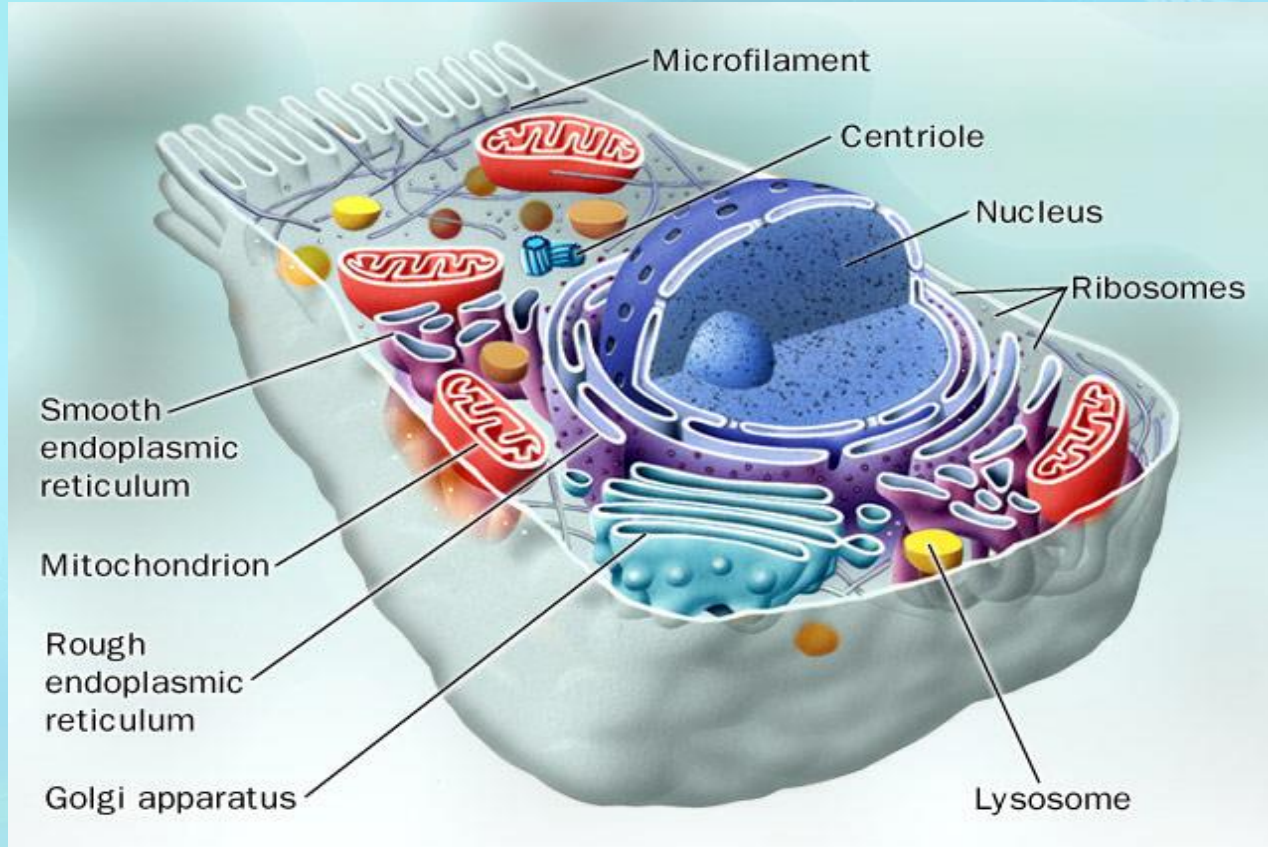


Cells or Cells or Cells?



Cell Intro

MODERN CELL THEORY

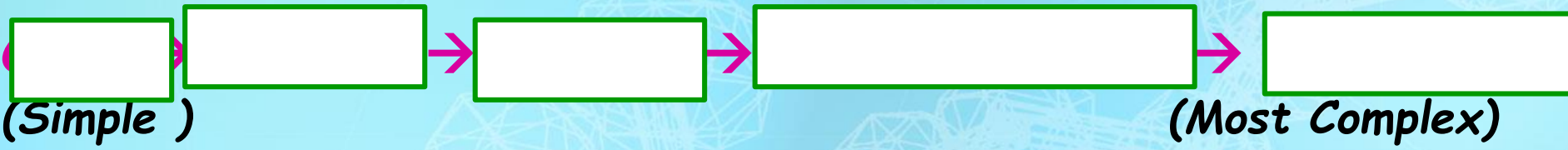


1.

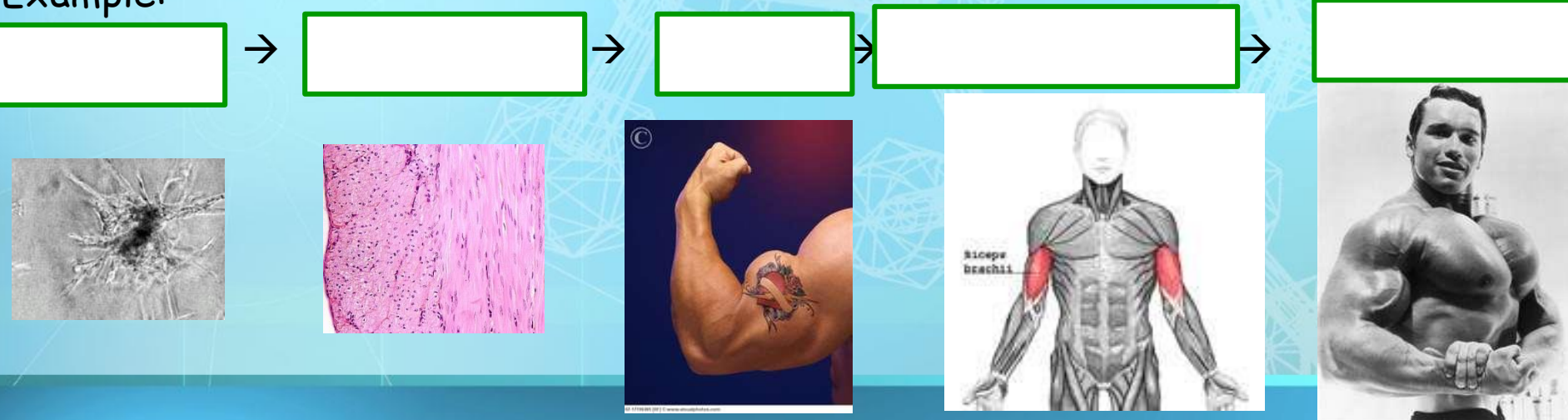
2.

3.

