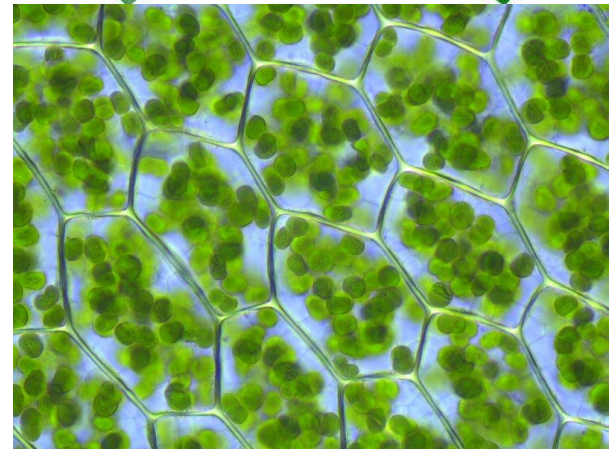
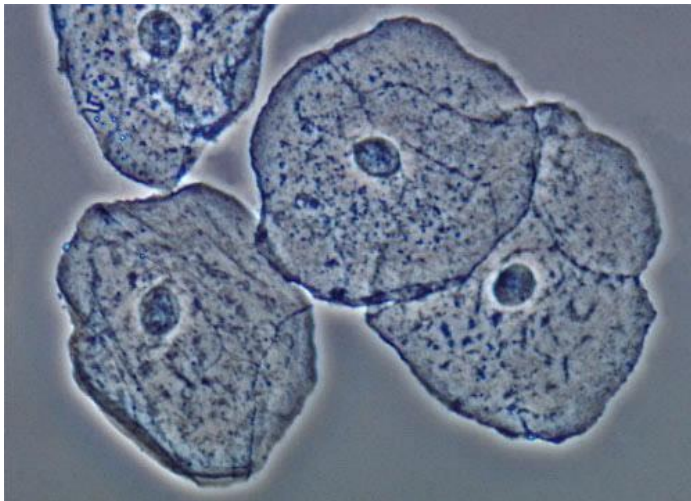
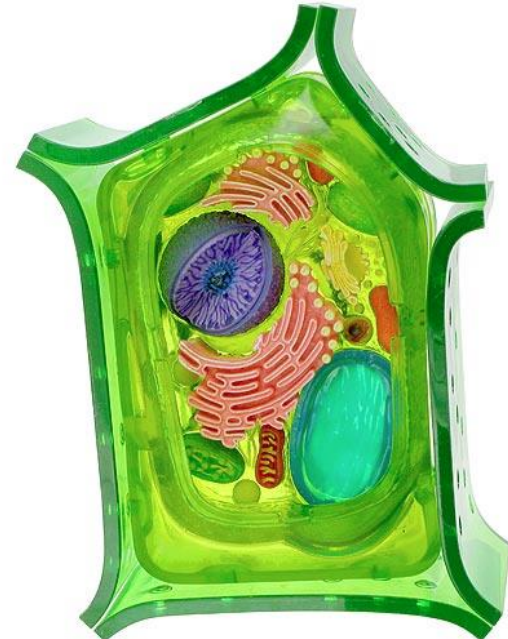
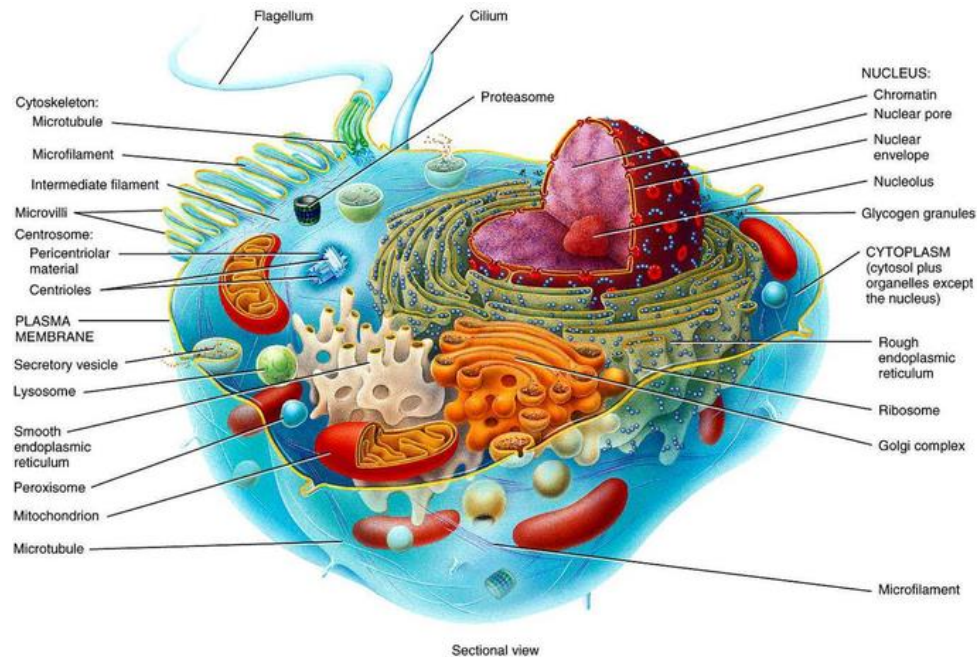


Are animal and plant cells different?

