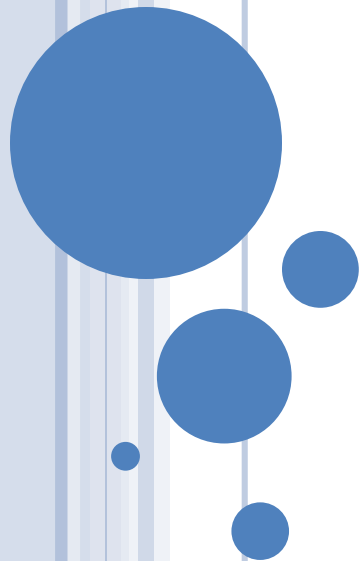


# **Warm-Up**

**Part of the cell theory states that cells:**

- a. are the basic unit of structure and function**
- b. come from other cells**
- c. make up all living things**
- d. all of the above are correct**



# Warm-Up

Part of the cell theory states that cells:

- a. are the basic unit of structure and function
- b. come from other cells
- c. make up all living things
- d. all of the above are correct

# CELL THEORY

- All living things are made of cells.
- Cells are the basic unit of structure and function in living things.
- All cells come only from other pre-existing cells.



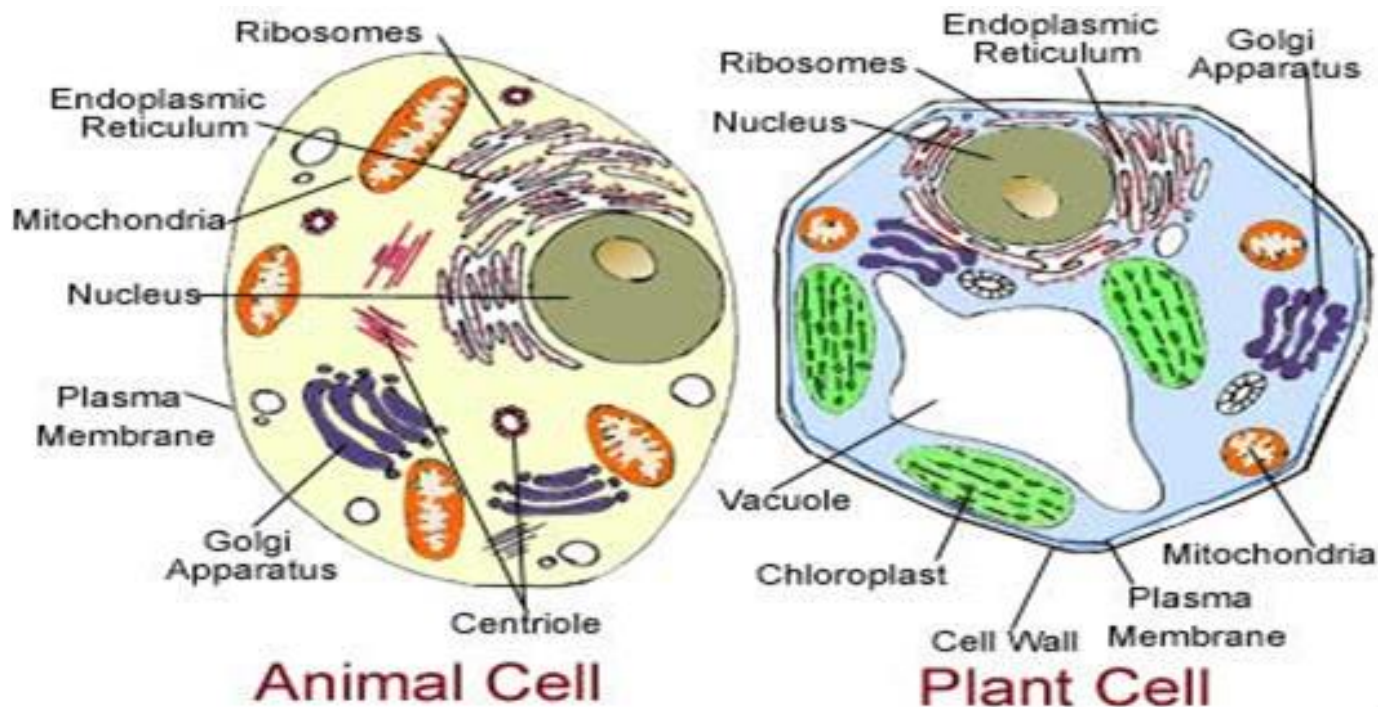
# Cell Notes and Post It Activity

Directions: Create “study  
notes with your post it  
notes”

Place over the correct  
image

Use for studying at home●

- **Standard:** S7L2. Obtain, evaluate, and communicate information to describe how cell structures, cells, tissues, organs, and organ systems interact to maintain the basic needs of organisms.
- **Purpose:** To be able to describe the cell organelles and their functions within the cell.



