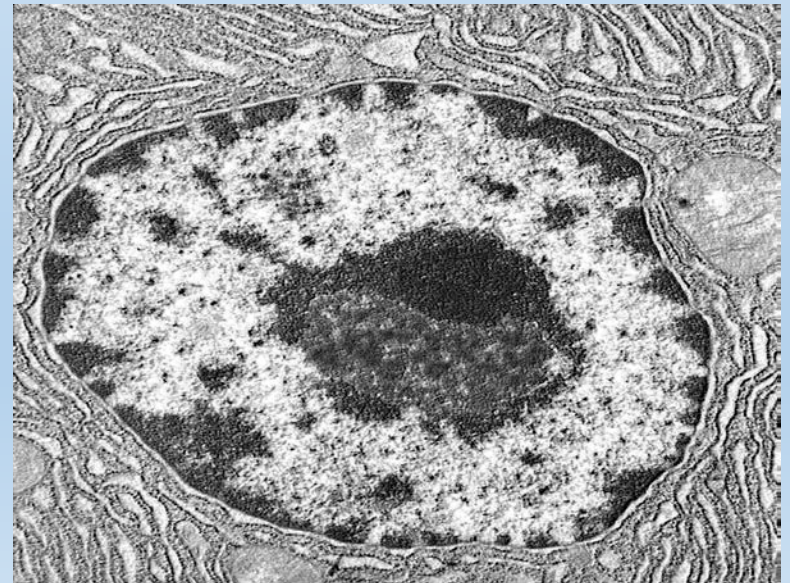
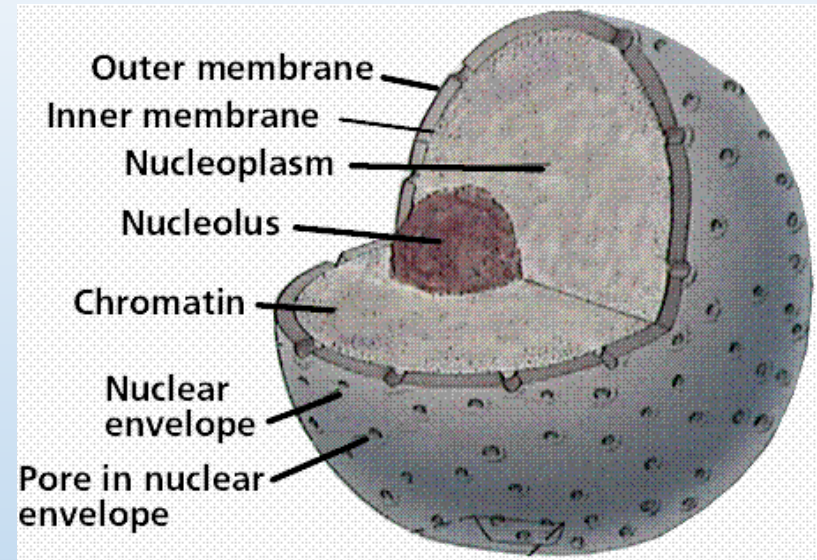
Cytoplasm

- Jelly-like fluid in the cell.
- Suspends the cell's organelles.
- Composed mostly of water.