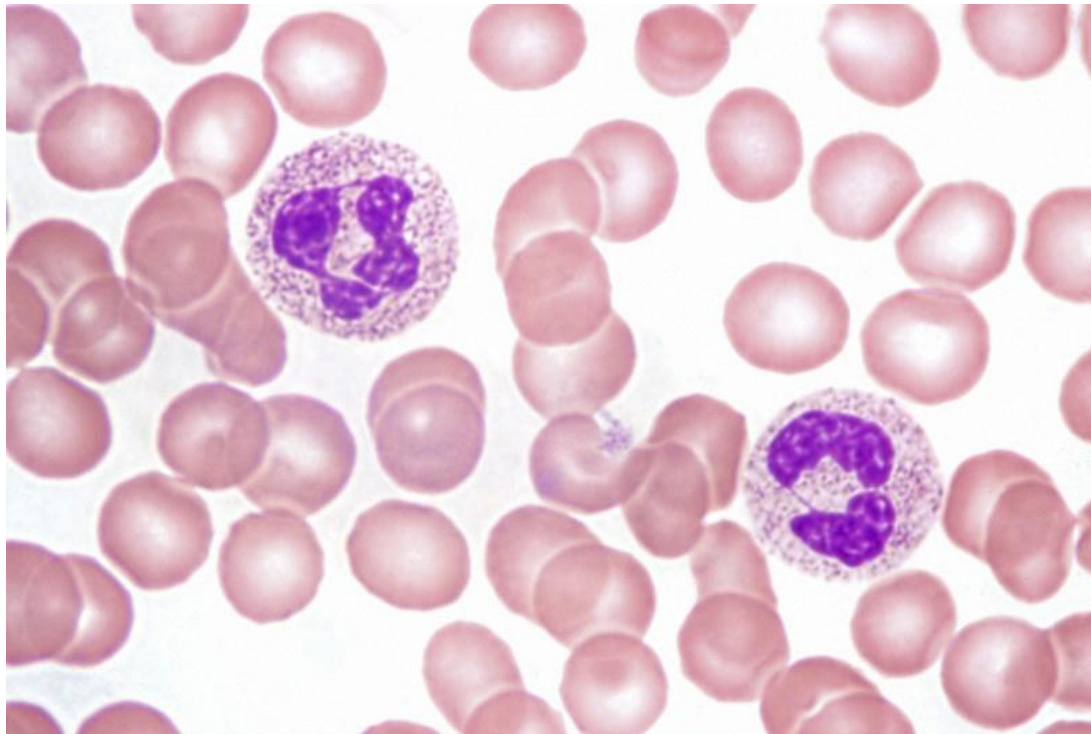


THE CELL AND ITS PARTS



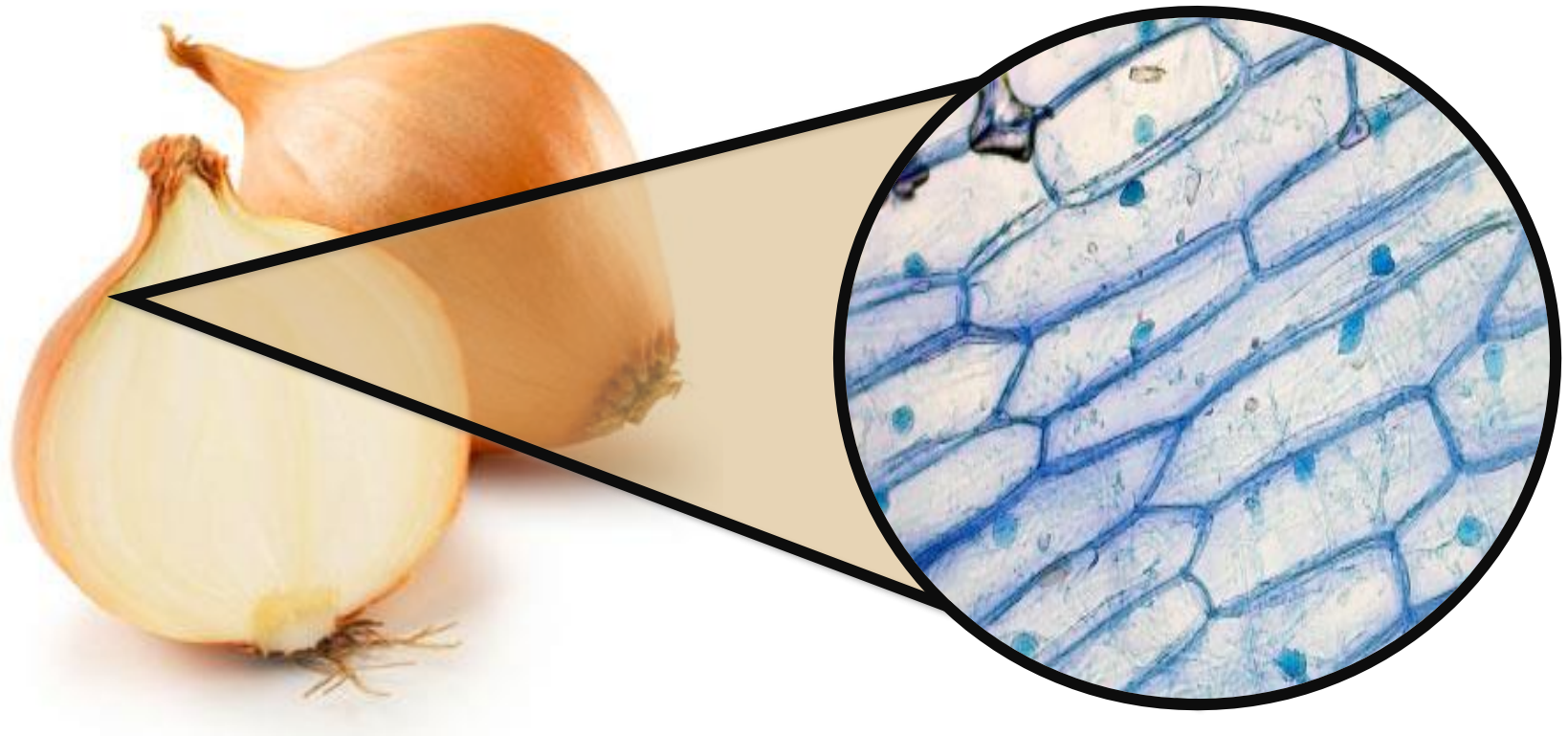
What is a cell?

- Smallest unit of life
- Contains everything you need to be “living”