# 1. CELL MEMBRANE

- Lets substances

1. Barrier

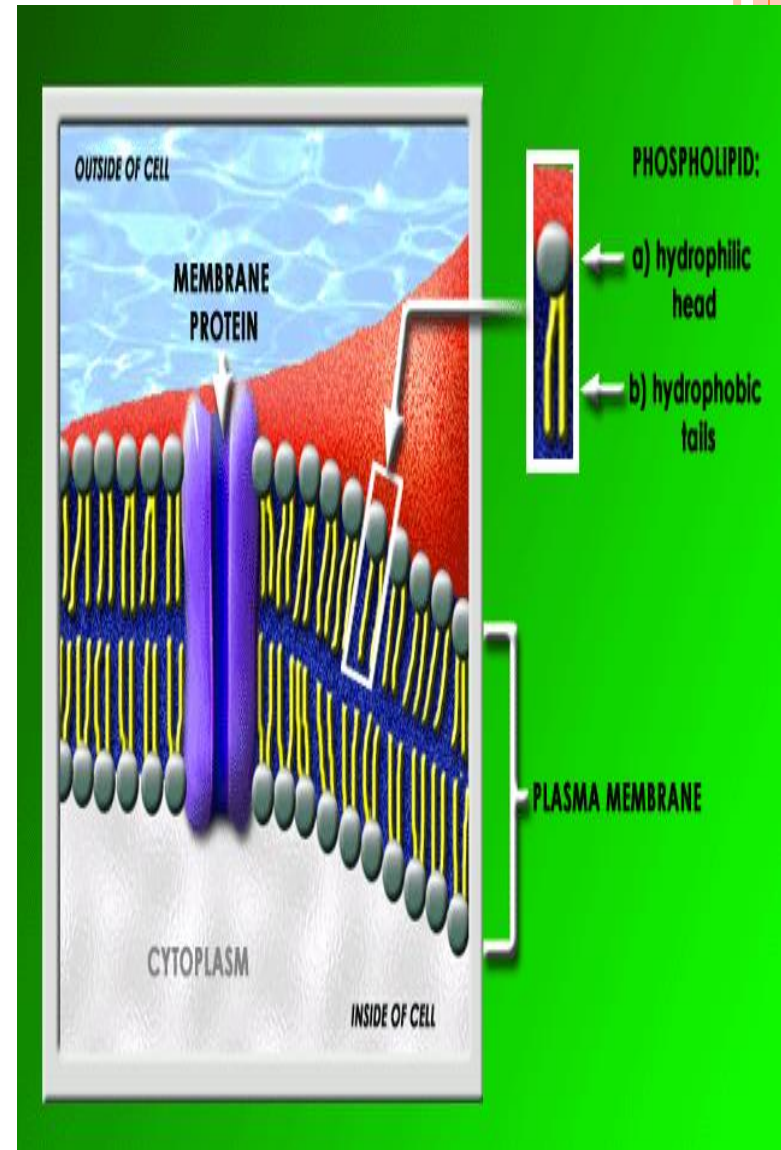
2. in and out

- Maintains homeostasis

- Selectively permeable

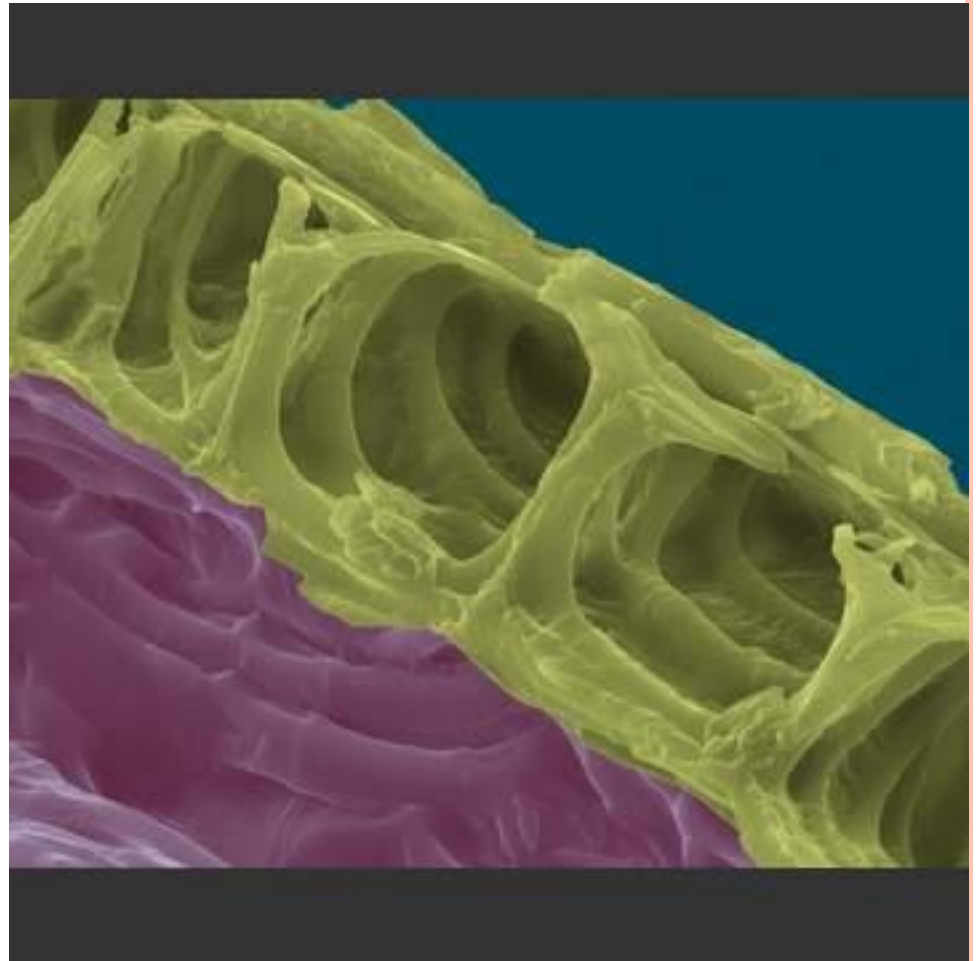
- Made up of phospholipids

- Bilayer (bi-two) with
  - **hydrophilic** (water-loving) heads pointed outwards and
  - **hydrophobic** (water-fearing) tails always pointed inward