Levels of Organization for Multicellular Organism:



Example:



Cells

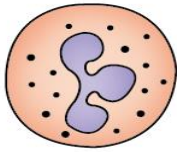
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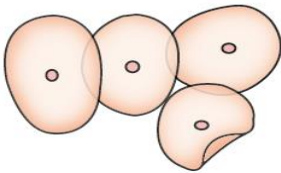
Different kinds of animal cells



[Blank label box]



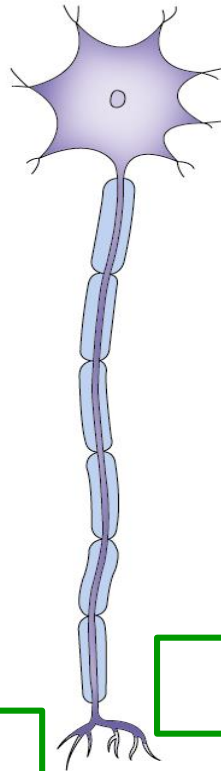
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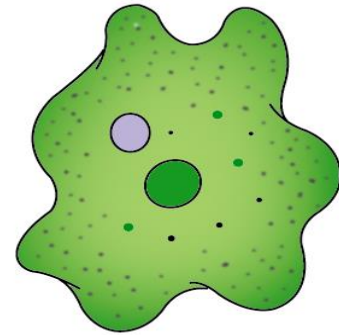
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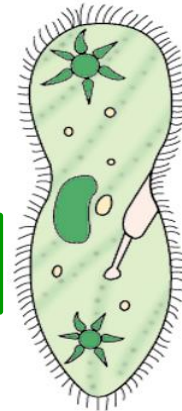
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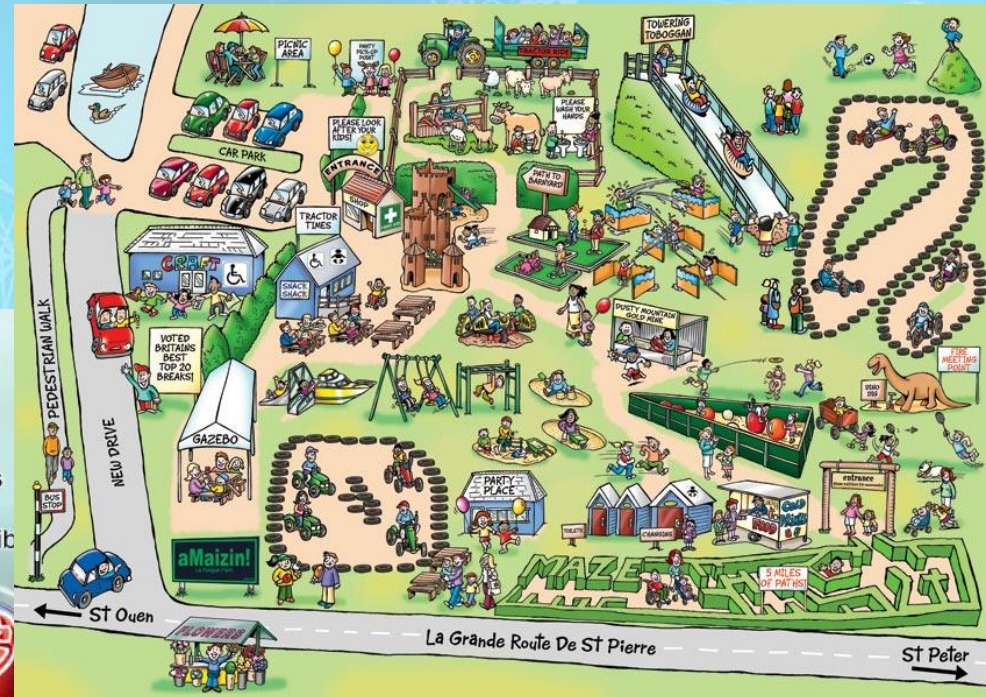
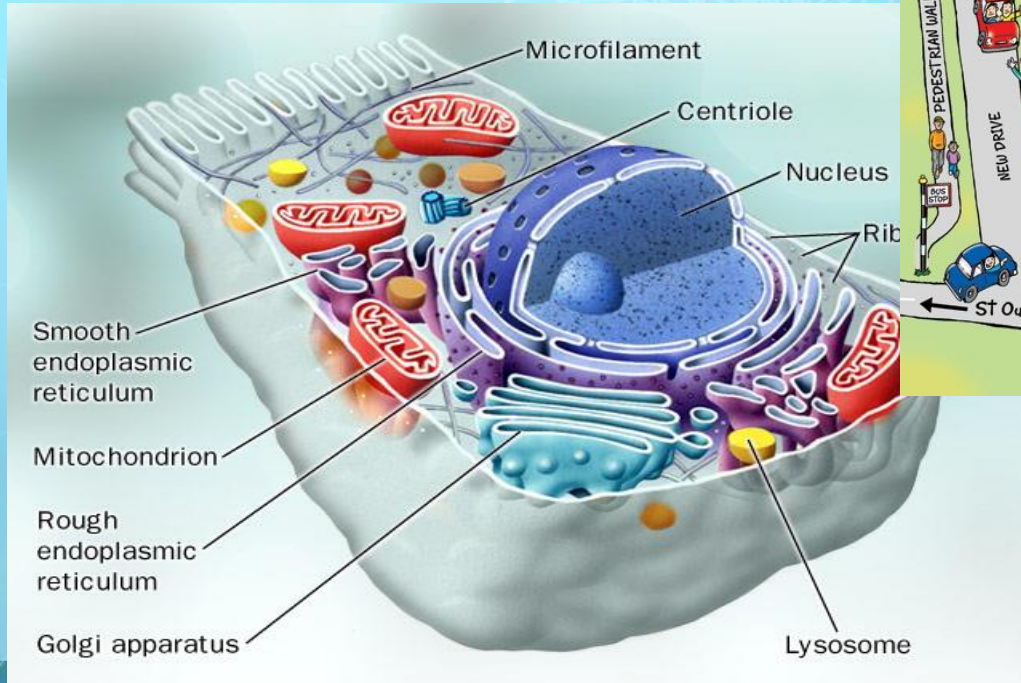