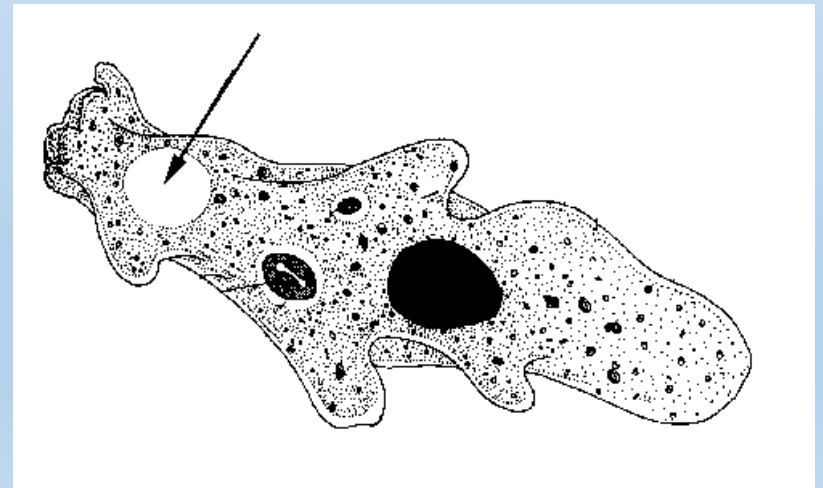
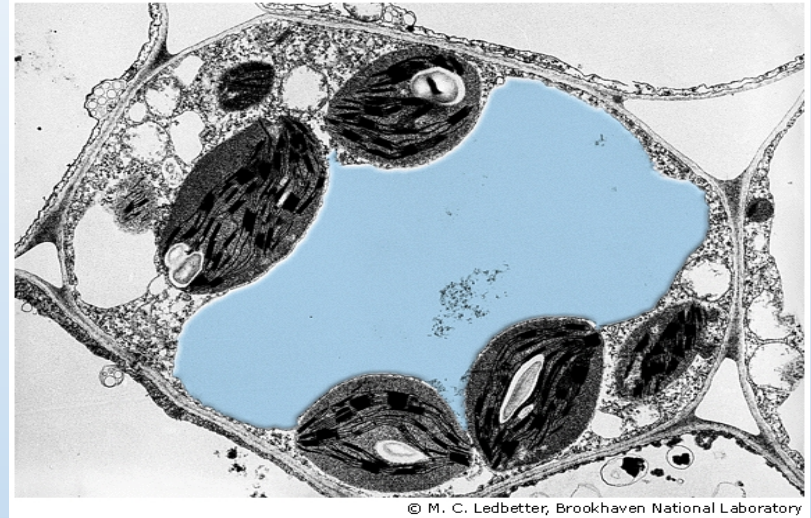
The Nucleus

- The “control center” of the cell.
- Directs all cellular activities including movement, growth and other life functions.
- Location of the DNA (the genetic material).



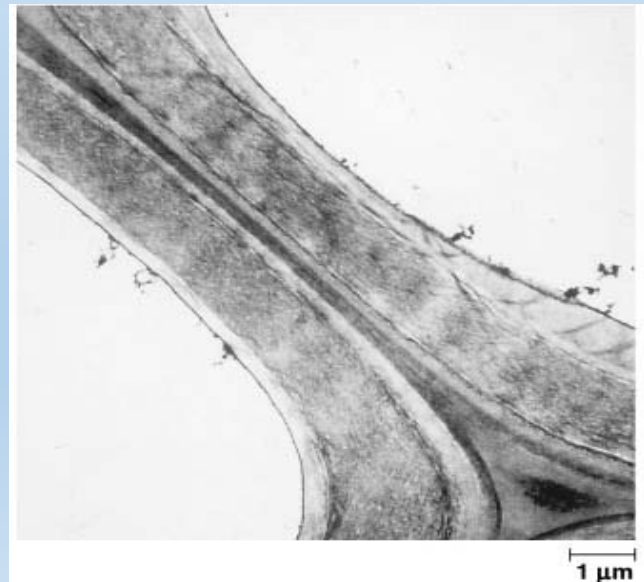
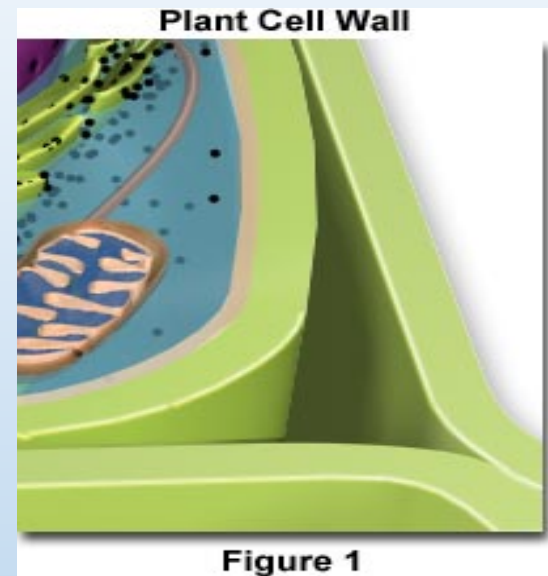
Vacuoles

- Large, membrane bound storage structures.
- In plant cells vacuoles are extremely large and also help to support the plant.
- Called **VESICLES** in animal cells.