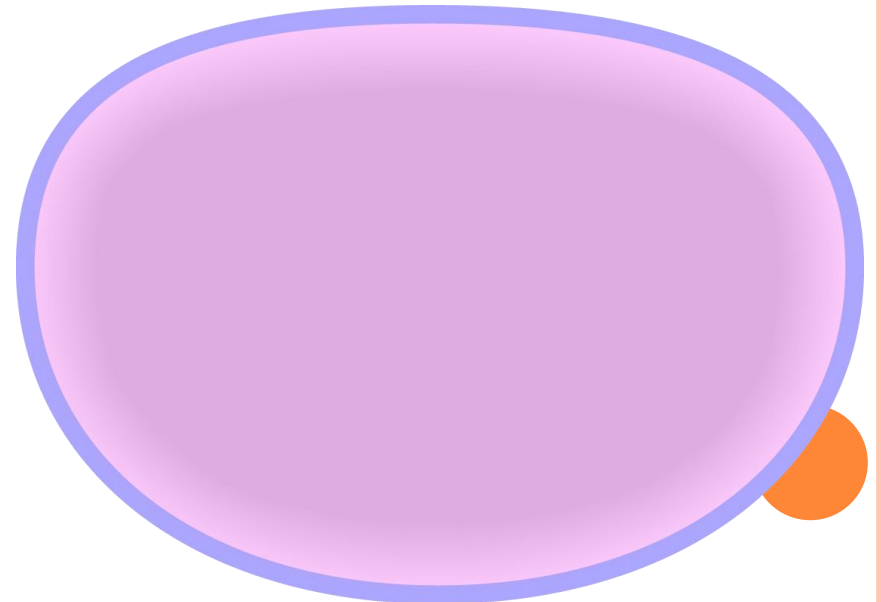
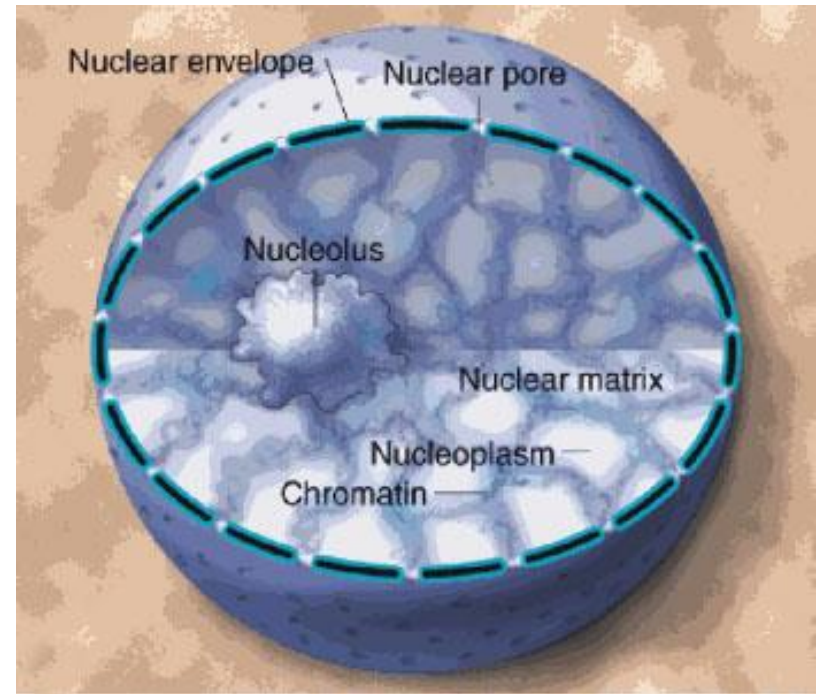
## 2. CELL WALL

- Protection
- Only found in plants, bacteria and a few fungi.
- In plants, made of cellulose (a carbohydrate) and in fungi is made of chitin





- **3. Nucleus-** control center; contains DNA
- **4. Nucleolus-** assembles “makes ribosomes”
- **5. Cytoplasm-** clean fluid inside cell, helps with movement throughout cell, cushions organelles, & spreads them out



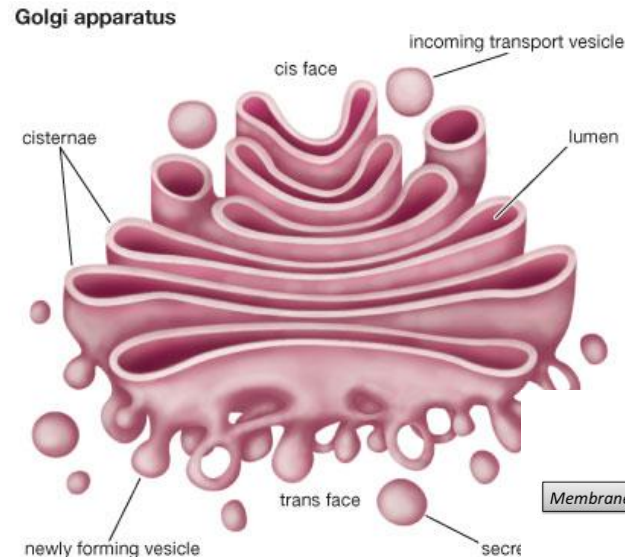
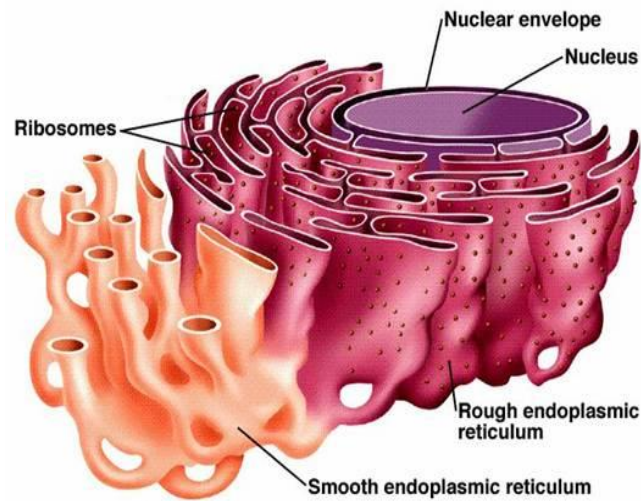


