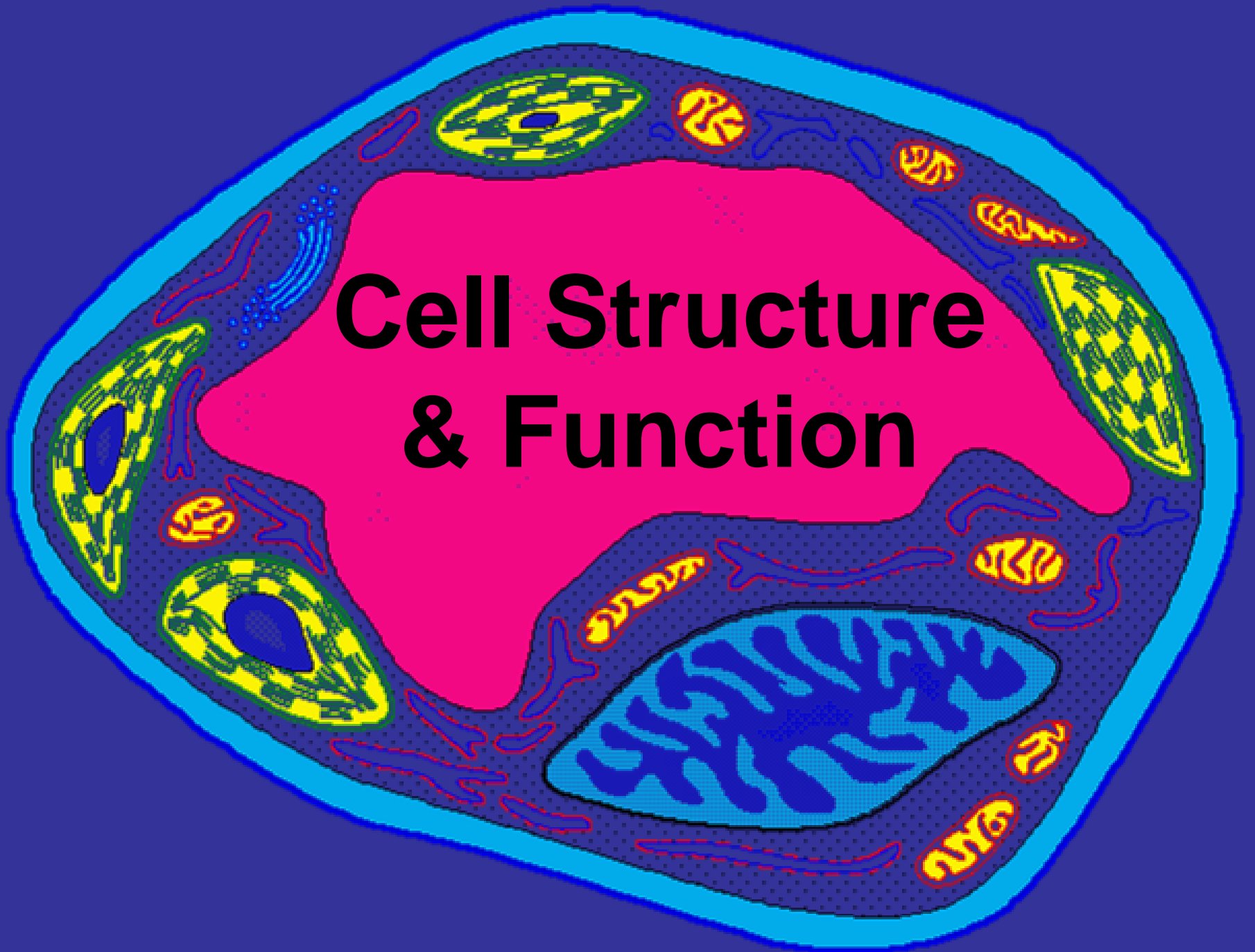


Cell Structure & Function



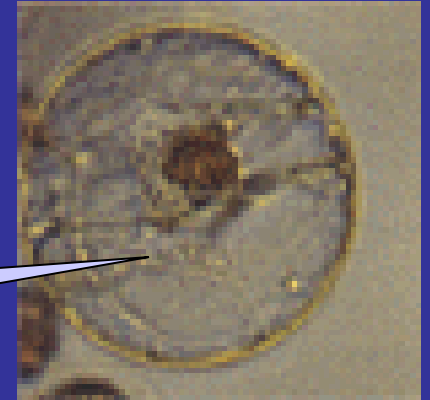
Cell

A cell is the smallest unit that is capable of performing life functions.