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Basic Structure of a Cell

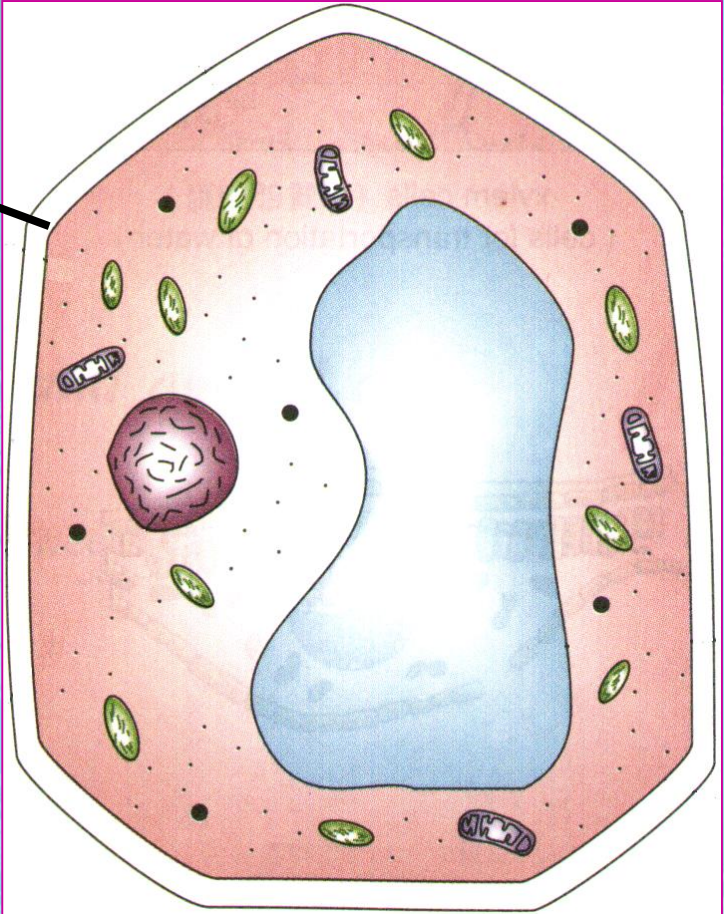


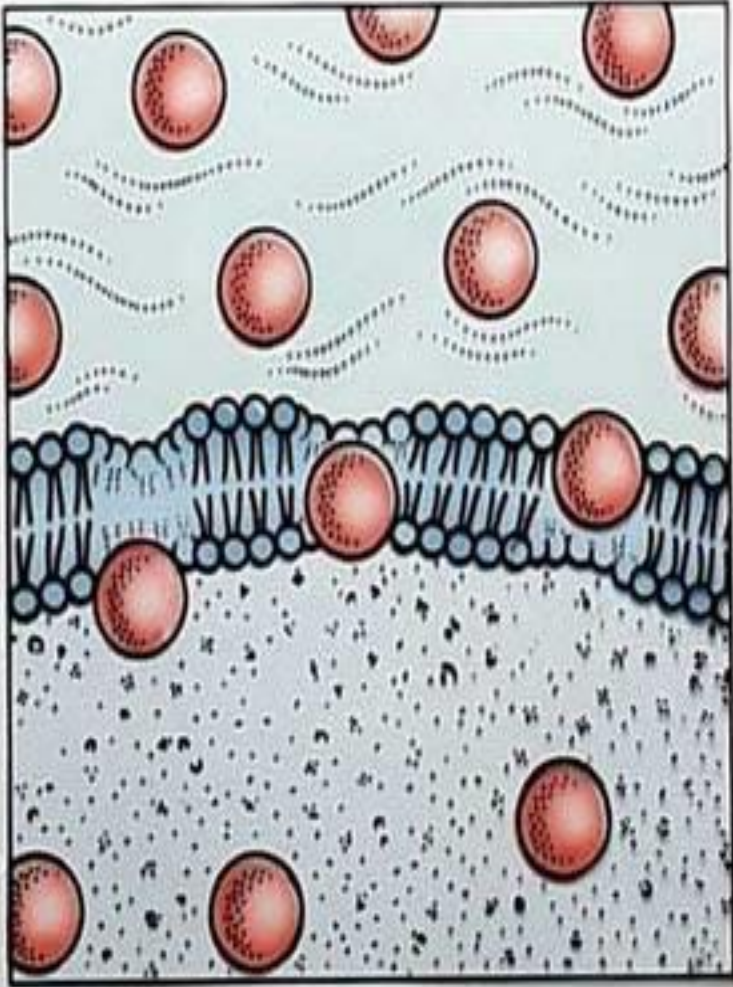
[Cell Video](#)

-

- **disposes of waste products**

-

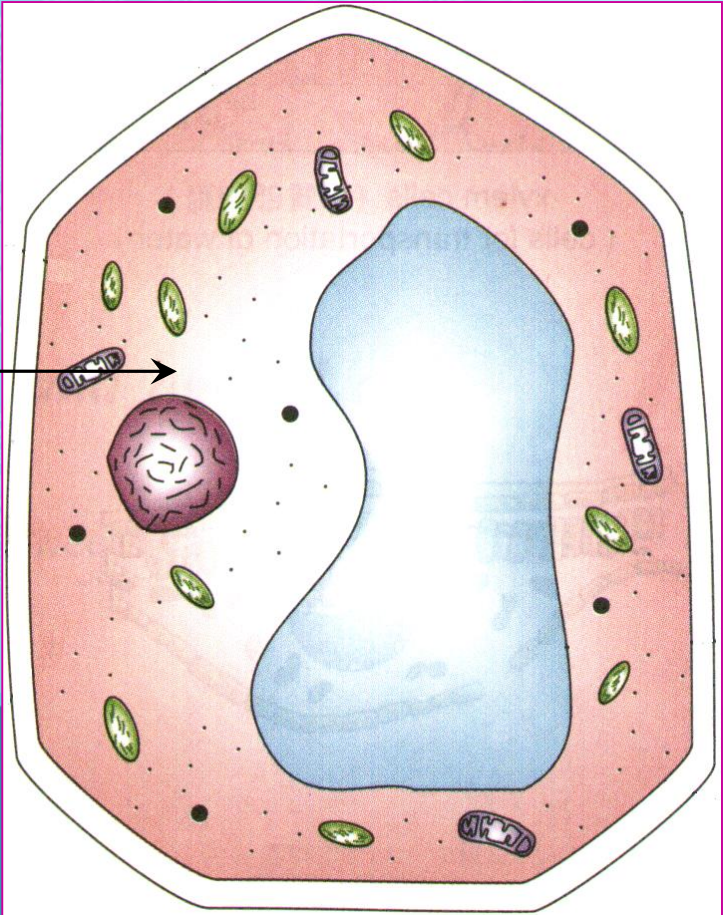




- The cell membrane is SEMI-PERMEABLE.



cytoplasm



The organelles are suspended in the cytoplasm.