○ **6. Endoplasmic Reticulum-**  
transports proteins

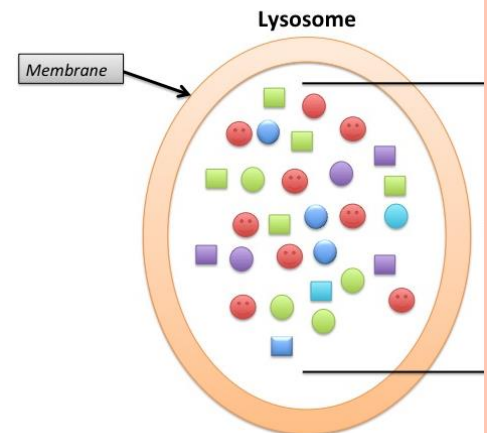
- Rough- ribosomes (makes proteins)
- Smooth- lipid area

○ **7. Golgi Body-**  
**packages**, modifies, &  
ships proteins and  
other substances

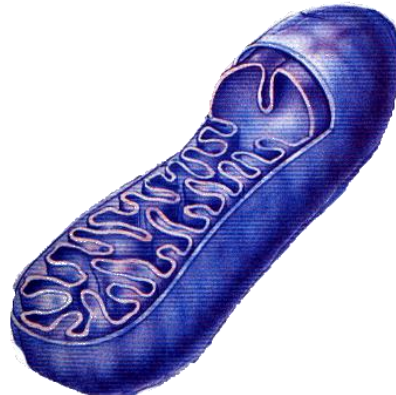
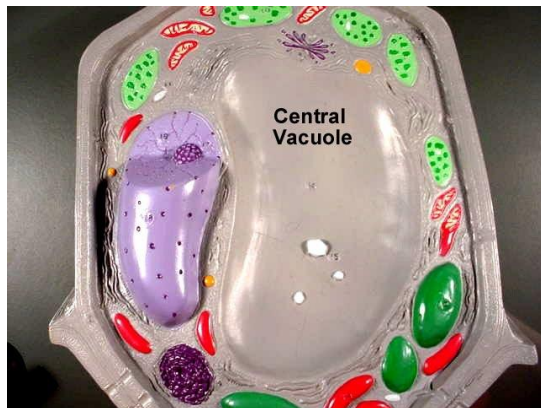
○ **8. Lysosomes-** cleans  
up cell, contains  
enzymes for digestion  
of old and worn out  
parts or invaders  
(NOT found in plant  
cells)



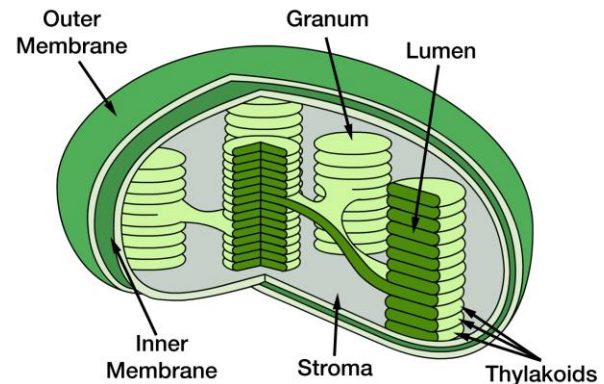
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- **9. Vacuoles-** stores excess food, water, & waste larger in plants
- **10. Mitochondria-** powerhouse; energy production
- **11. Chloroplasts-** site of photosynthesis in plants. Contains chlorophyll.
- **12. Ribosomes-** manufactures proteins or “protein synthesis”



Chloroplast



**Some typical cells**