Examples of Cells

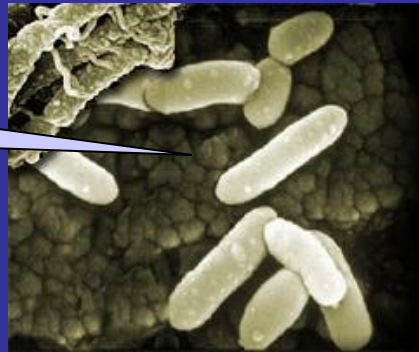


Amoeba Proteus

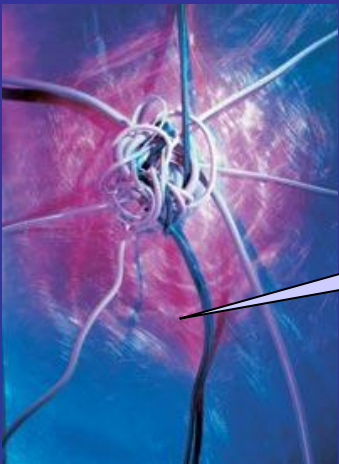


Plant Stem

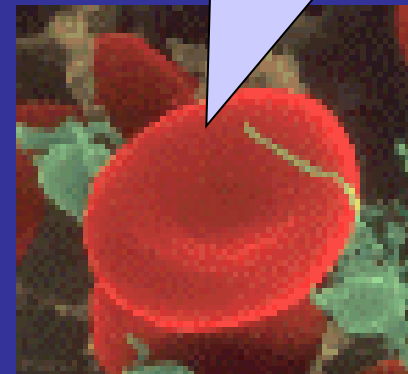
Bacteria



Nerve Cell