Cells are microscopic

- Too small to see without microscope



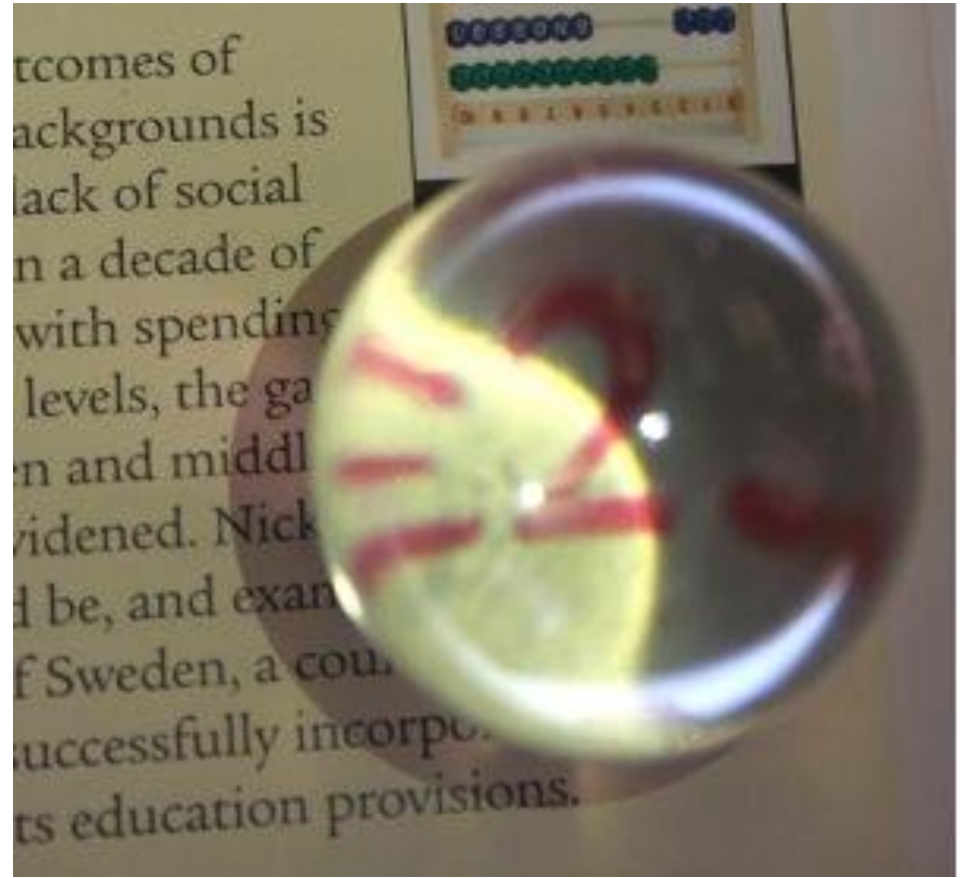
Antonie van Leeuwenhoek

- Father of Microbiology
- Perfected microscope design



Antonie van Leeuwenhoek

- Father of Microbiology
- Perfected microscope design



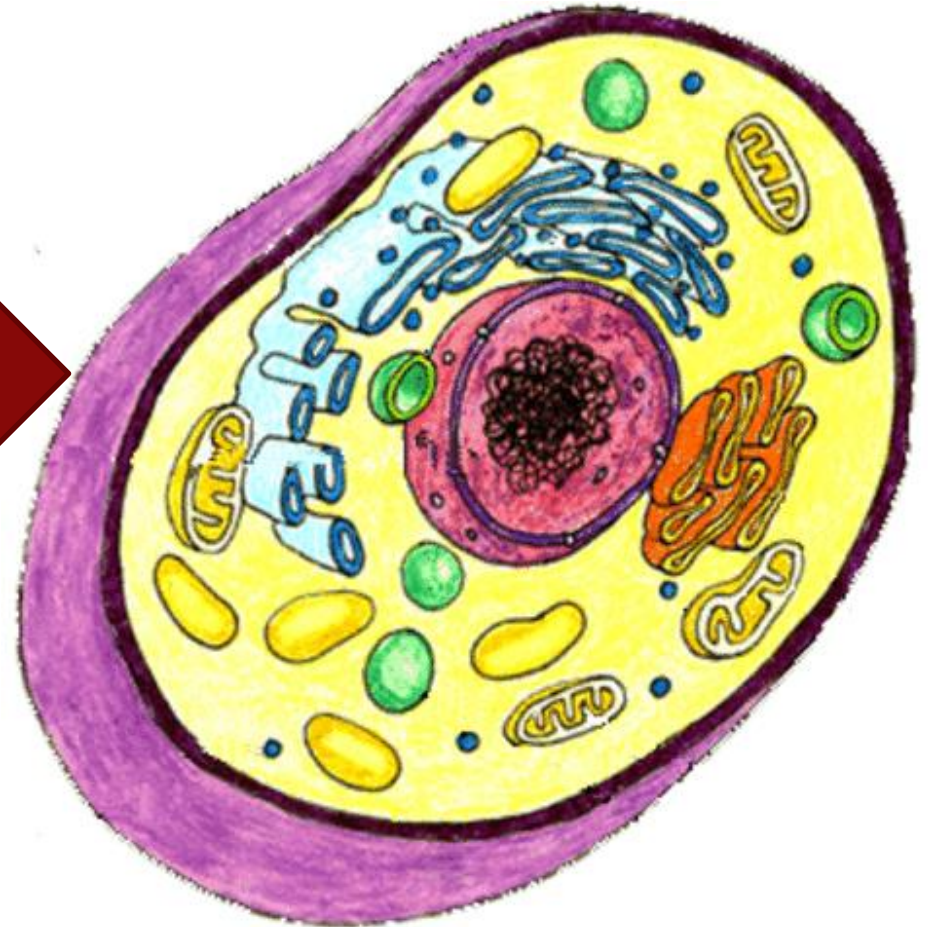
Cells have organelles

- Cellular “organs”
- Cells are like cities or people → each part has a purpose.



