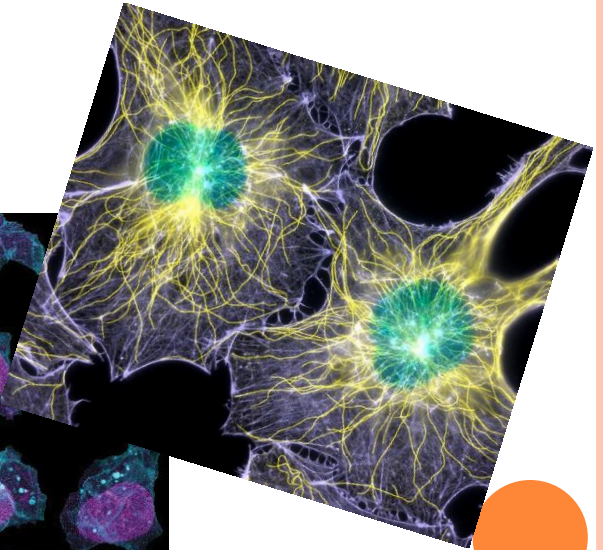
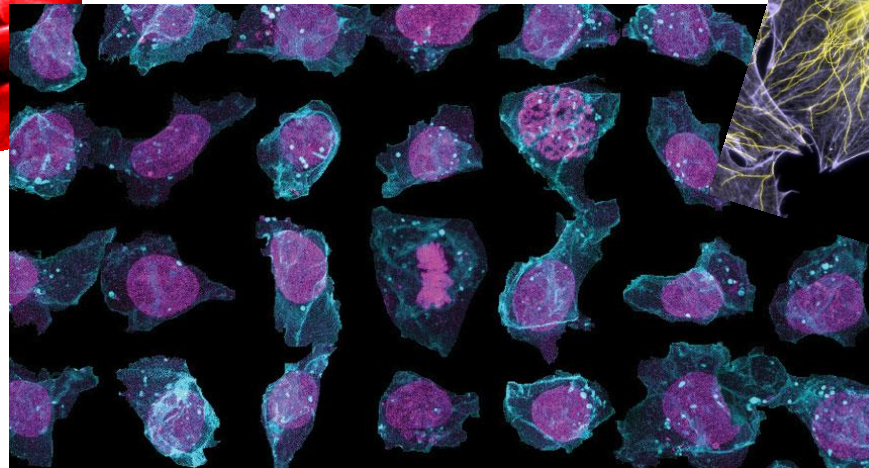
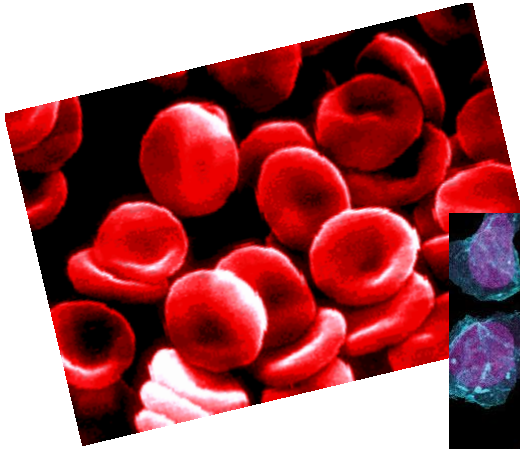