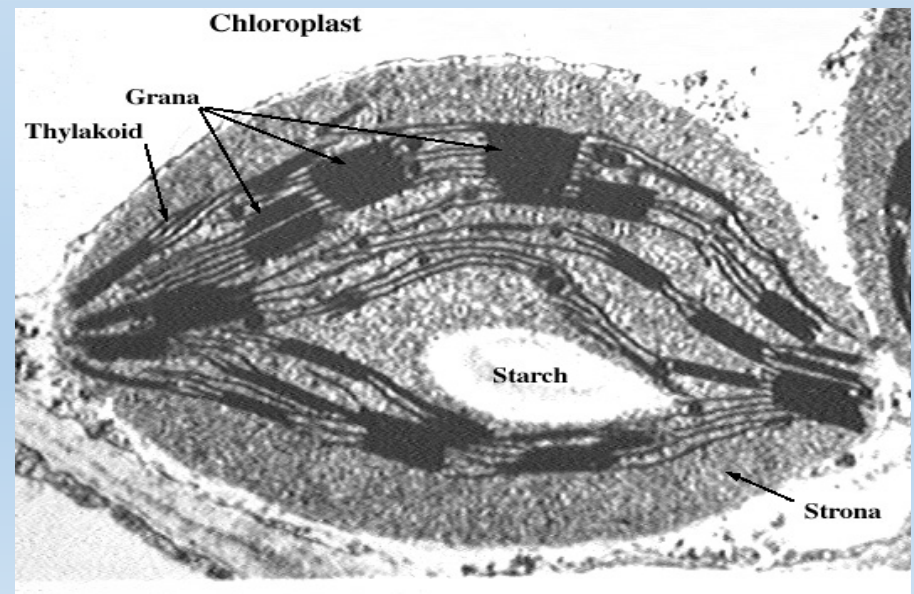
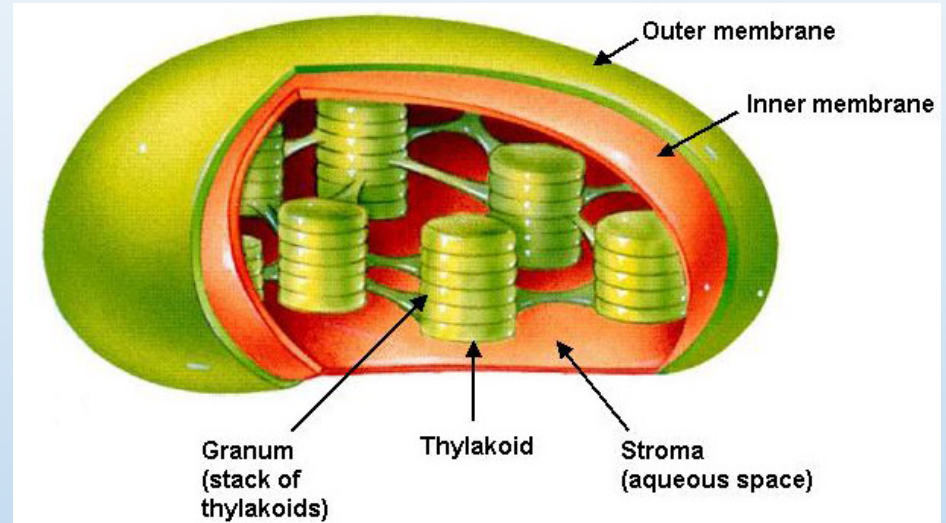
The Cell Wall

- Present around plant cells **ONLY**. (And some bacteria.)
- Protects and supports plant cell.