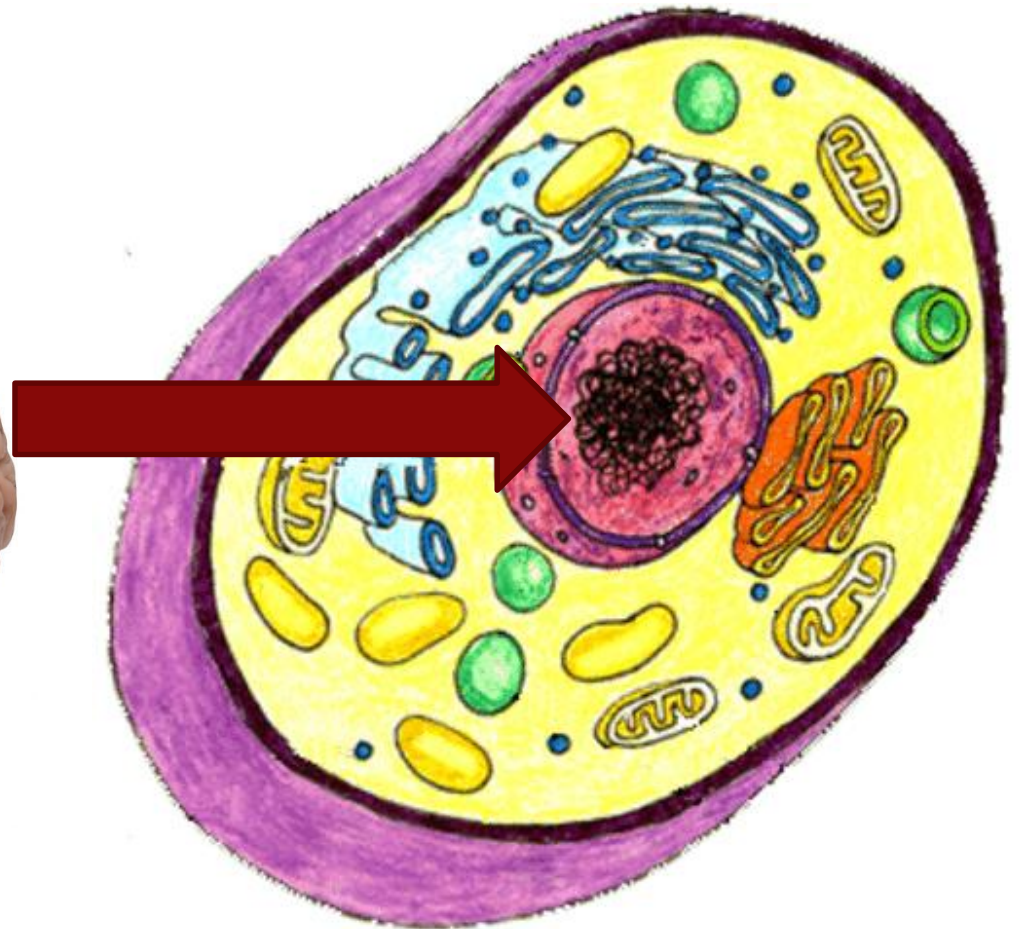
Cell membrane

- Lets nutrients in, lets waste out
- Protects cell



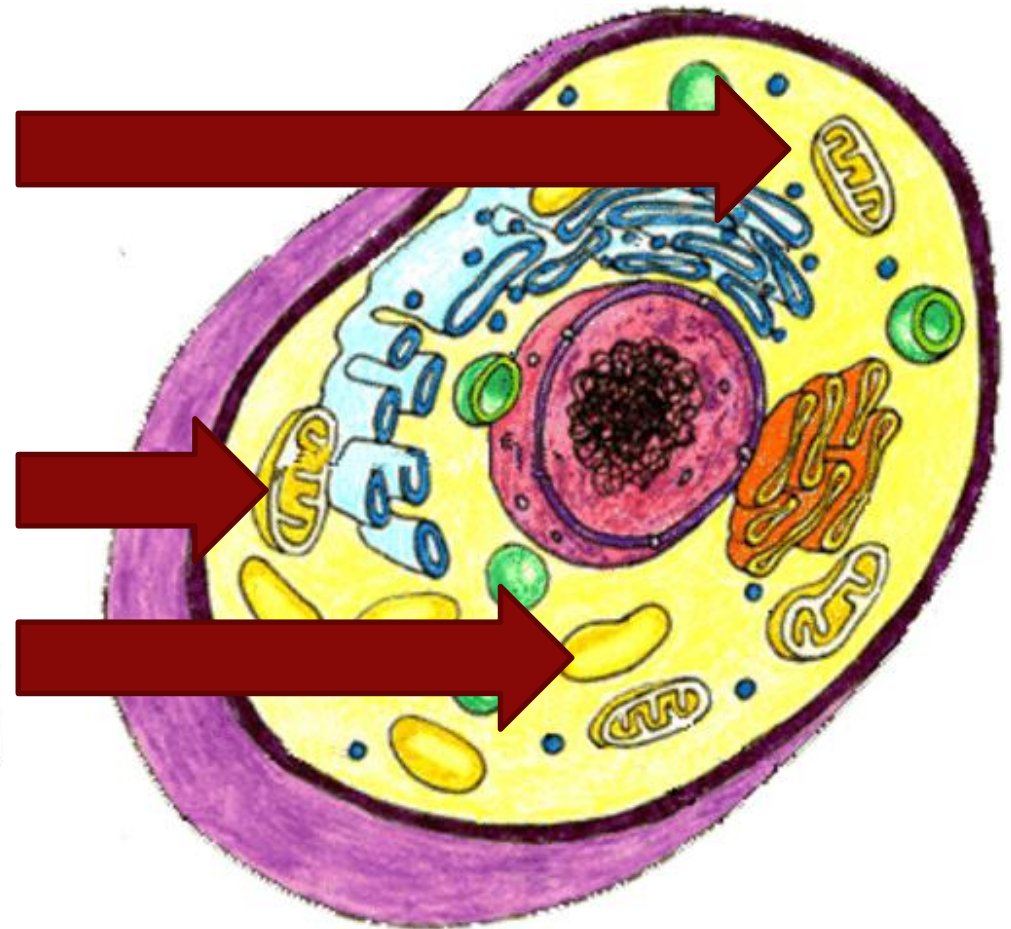
Nucleus

- Contains DNA
- Tells cell what to do



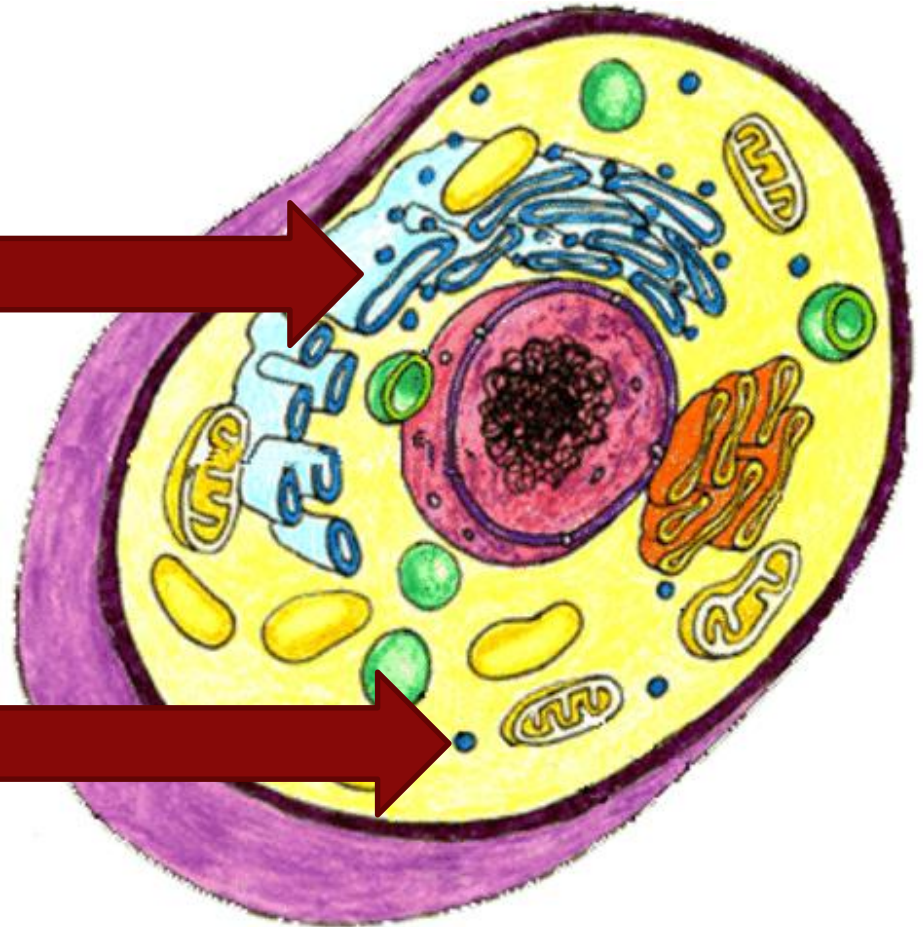
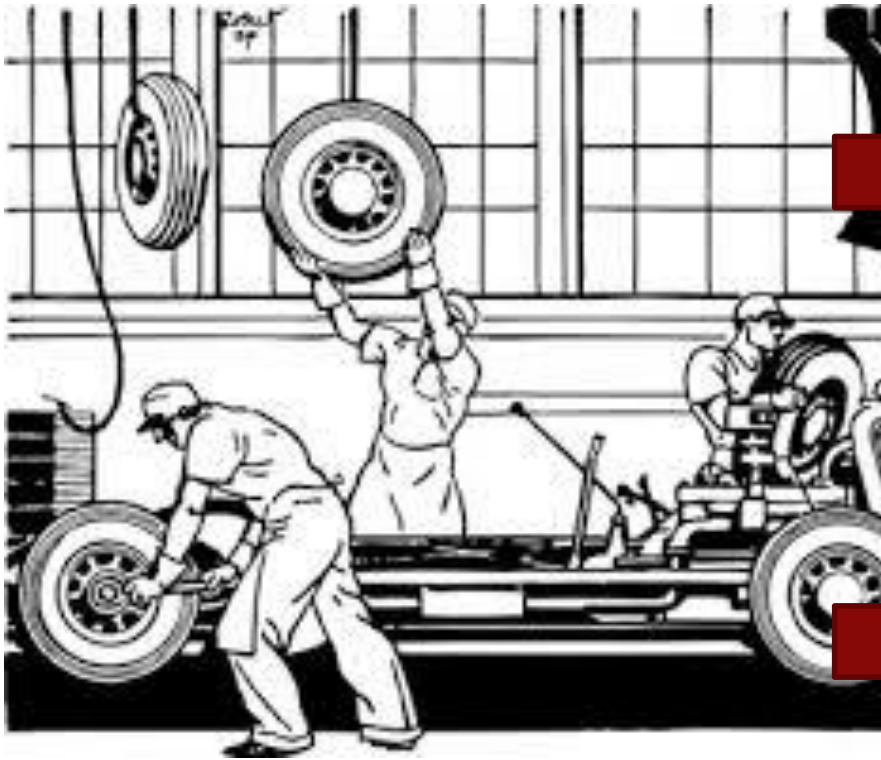
Mitochondria