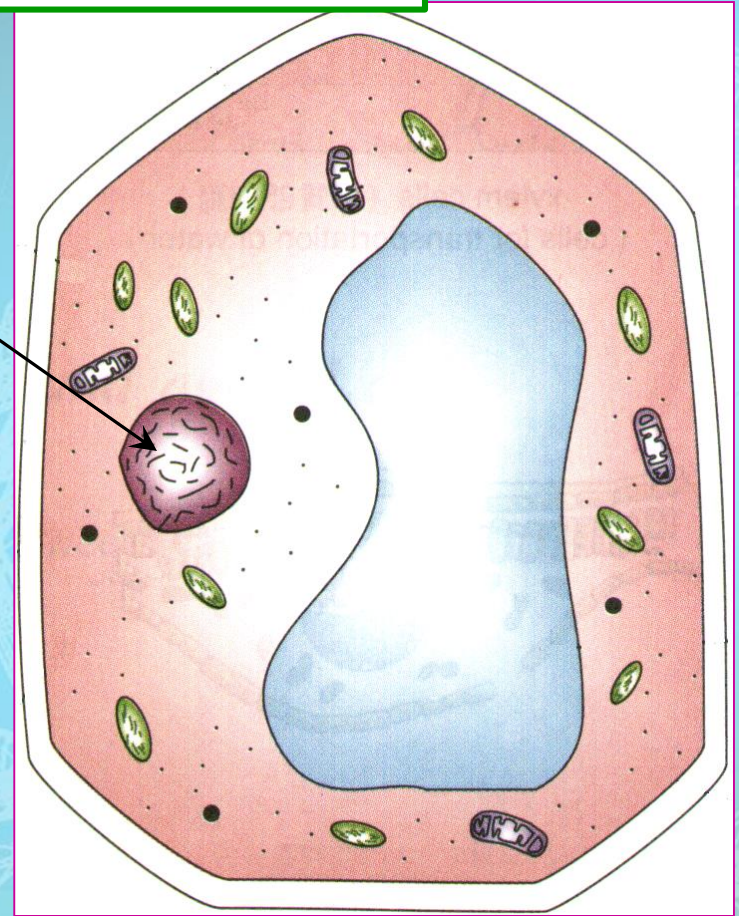
Nucleus

• [Blank box]

• Contains the DNA and Chromosomes

• Enclosed by a nuclear membrane (like the cell membrane)

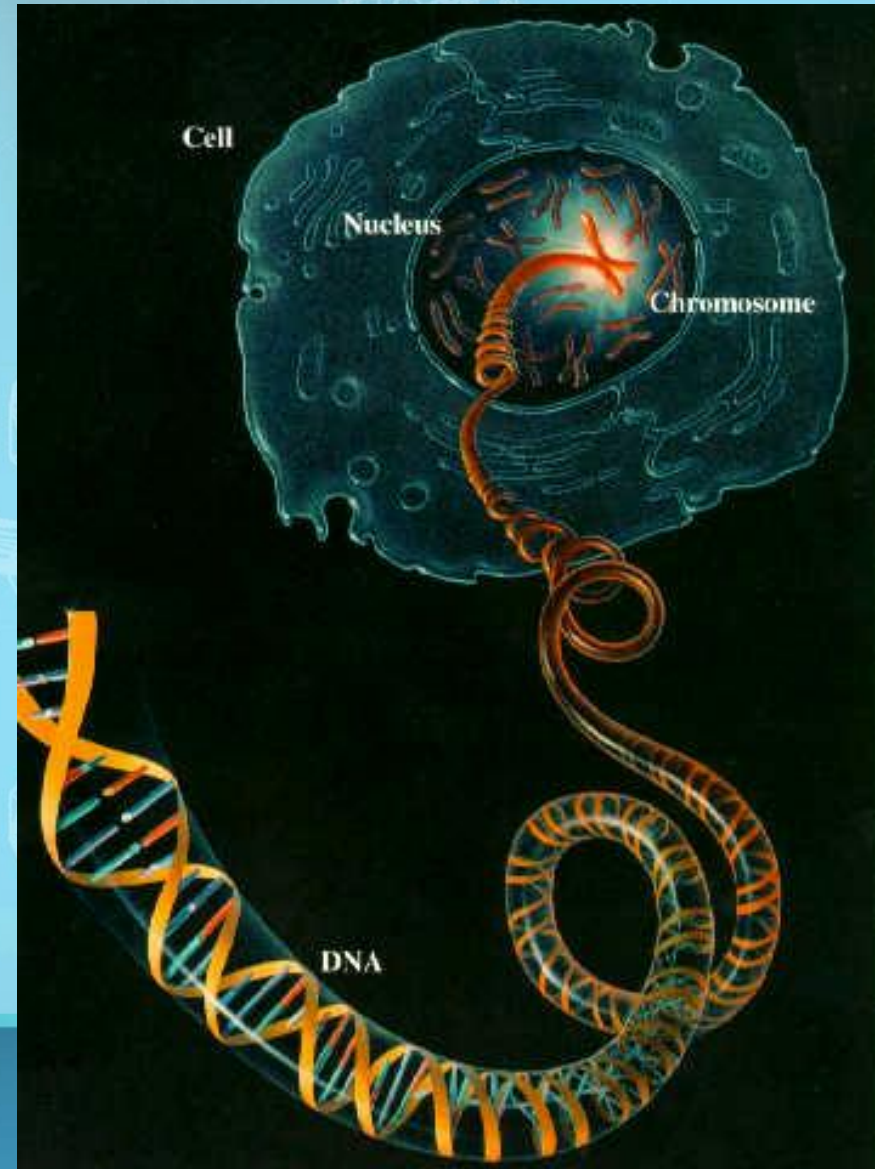
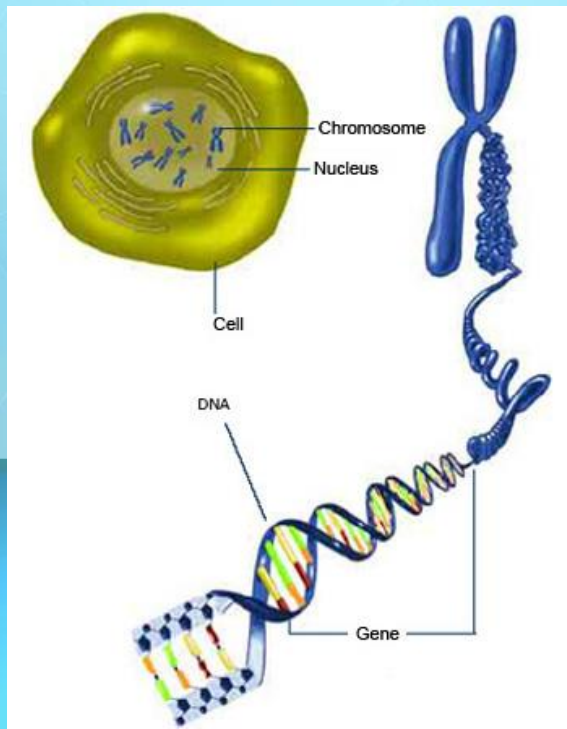
• [Blank box]