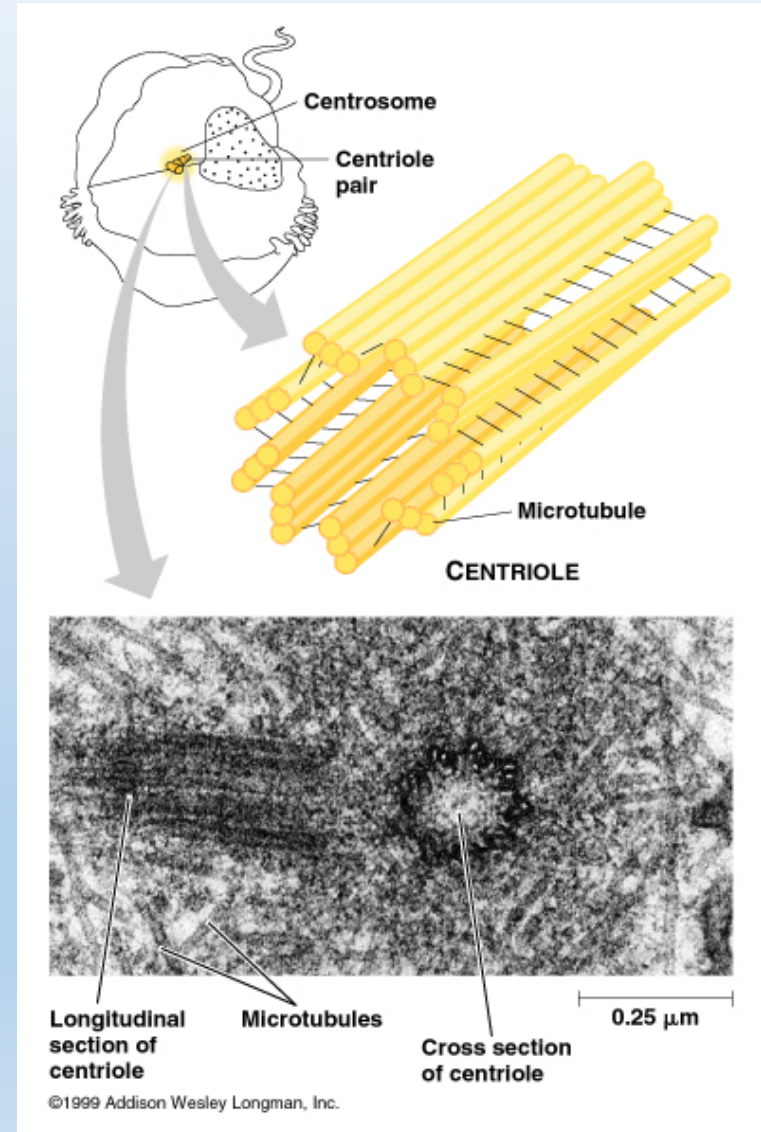
Chloroplast

- Found **ONLY** in plant cells.
- Location of **PHOTOSYNTHESIS** (the transformation of light energy into chemical energy).



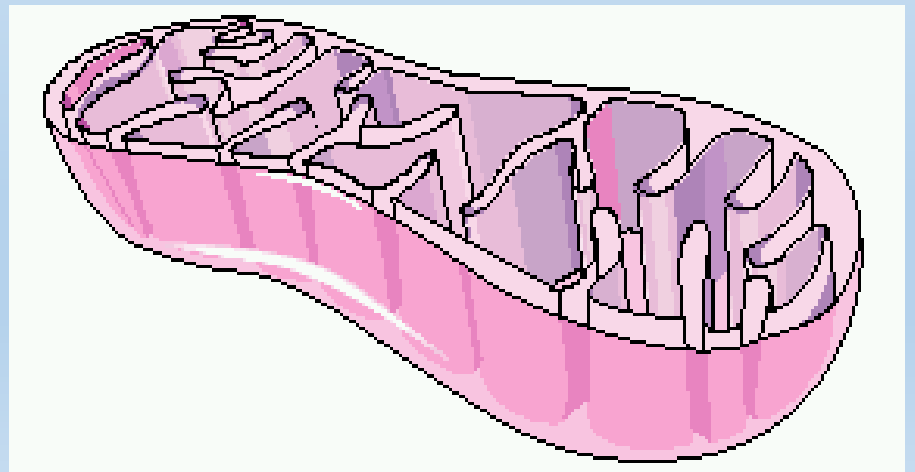
Centrioles

- Centrioles are **ONLY** present in animal cells.
- Centrioles aid in animal cell division.