- Makes energy for the cell



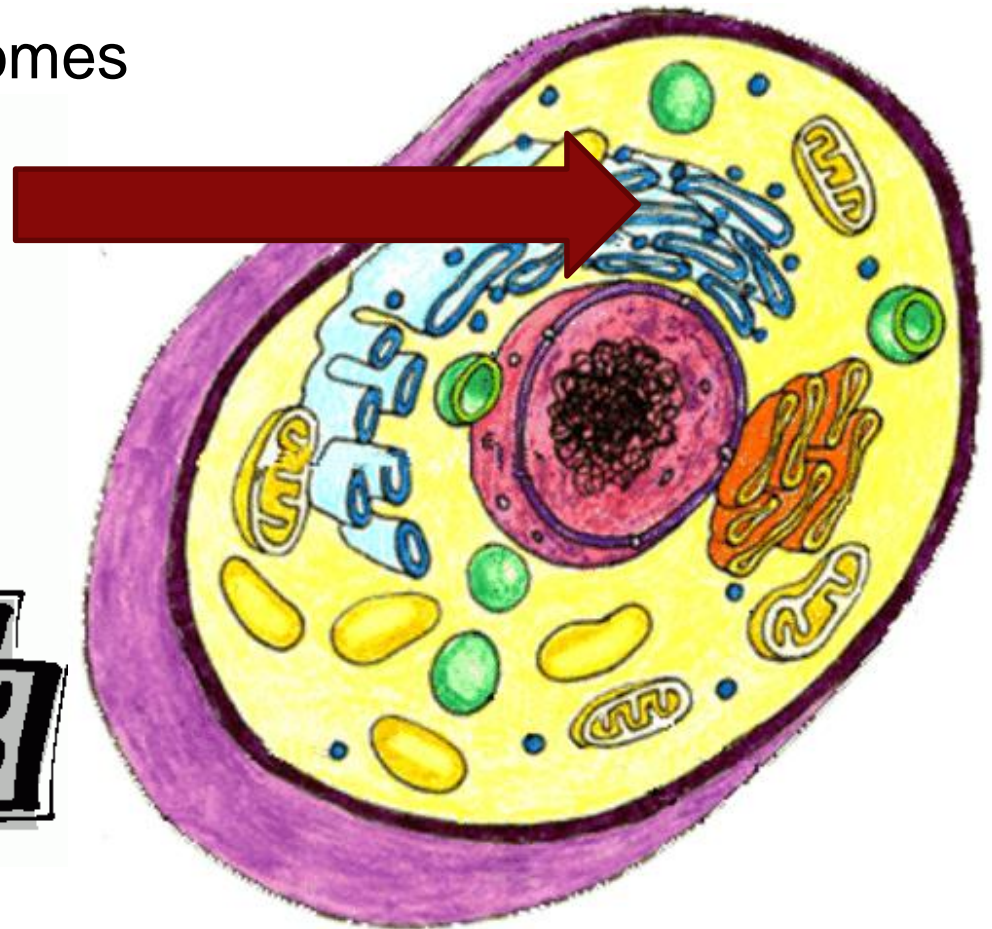
Ribosomes

- Make proteins from mRNA transcripts
- Translation!



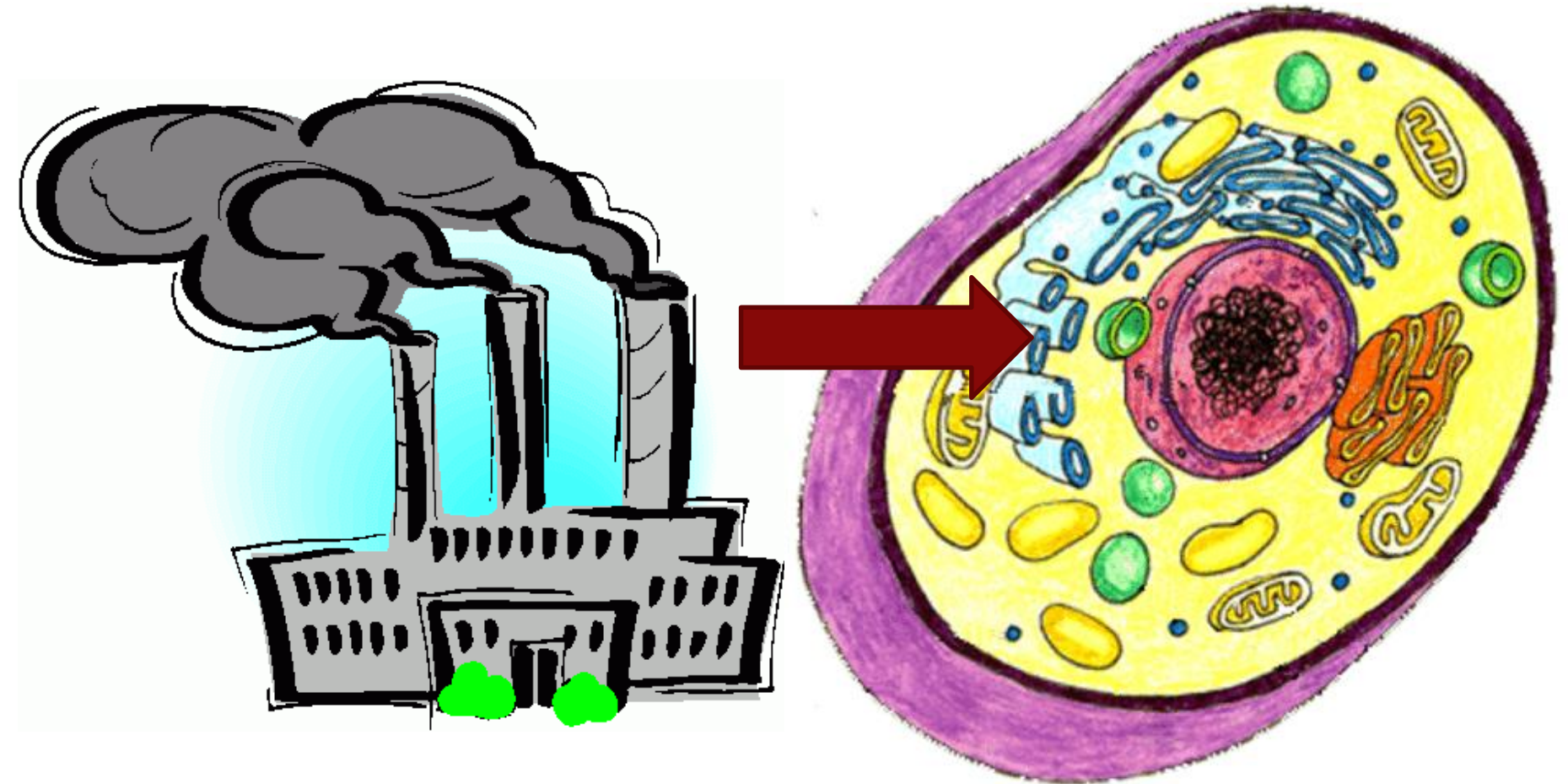
Rough Endoplasmic Reticulum (ER)