Red Blood Cell

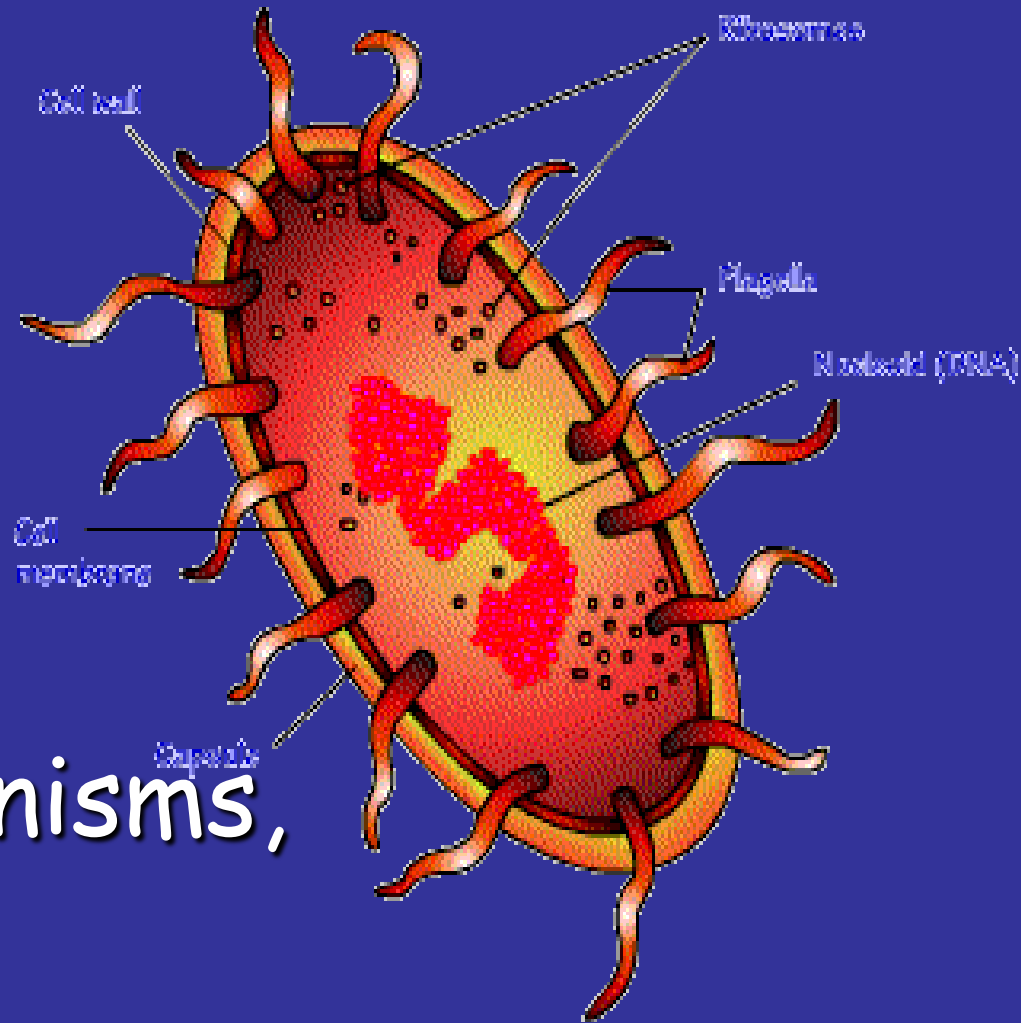


Review: Two Types of Cells

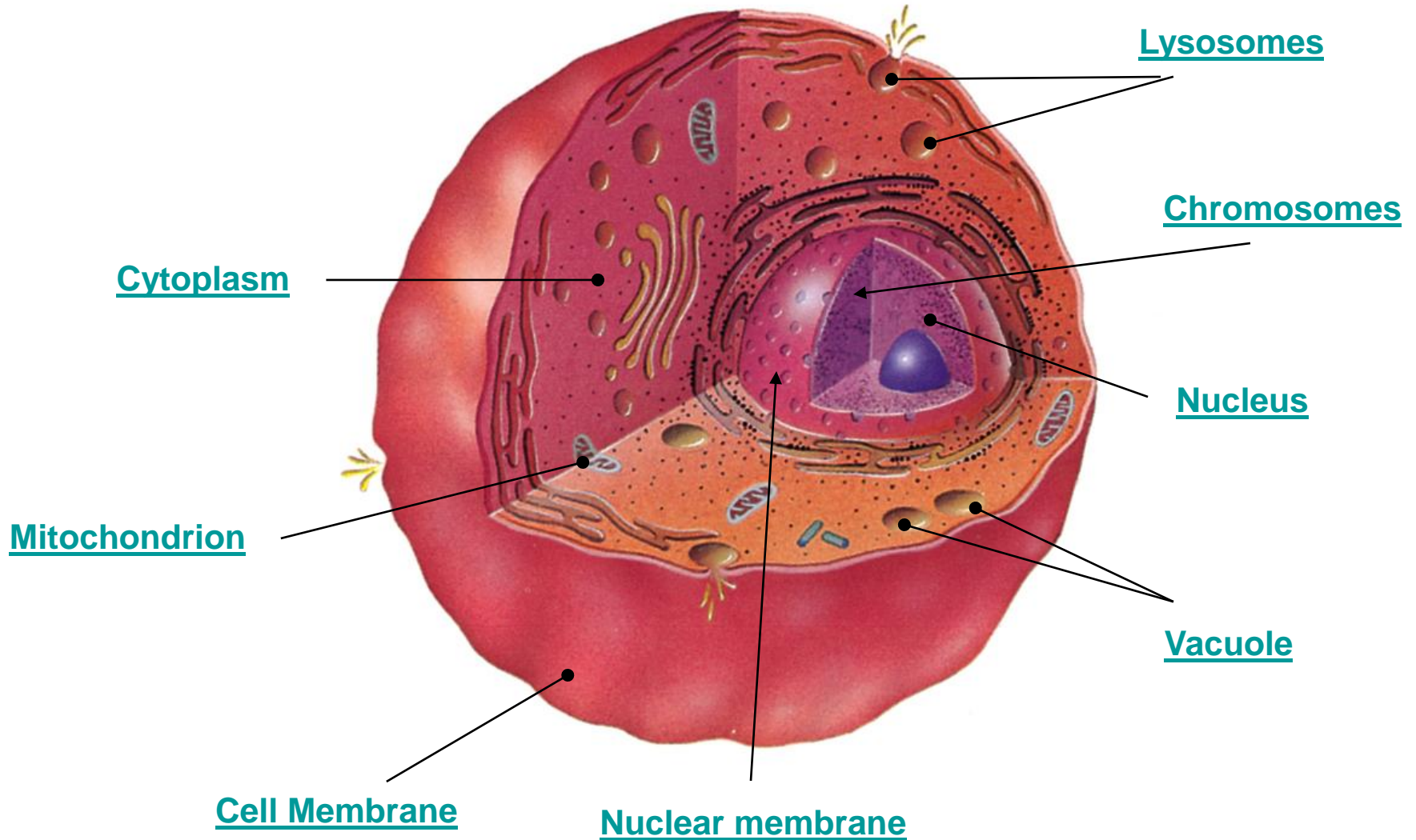
- Prokaryotic = without a nucleus
- Eukaryotic = with a nucleus