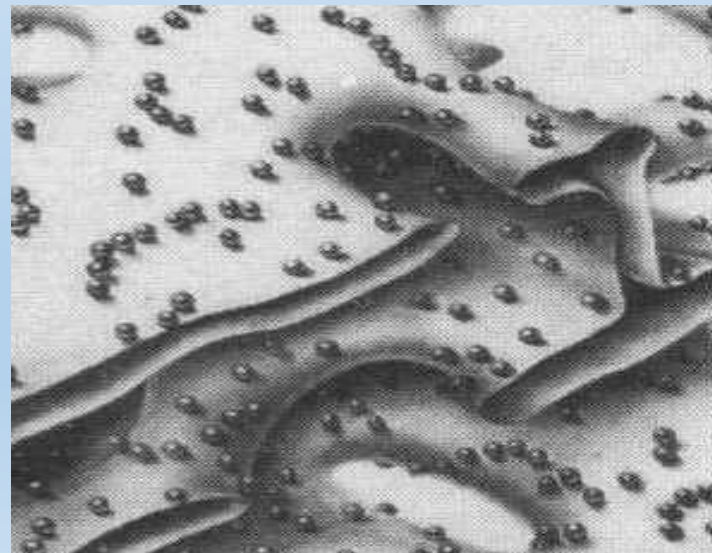
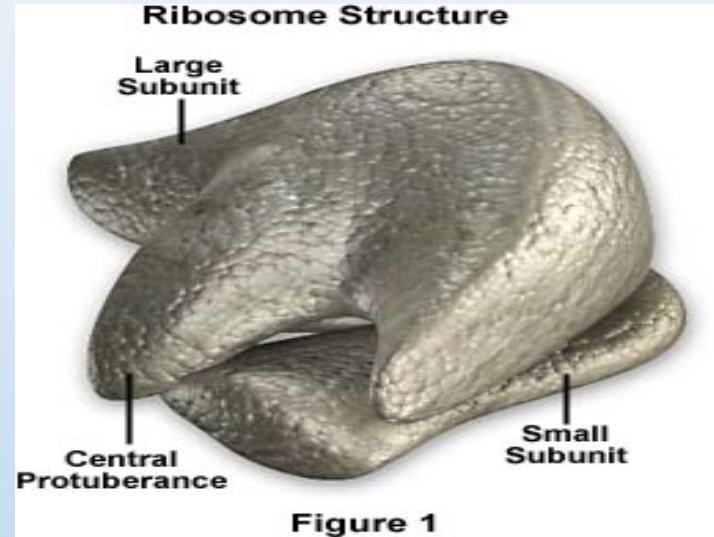
Mitochondria

- Mitochondria are the powerhouse of the cell.
- They are the site of cellular respiration which makes useable energy for cells.