- Where proteins are made
- Works closely with ribosomes



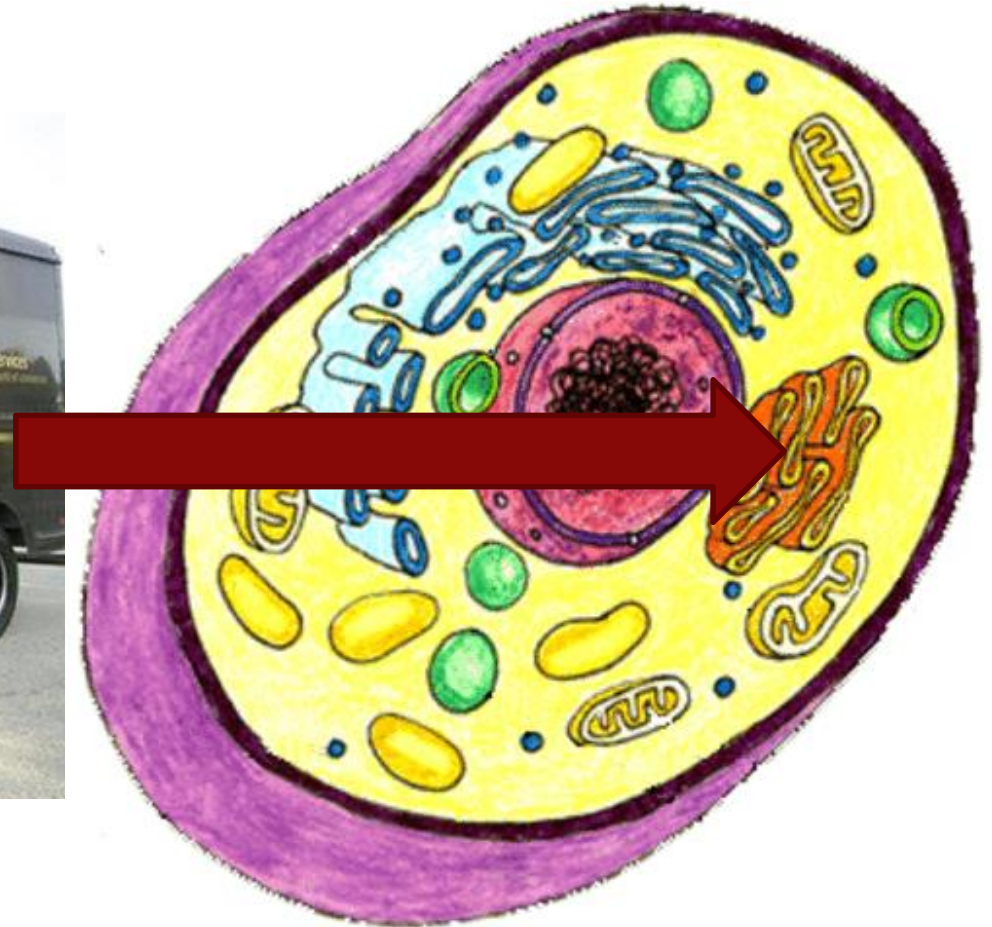
Smooth Endoplasmic Reticulum (ER)