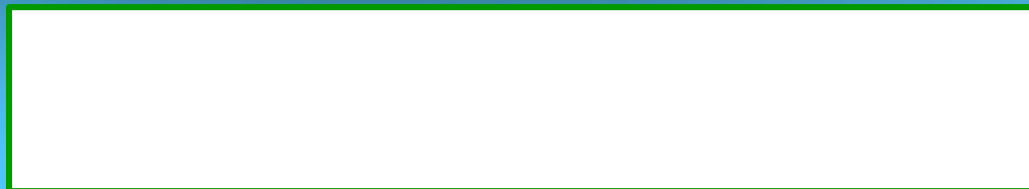
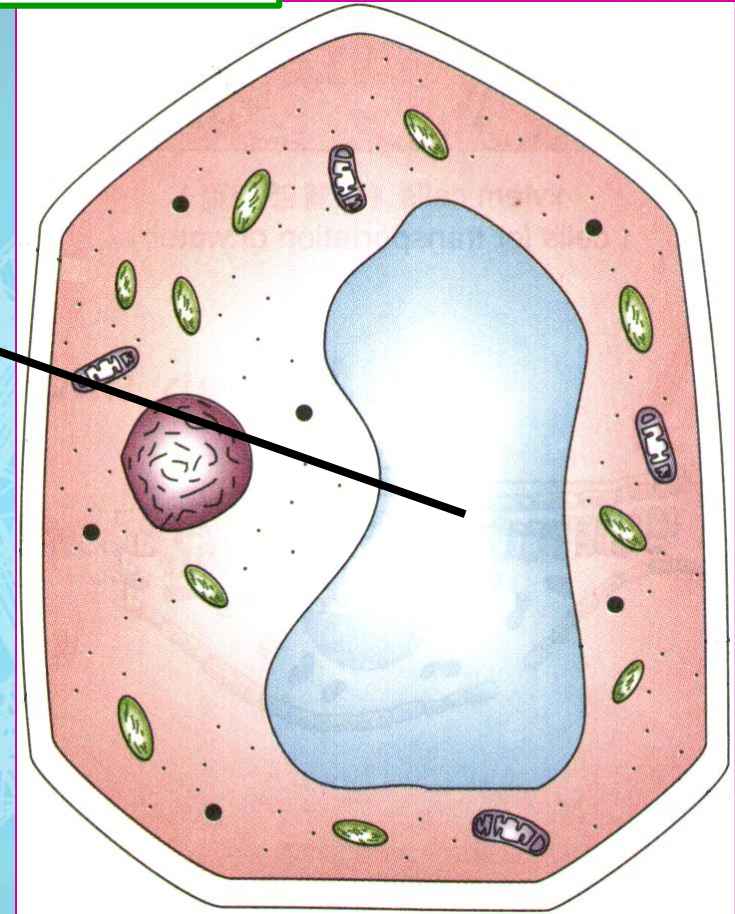
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(deoxyribonucleic acid).