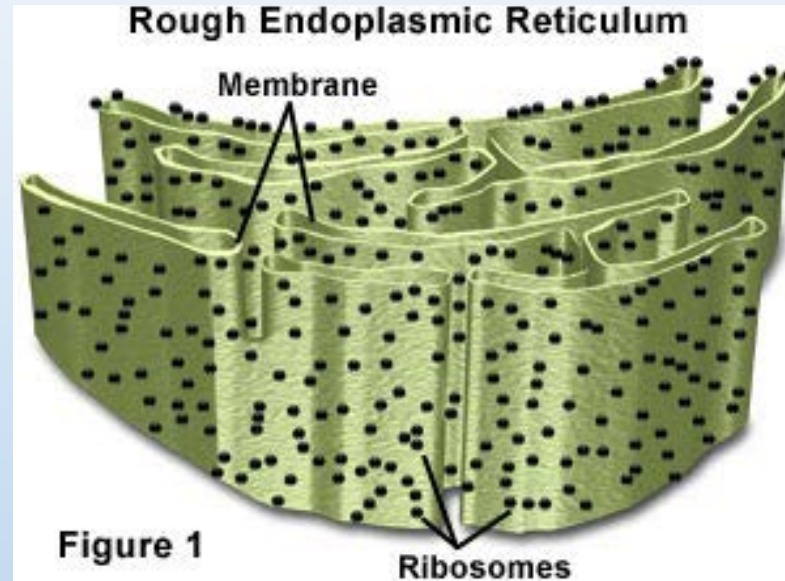
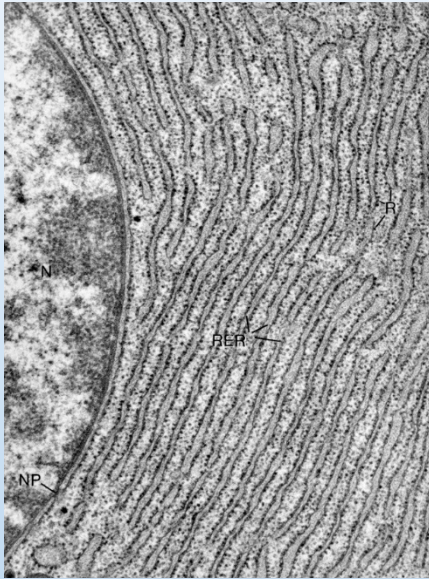


Ribosomes

- The organelle where proteins are assembled.
- Often located on the endoplasmic reticulum.



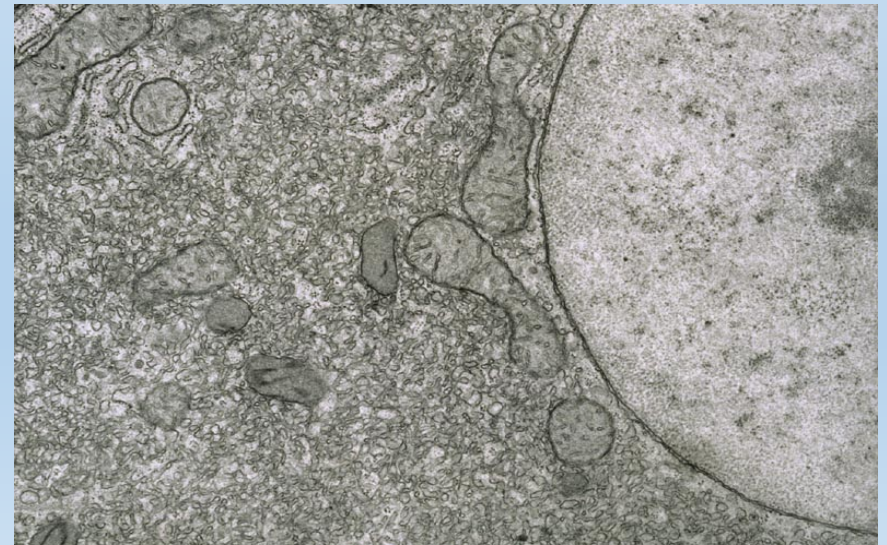
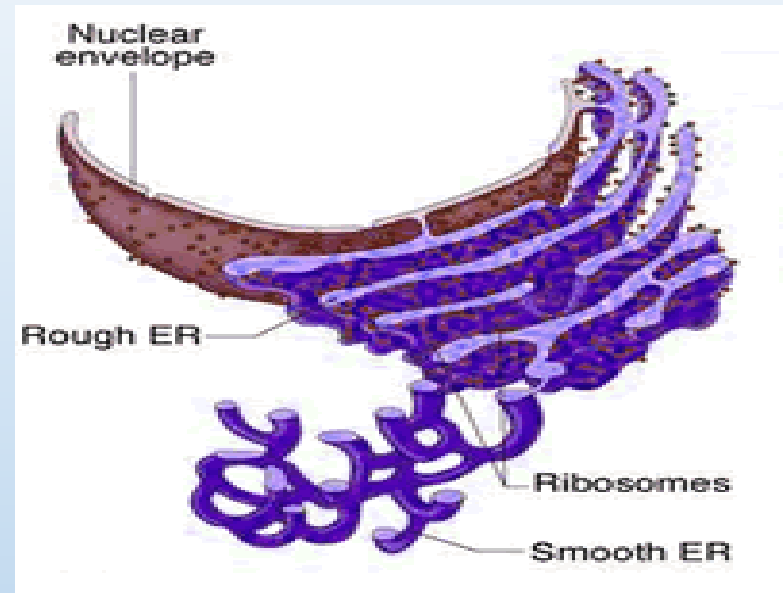
Rough Endoplasmic Reticulum



- Ribosomes attach to make proteins.
- Packages new proteins.