# WHAT ARE THE PARTS OF A CELL?



# THE CELL THEORY

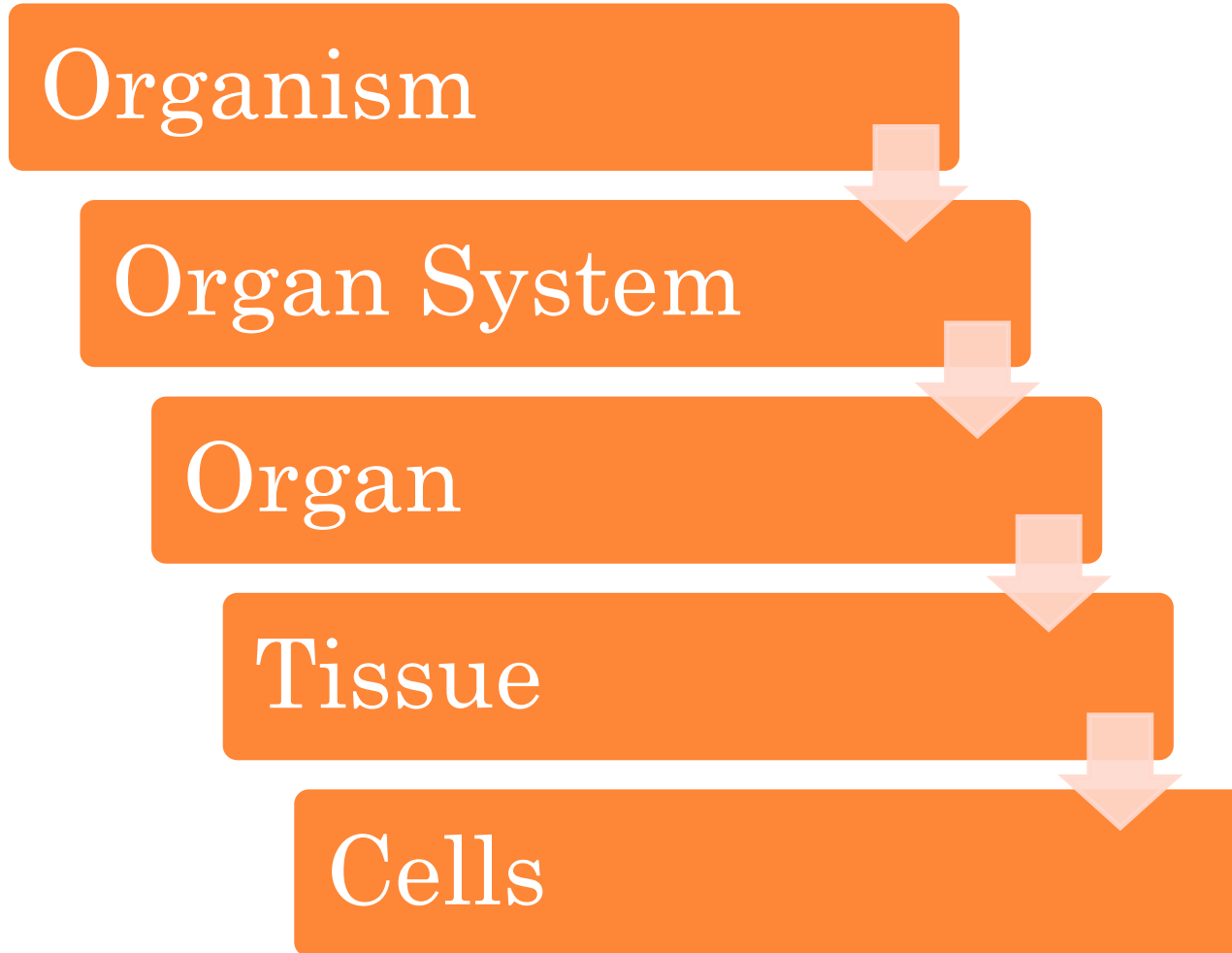
1. All living things are made of cells
2. Cells are the basic unit of structure and function in living things.
3. Living cells only come from other living cells.