Gene < DNA < Chromosome < Nucleus

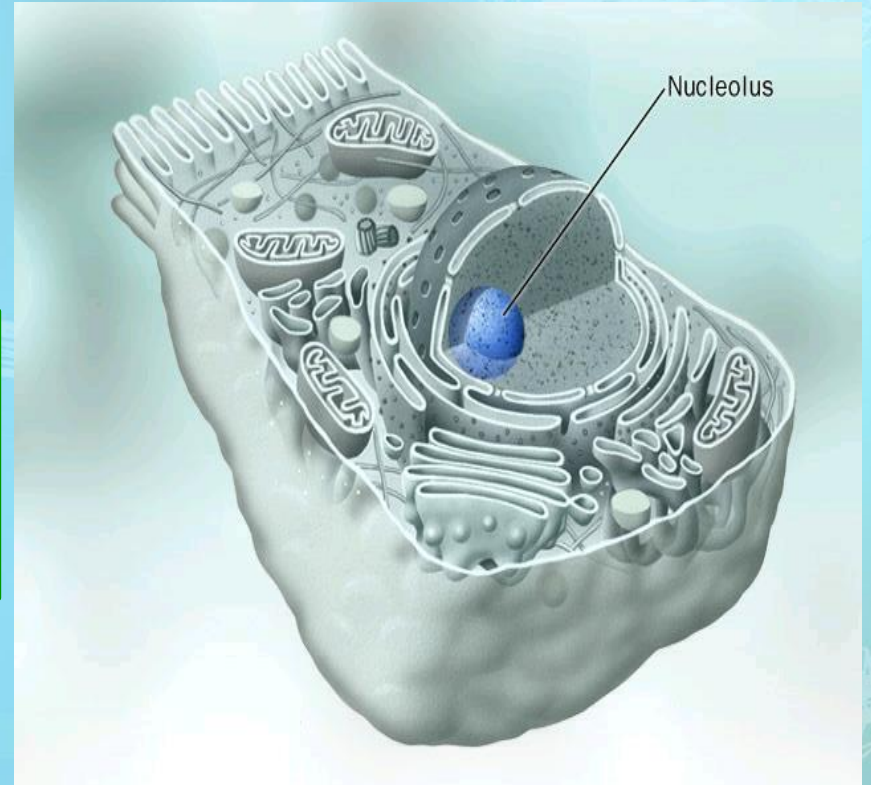


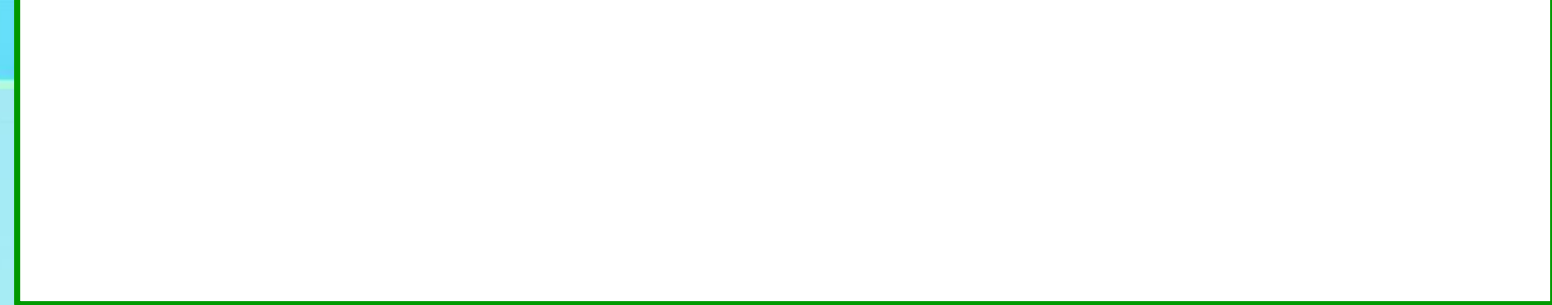
Vacuole



-

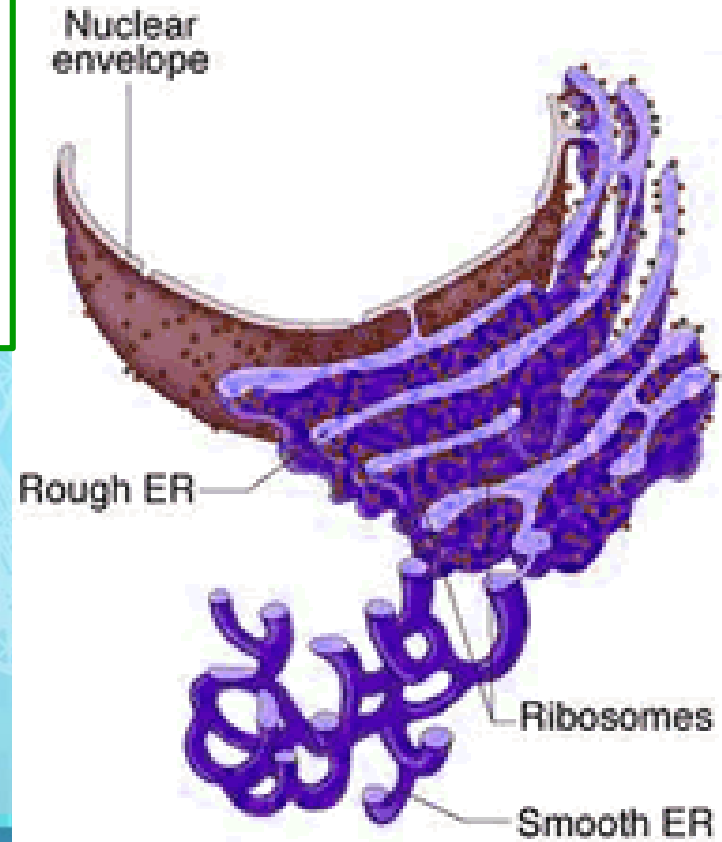
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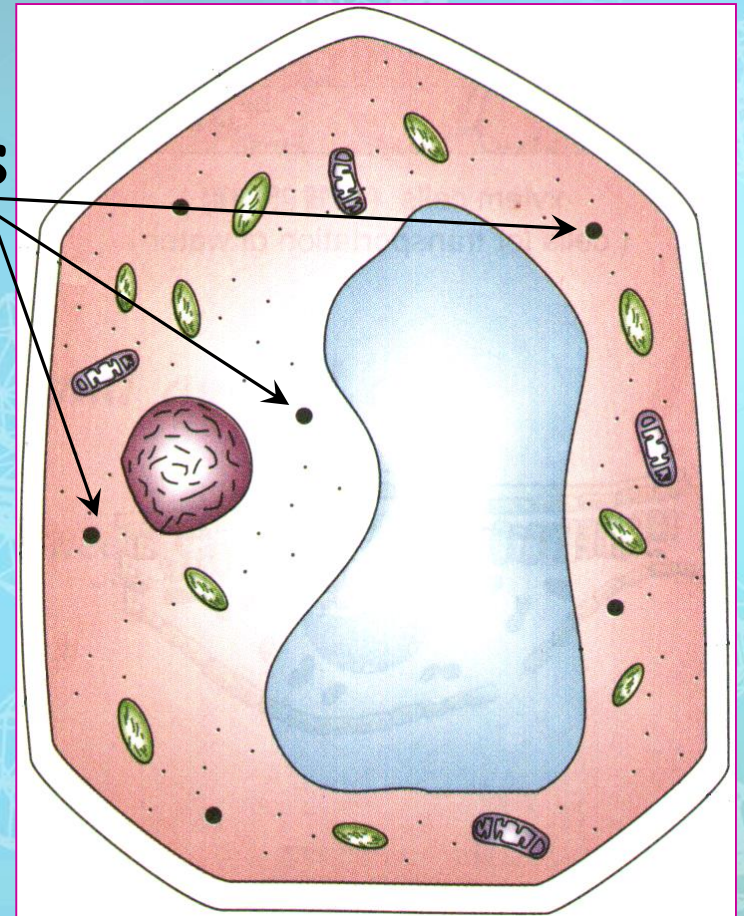
ER does not have ribosomes