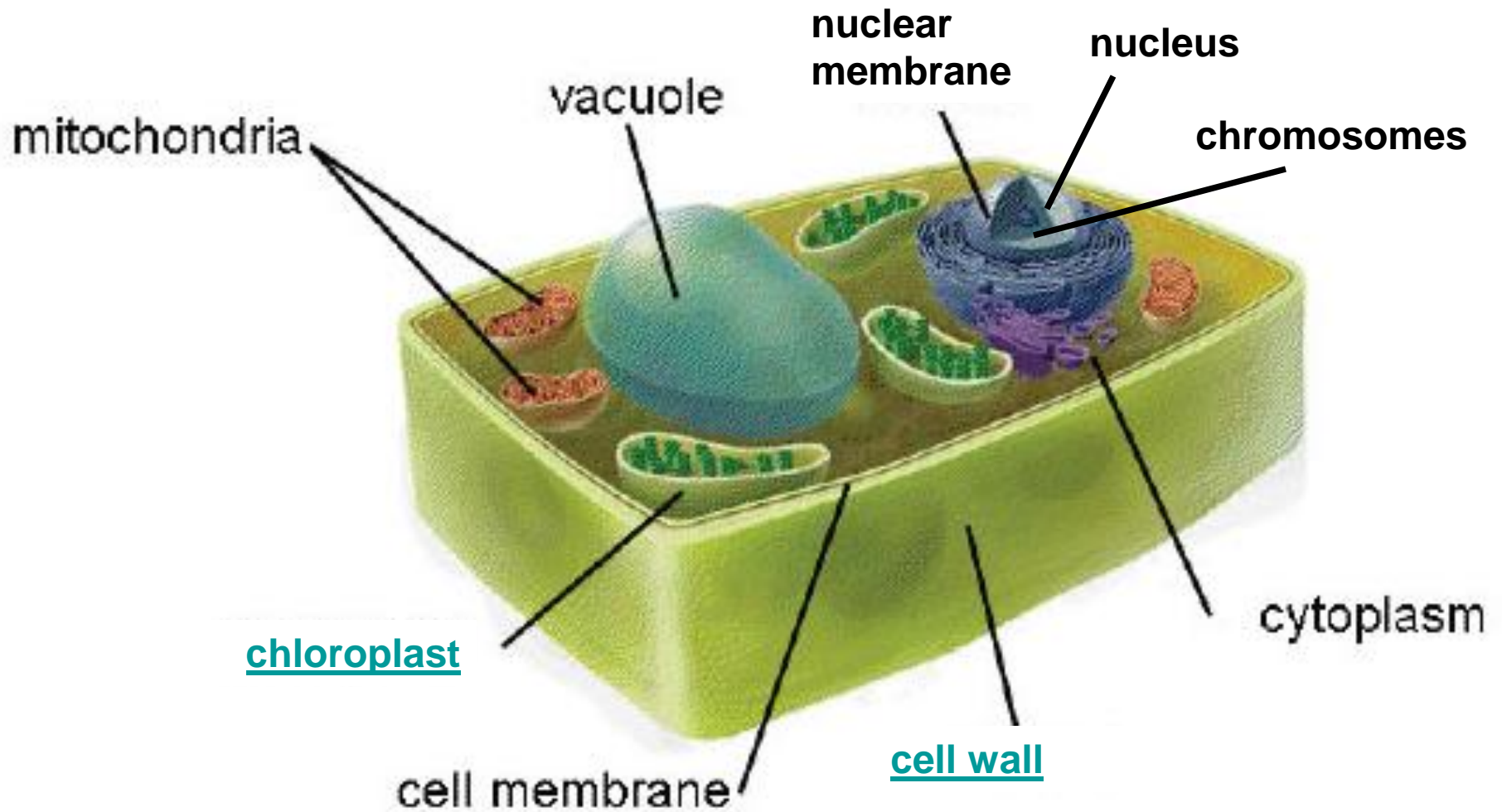
Prokaryotic

- Do not have structures surrounded by membranes
- Few internal structures
- One-celled organisms,
- ex. Bacteria



Animal Cell

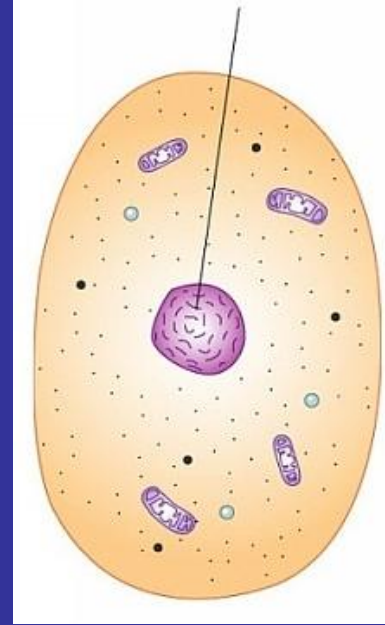




Plant Cell