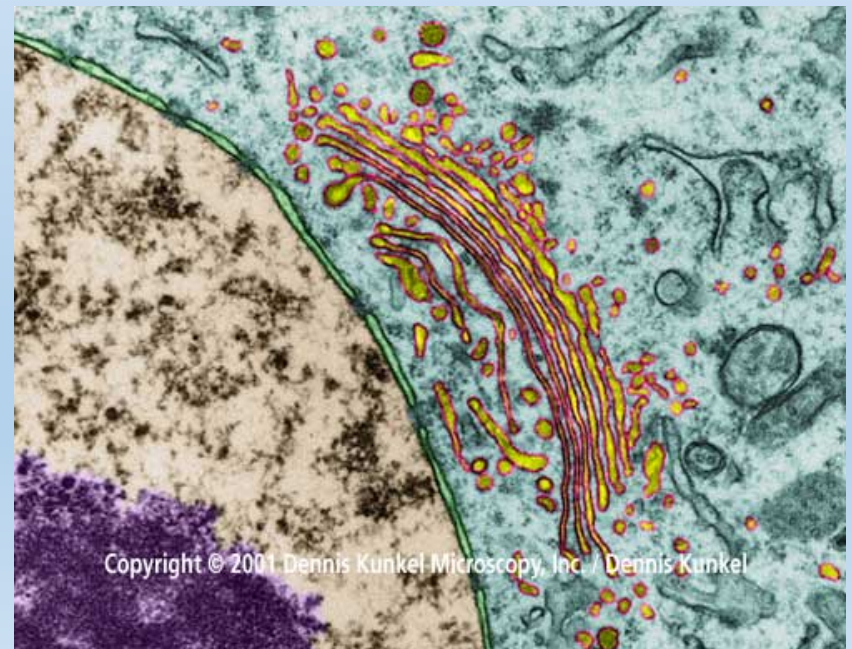
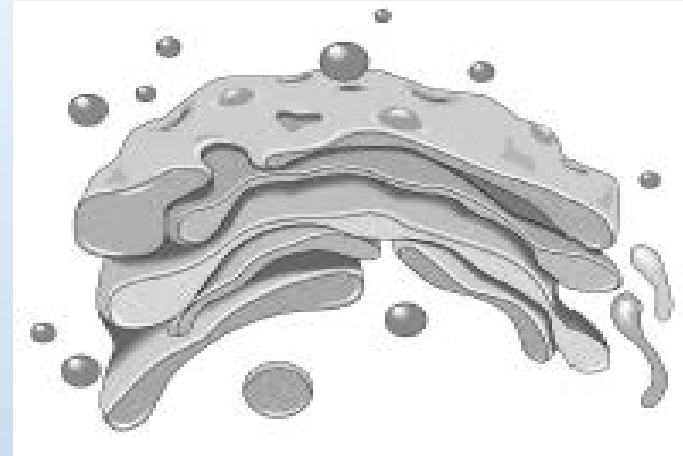
Smooth Endoplasmic Reticulum