ER has ribosomes on its surface

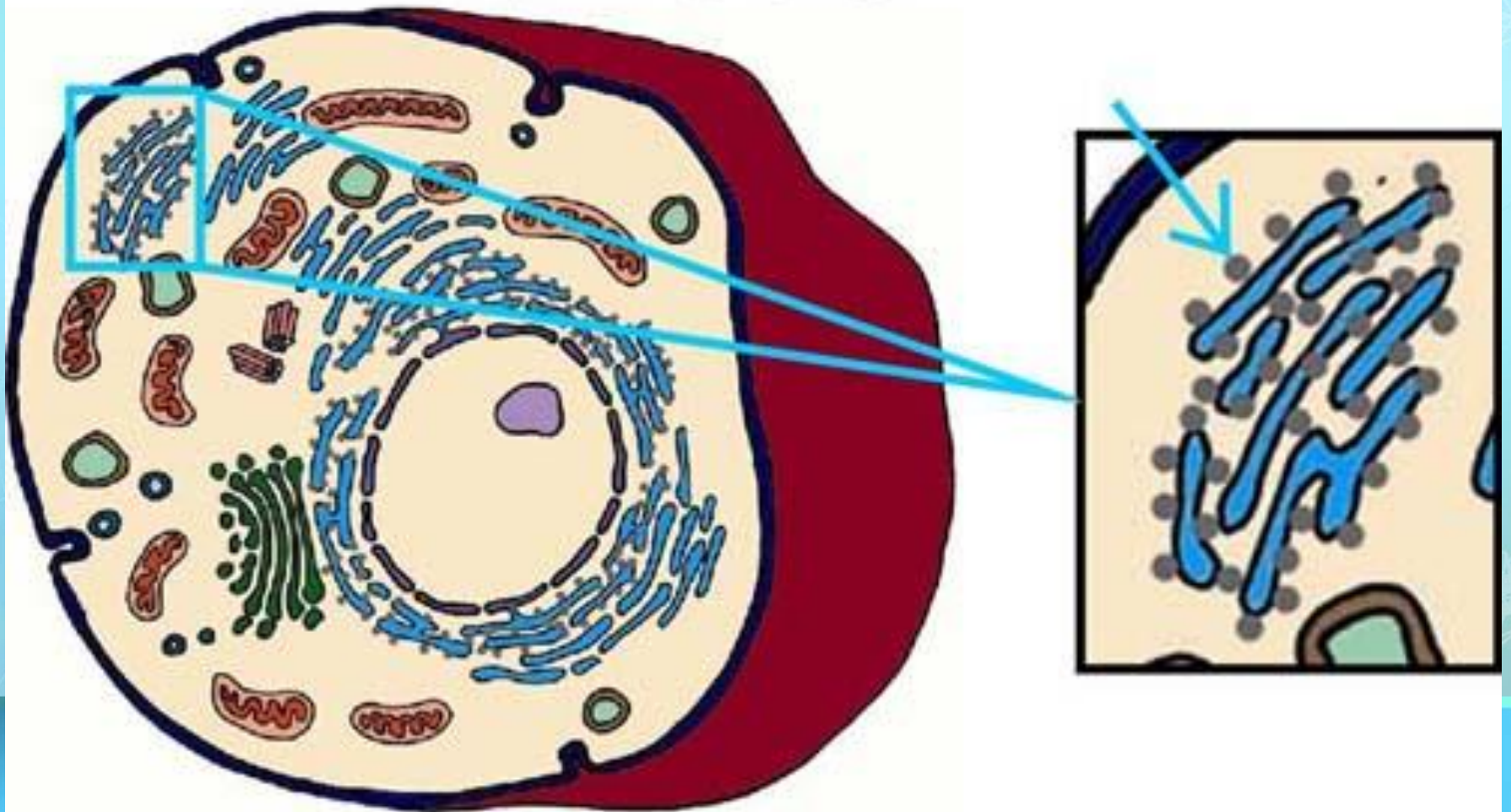


Ribosomes

- Can be floating in the cytoplasm
- or
- attached to the endoplasmic reticulum



Ribosome



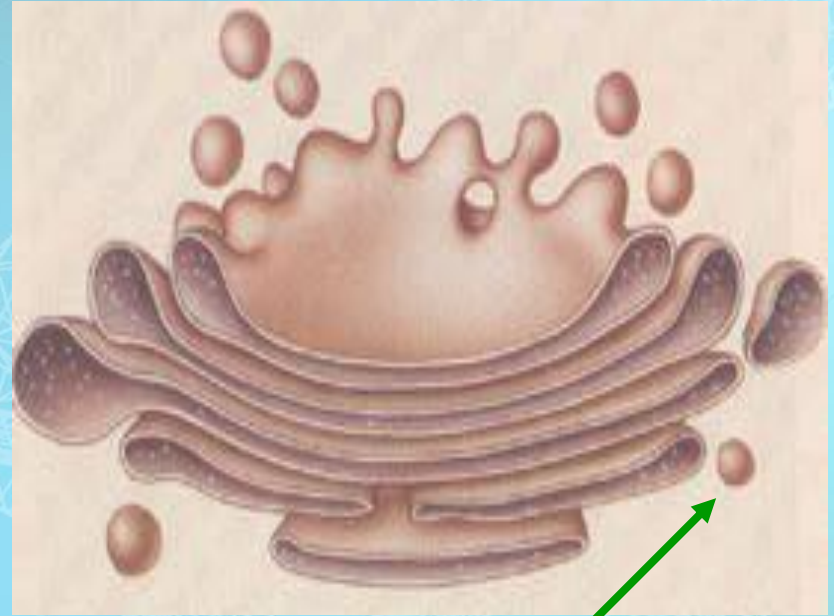




- Stacks of flattened sacs

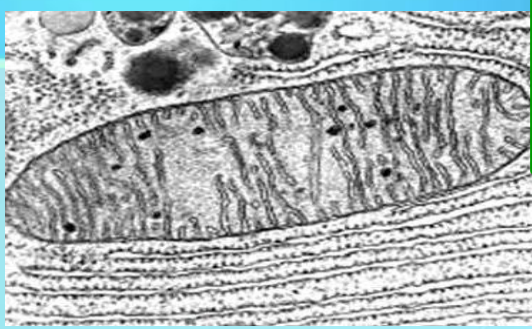


- Receive & modify proteins made by ER
- Transport vesicles with modified proteins pinch off the ends