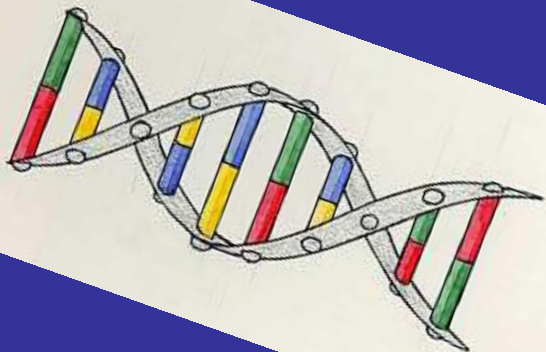
Nucleus

- cell's control center
- directs the cell's activities
- “brain” of the cell



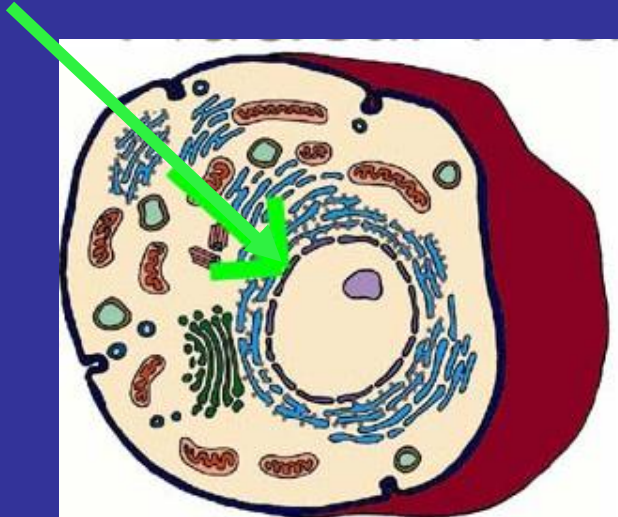
Chromosomes

- located in the nucleus
- contain genetic information for life of cell (DNA)