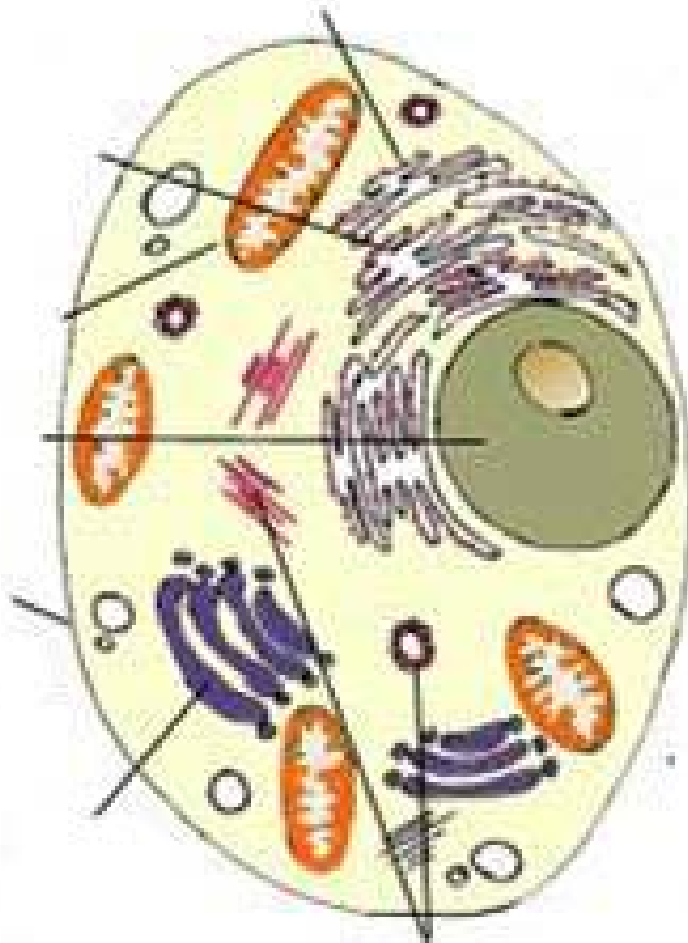
- Produces certain chemicals in cells.
- Produce vesicles which contain newly produced proteins.



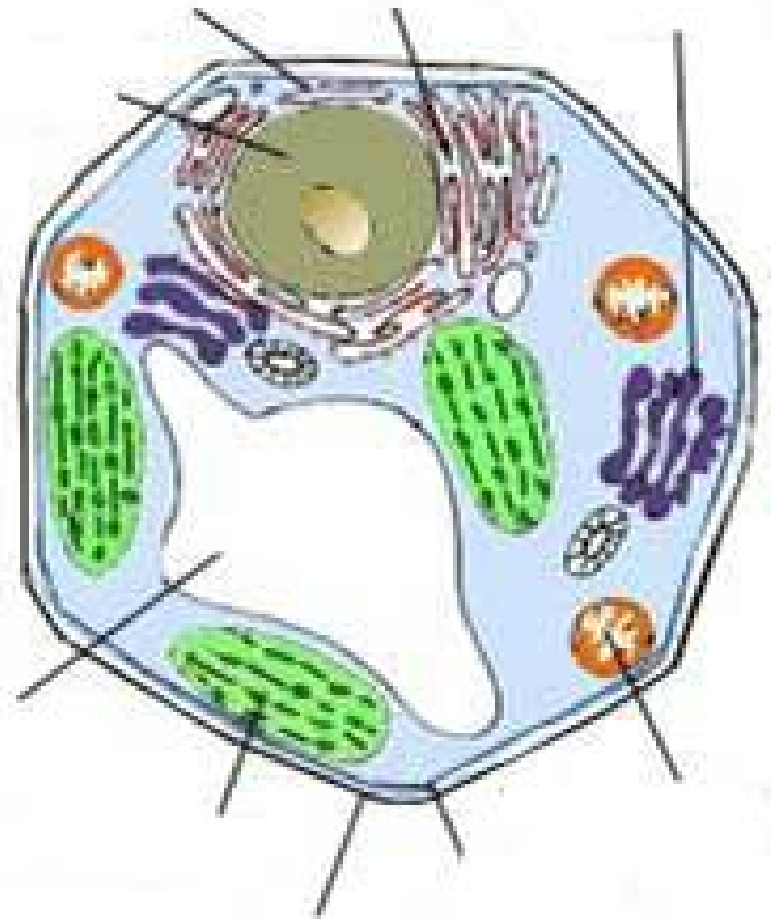
Golgi Apparatus

- Modifies, stores, packages and distributes proteins.
- Forms vesicles.





Cell



Cell