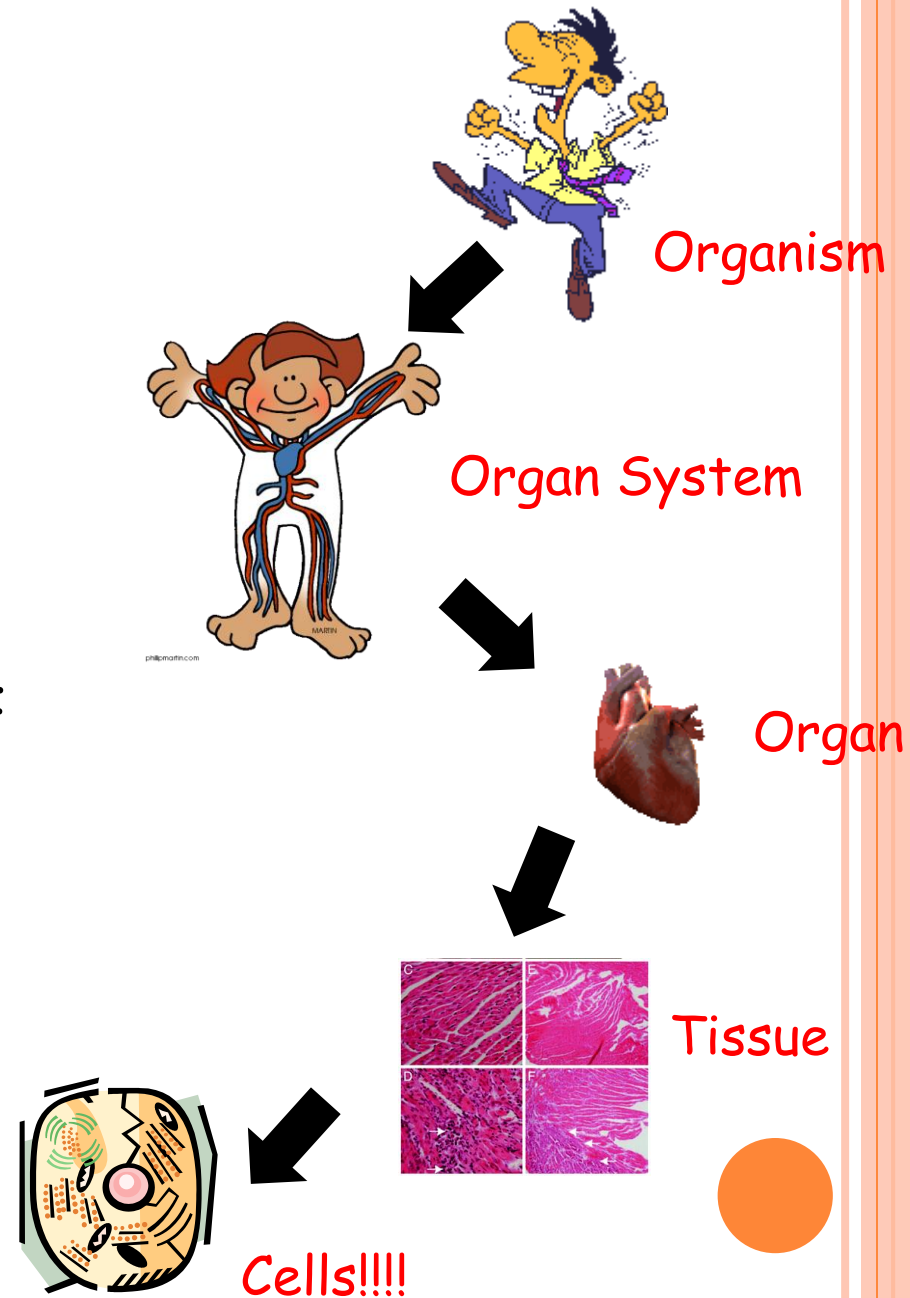
# WHAT IS THE HIERARCHY OF A ORGANISM?