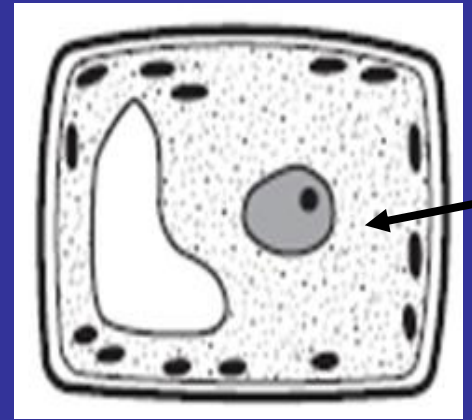


Nuclear Membrane

- surround the nucleus
- separates it from the rest of the cell

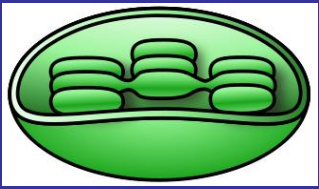


Cytoplasm

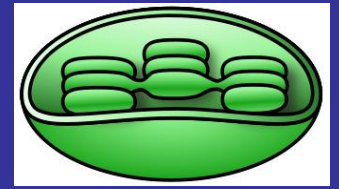


- clear jelly-like material
- contains nutrients for the cell
- supports the organelles





Chloroplast



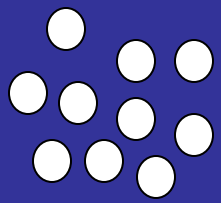
- captures solar energy from the sun and makes food for plant through photosynthesis
- contain chlorophyll (makes plants green)



Mitochondrion

- "power house" for the cell because they produce energy

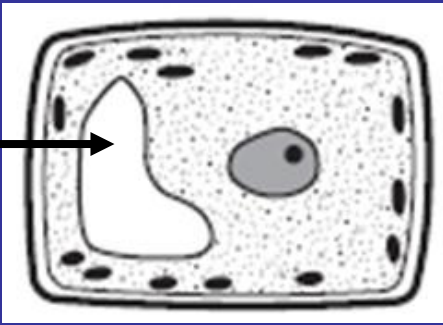




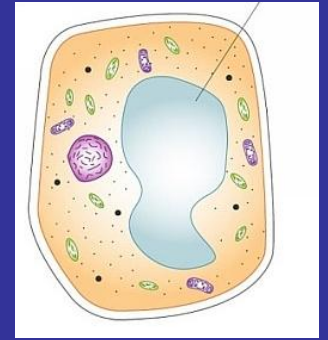
Lysosome

- small structures that break down nutrients & waste in the cell
- “clean up crew” for the cell





Vacuole

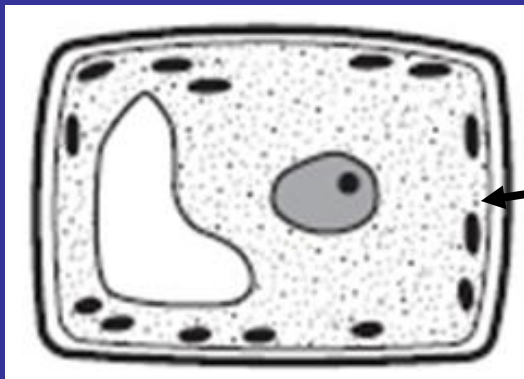


- round sac that holds water, nutrients and waste
- "store house" for the cell
- Plant cells have 1 large
- Animal cells have many

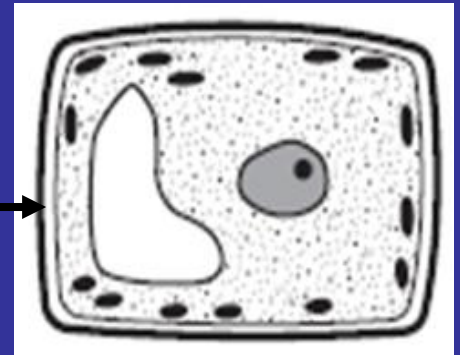


Cell Membrane

- surround cell & separates it from the environment
- controls what substances enter/leave the cell



Cell Wall



- Rigid outer layer of non-living material
- gives structure, shape & protection to plant cell only
- materials pass through to the cell