- Where lipids (fats) are made and broken down



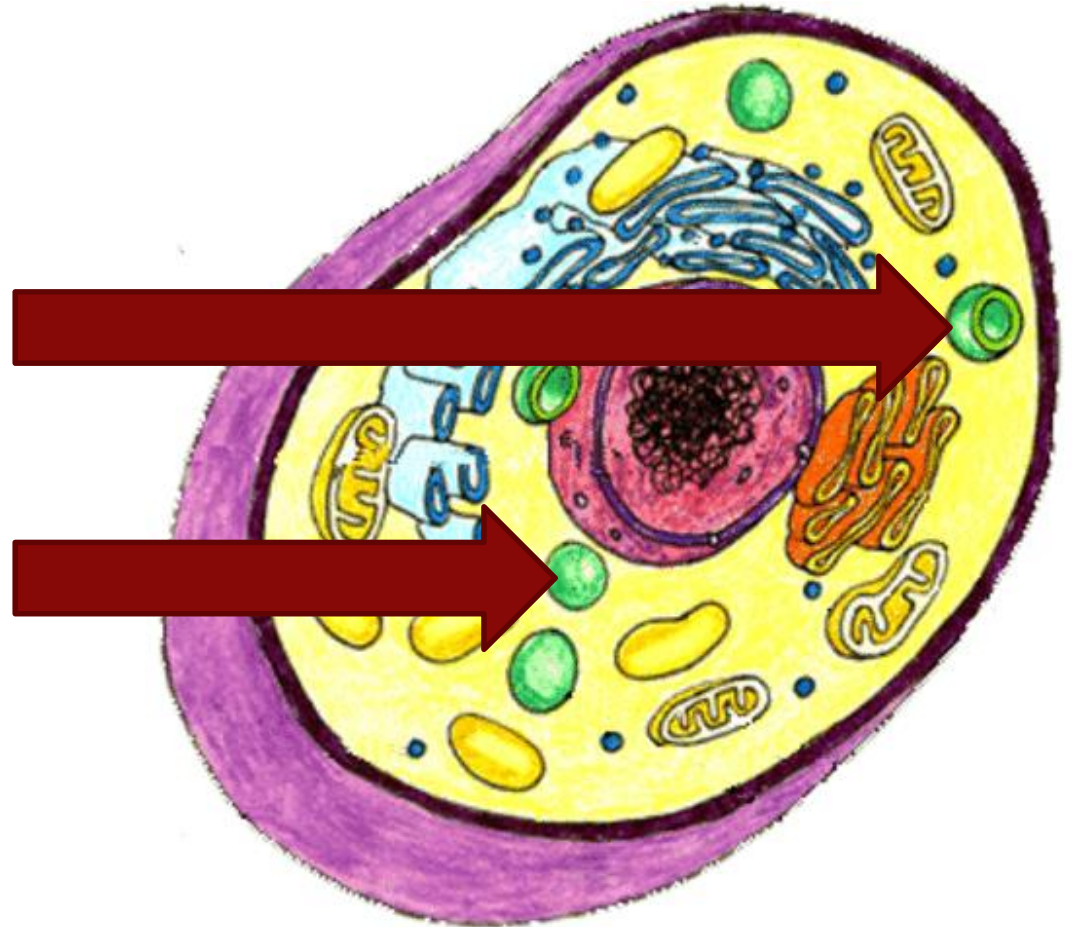
Golgi apparatus

- Packages and ships proteins to other parts of the cell



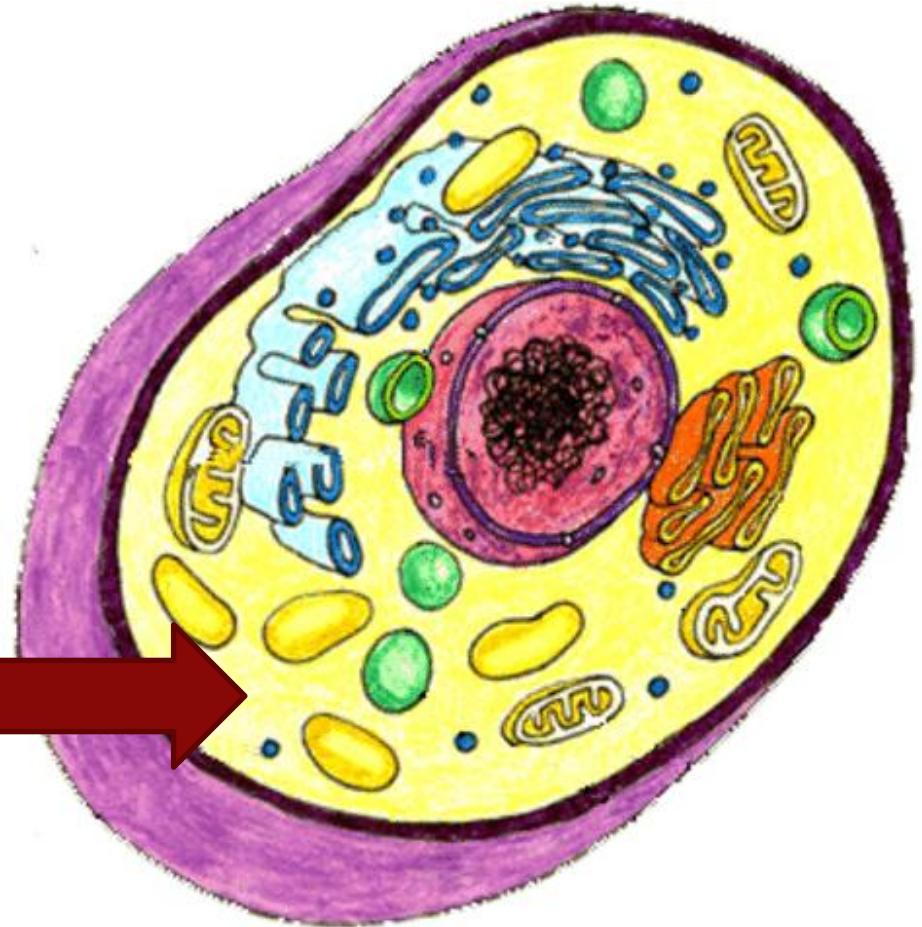
Lysosomes

- Stores and breaks down waste



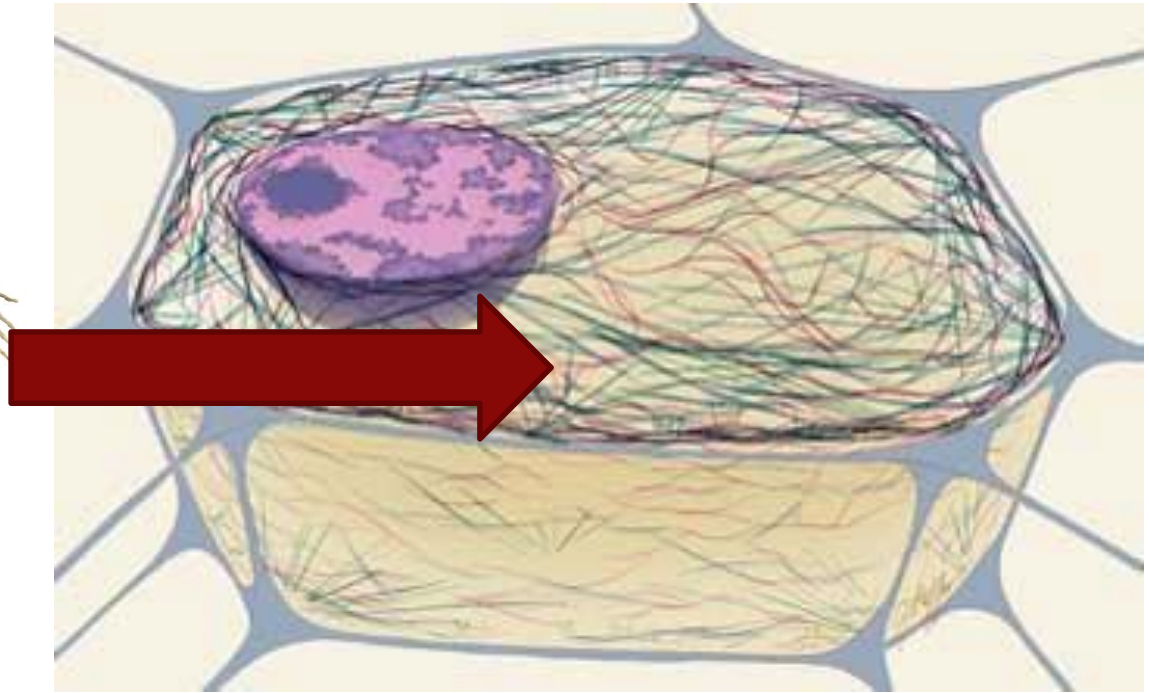
Cytoplasm

- Fluid inside the cell



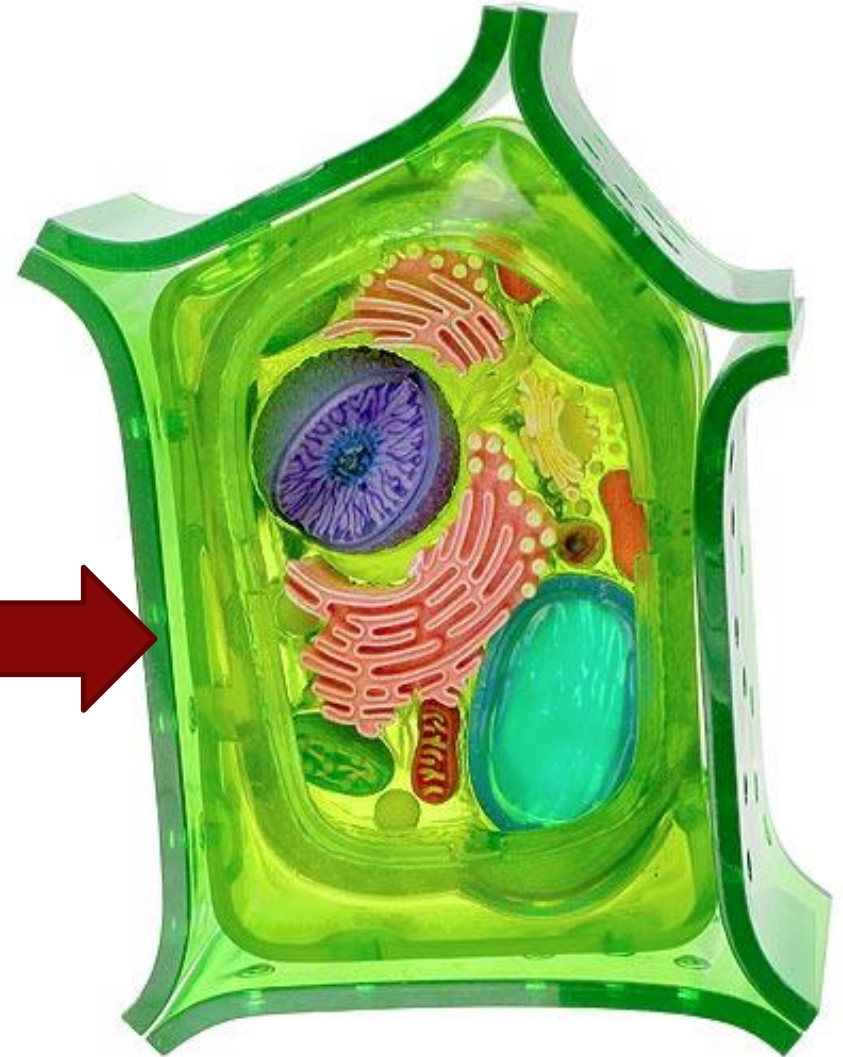