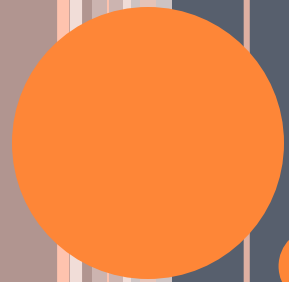
# HIERARCHY IN ORGANISMS



# CELL HIERARCHY

- ❑ An organism is made of organ systems.
- ❑ Organ systems are made up of organs
- ❑ Organs are made up of tissues
- ❑ Tissues are made up of cells
- ❑ Cells are made up of organelles





# WHAT ARE ORGANELLES?

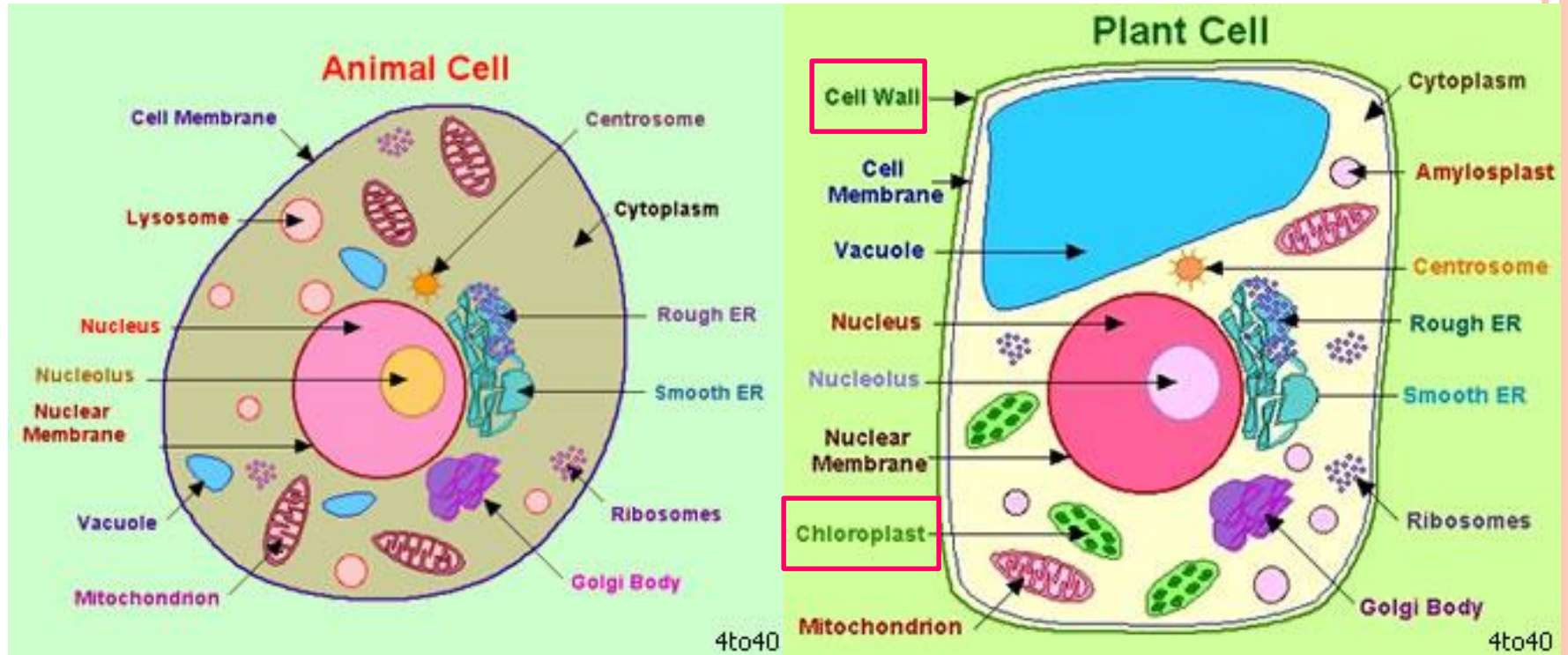
# ORGANELLES

- Organelles are like tiny organs in a cell
- Each has a specific function
- They work together to keep the cell alive and healthy



# Animal Cell

# Plant Cell







# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Cell Membrane

- Surrounds the cell
- Supports and protects the cell
- Controls movement in and out of the cell