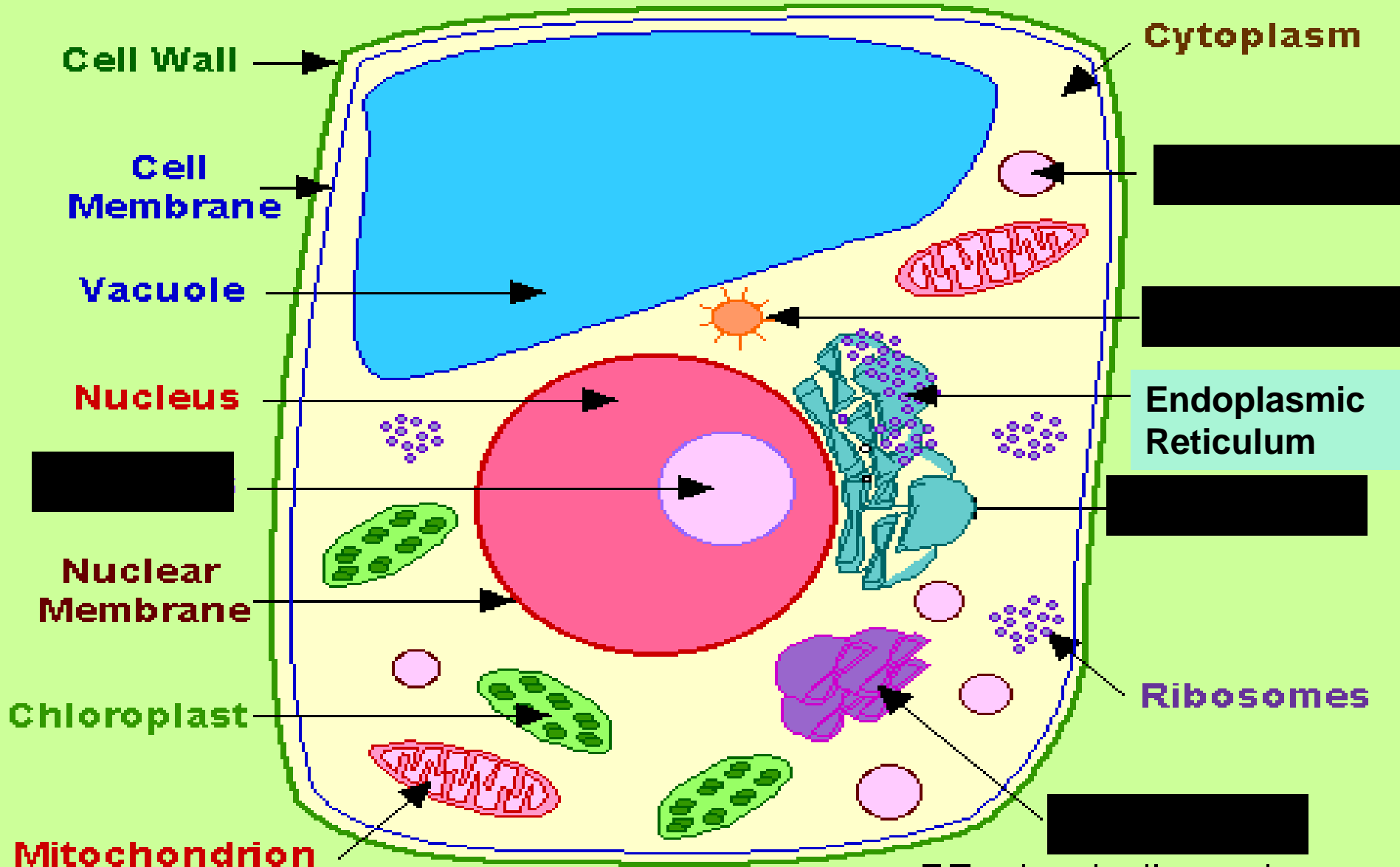
Endoplasmic Reticulum

- carry proteins & nutrients around the cell



Draw, Label and Color

Cross-Section of a Plant Cell



Plant Cell

Endoplasmic Reticulum

Nuclear membrane

Nucleus

Chromosomes

Ribosomes

Golgi Body

Mitochondrion

Vacuole

Lysosome

Cell Wall

Cell Membrane

Chloroplasts

Cytoplasm