Cytoskeleton

- Holds the cell together



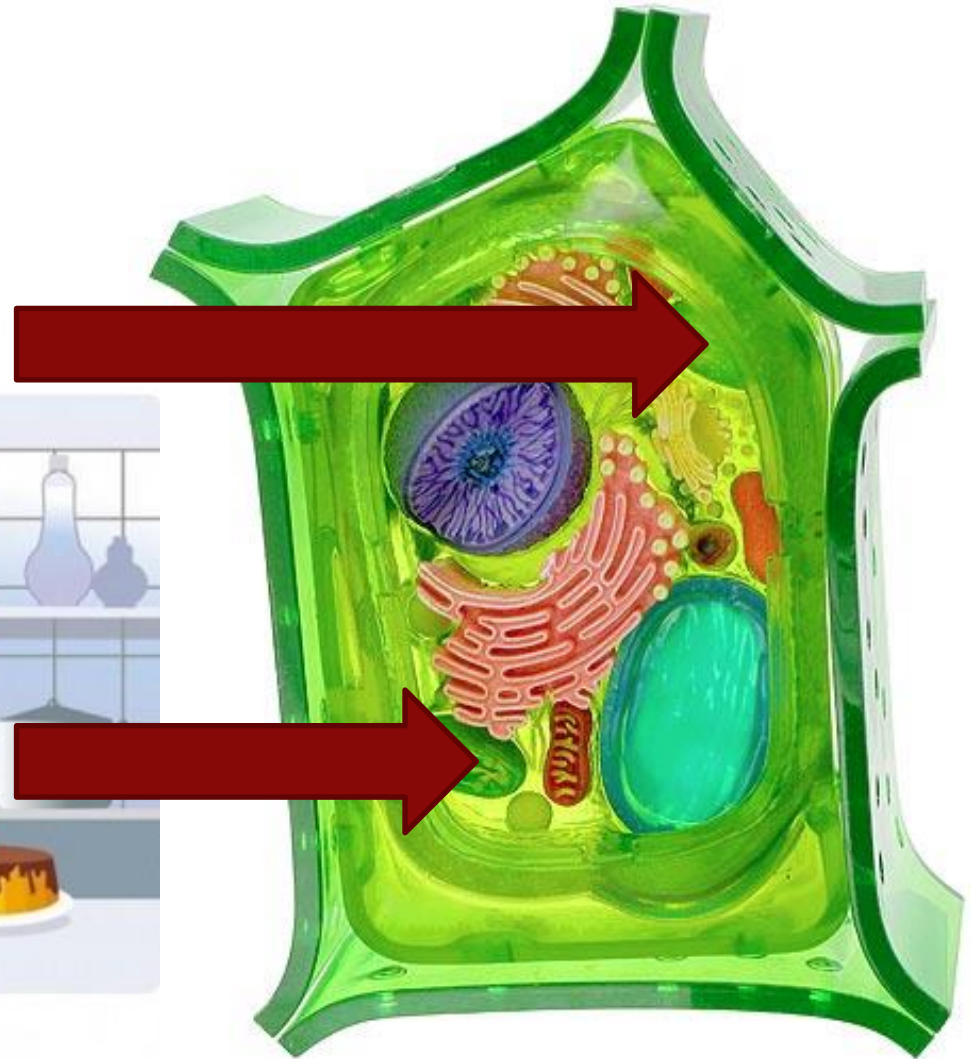
Cell wall

- Surrounds cell membrane
- Protection, rigidity



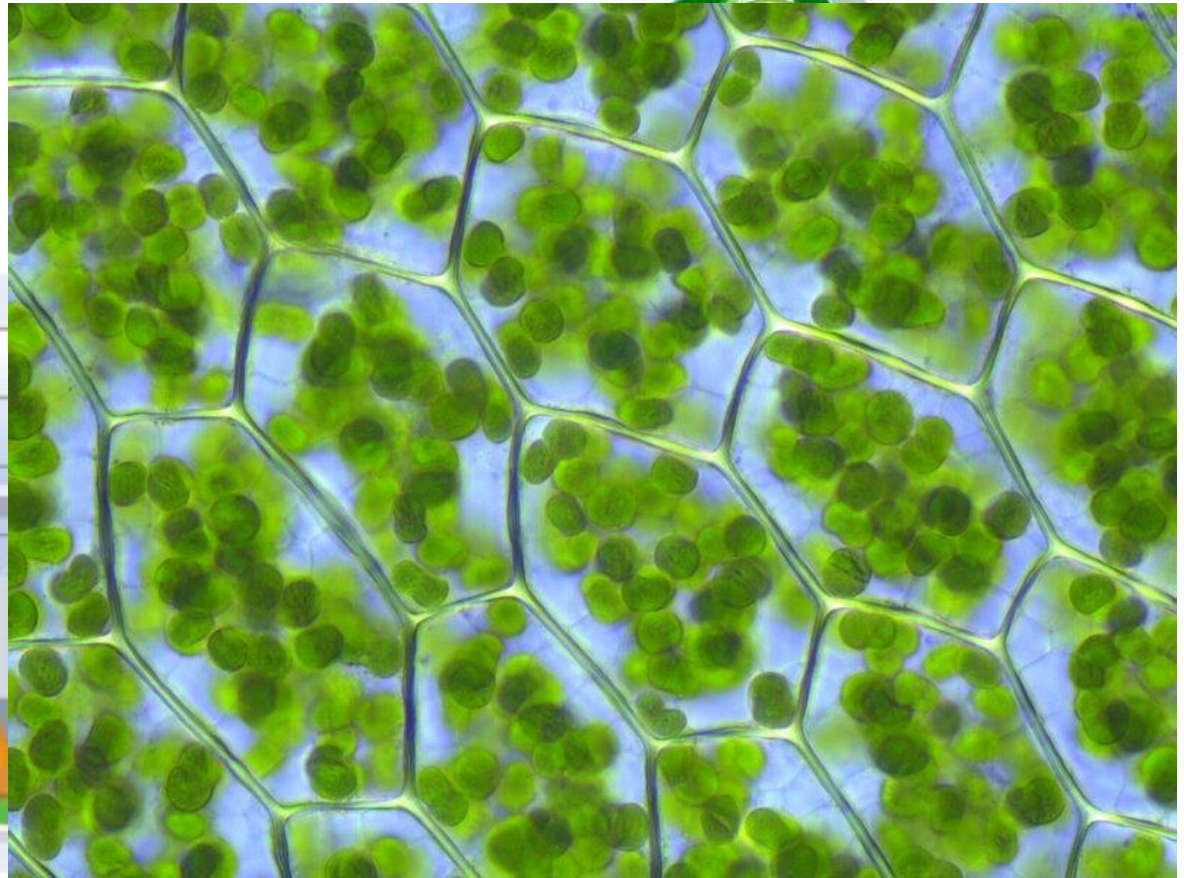
Chloroplasts

- Photosynthesis
- Sunlight → sugar
- Green color



Chloroplasts

- Photosynthesis
- Sunlight → sugar
- Green color



Vacuole

- Stores water, food, waste
- Large volume