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Lysosomes

- Breaks down large food and digests old cell parts
- Cell's recycler



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Cytoplasm

- The cell's environment or inner space
- Mostly made of water
- Contains the organelles



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Nucleus

- The cell's computer, brain, or manager
- Uses DNA to control the cell's activity
- Determines what proteins will be made



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Nuclear Membrane

- Surrounds the nucleus
- Protects and guards the nucleus
- Allows materials to pass in and out



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Ribosomes

- Produces protein (which is the product of the cell)



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Endoplasmic Reticulum

- Transportation system of the cell
- Carries material throughout the cell
- There are Rough ER and Smooth ER





# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Golgi Bodies

- Packs and carries proteins
- They separate and float into the cytoplasm
- Prepares the proteins for use or delivery outside the cell



# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Mitochondria

- Supplies energy that the cell needs
- Breaks down sugar molecules into energy
- Needs oxygen and gives off carbon dioxide as waste




# WHAT ARE THE ORGANELLES OF AN ANIMAL CELL?

## ○ Vacuoles

- Storage bubbles found in the cell
- Stores food or nutrients
- Also stores waste products

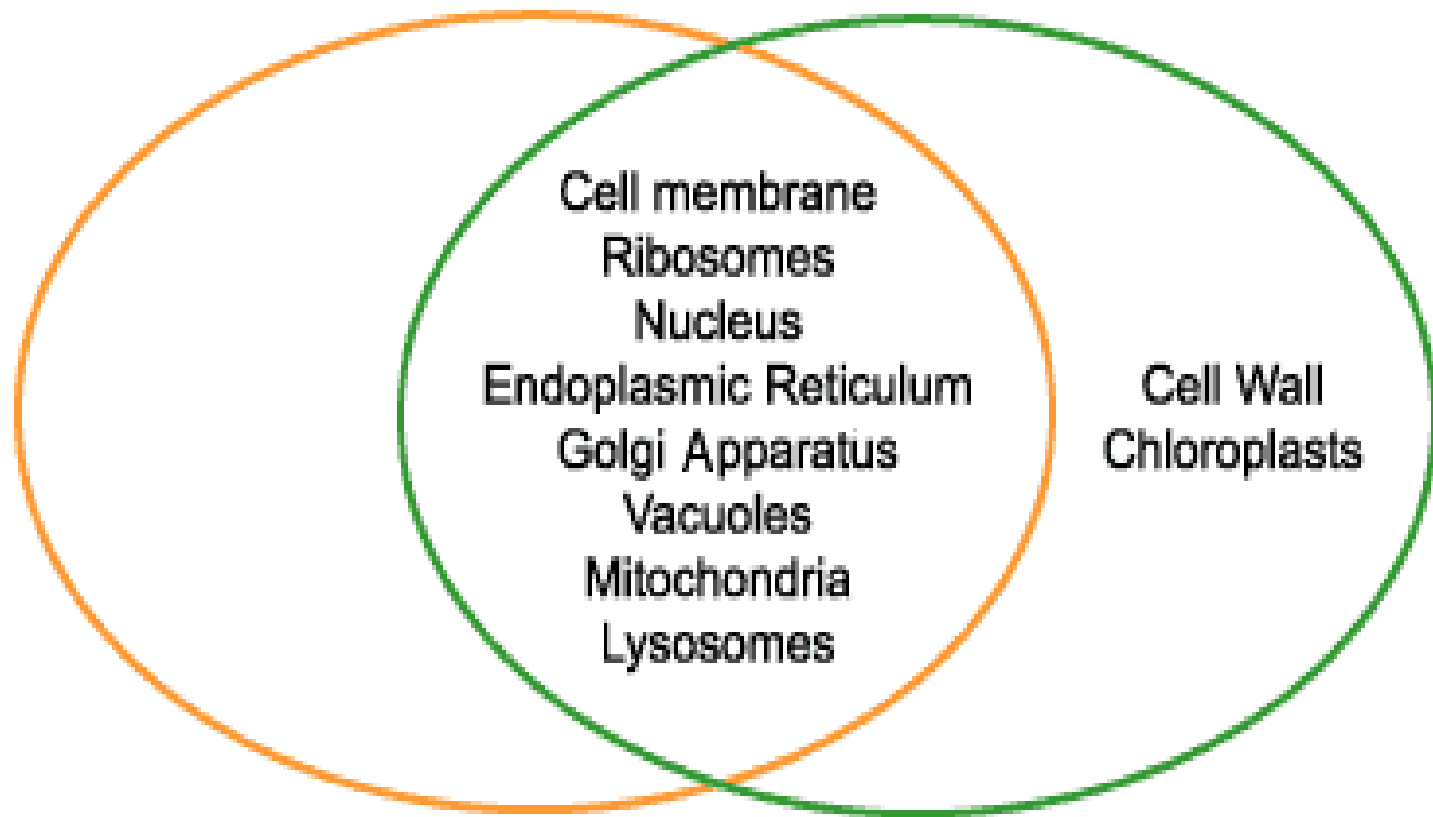




# WHAT ARE THE ORGANELLES OF A PLANT CELL?

## Animal Cells

## Plant Cells



# WHAT ARE THE ORGANELLES OF A PLANT CELL?

## ○ Cell Wall

- Plant cells only
- Surrounds the cell membrane
- Gives plants their shape, structure, support and protection

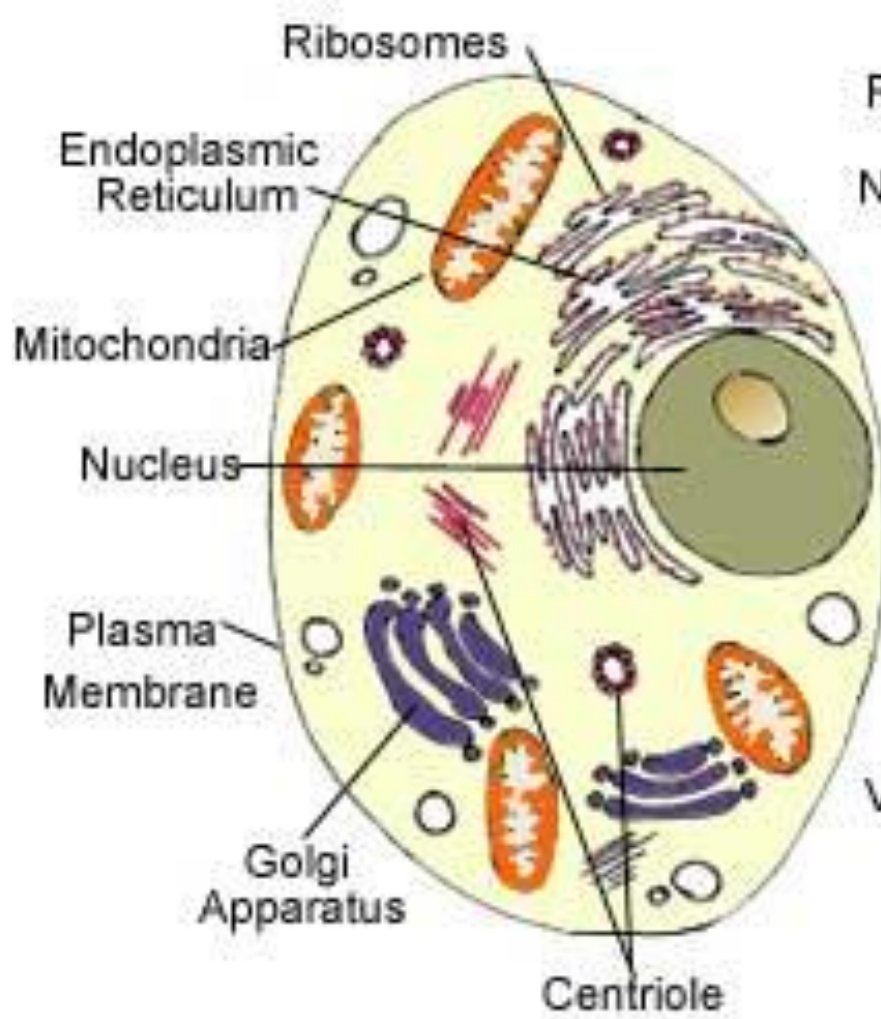


# WHAT ARE THE ORGANELLES OF A PLANT CELL?

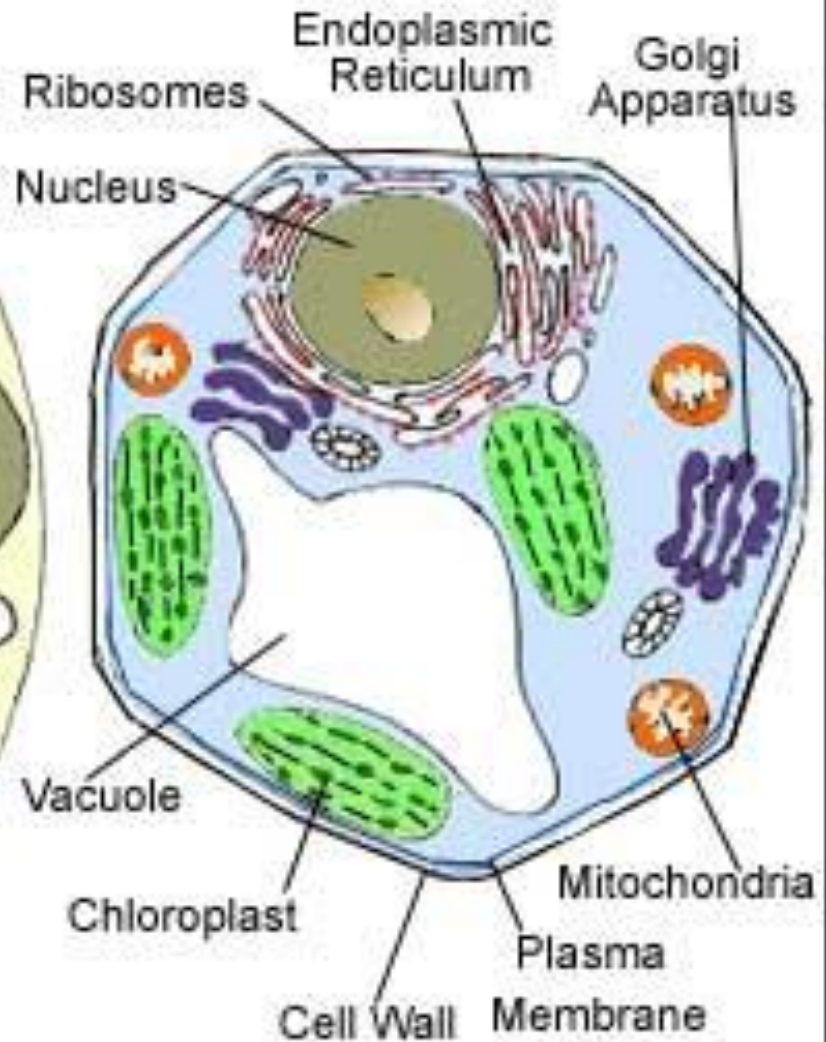
## ○ Chloroplasts

- Plant cells only
- Where photosynthesis takes place
- Makes food for the plant and gives plants their green color





**Animal Cell**



**Plant Cell**



# YOUR ASSIGNMENT

- Create the chart below
- Make up an analogy for each of the cell parts (plant parts included)
- In complete sentences, describe why the analogy works for each of the parts
- Turn completed chart into the basket when done

Cell Part	Analogy	Why it Works