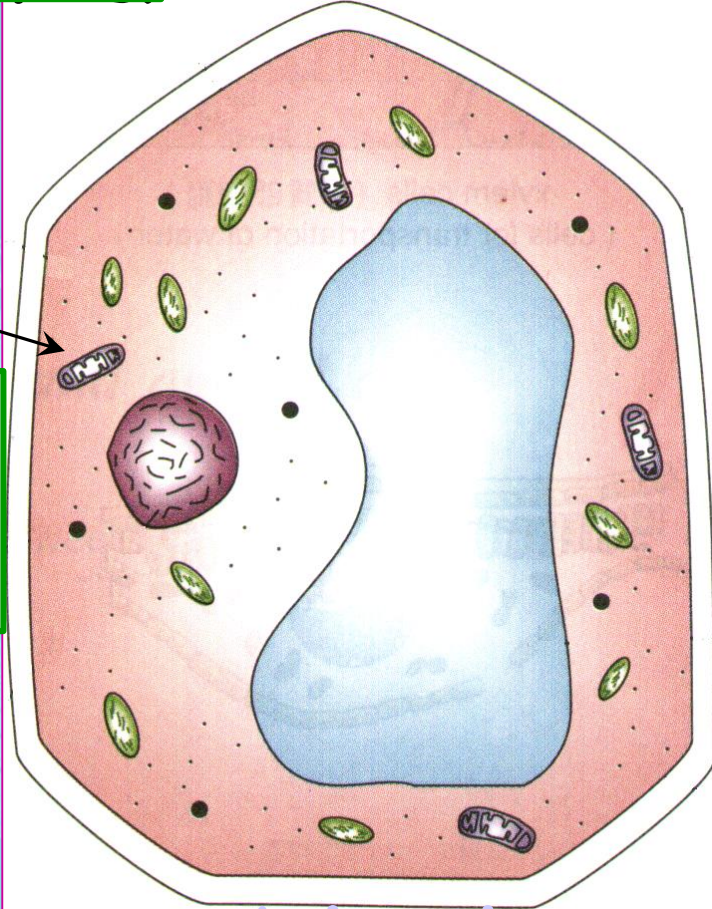


Transport vesicle

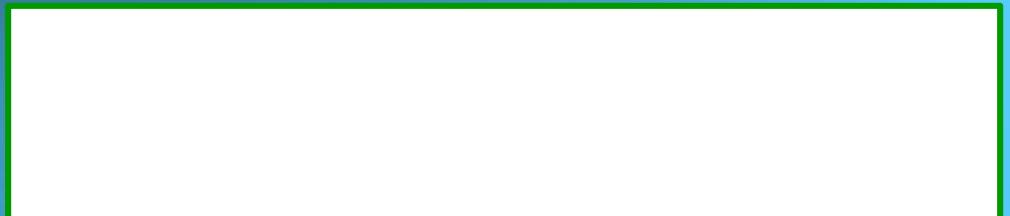




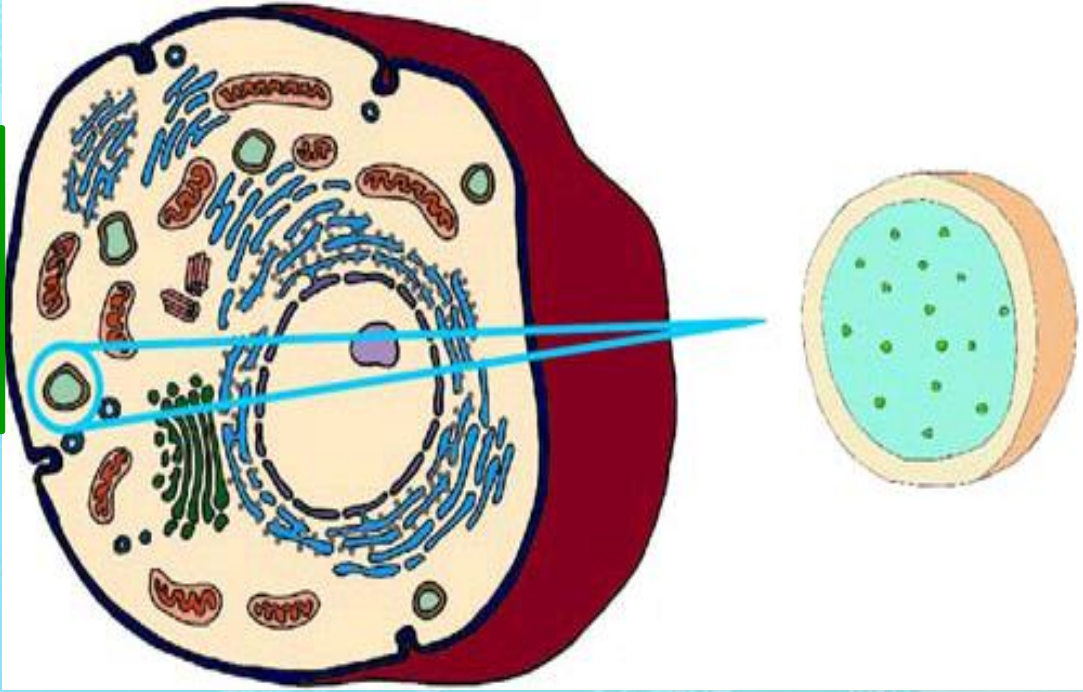
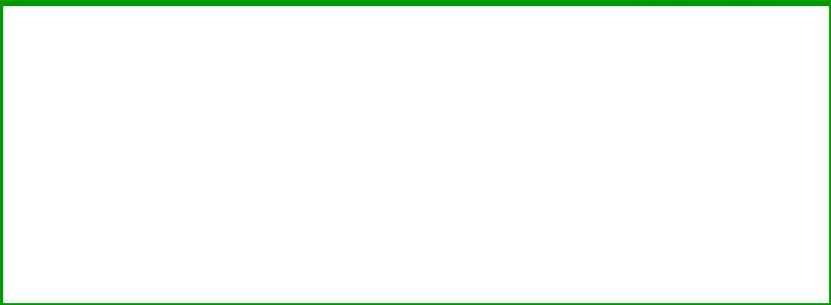
Mitochondria



Animation



- Contain digestive enzymes



- Programmed for cell death (releases an enzymes to break down & recycle cell parts)



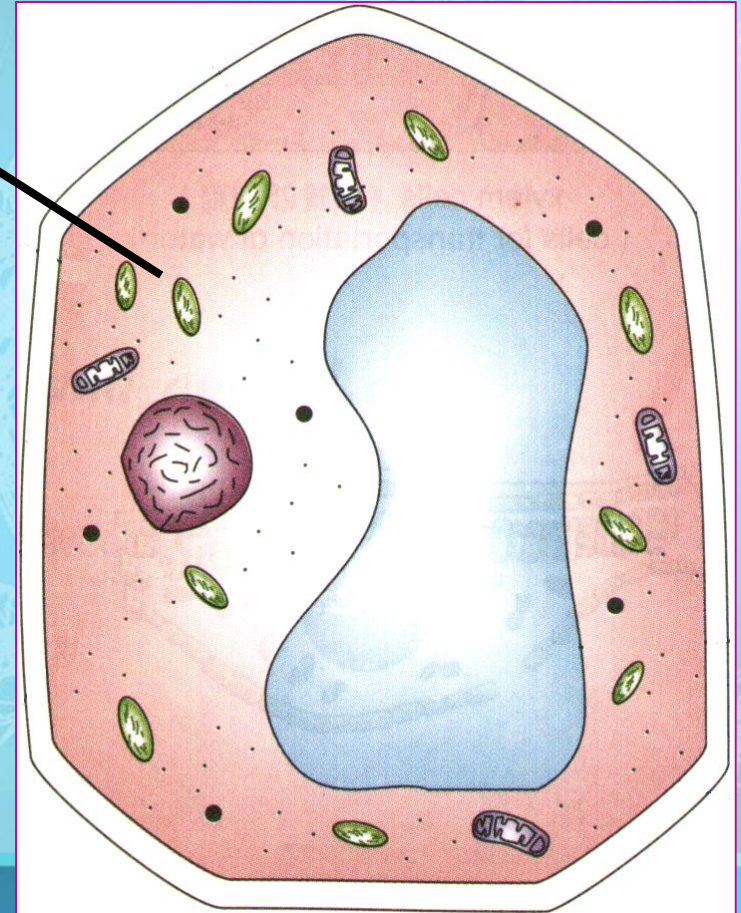
- [Lysosome animation](#)



Plant Cell Organelles

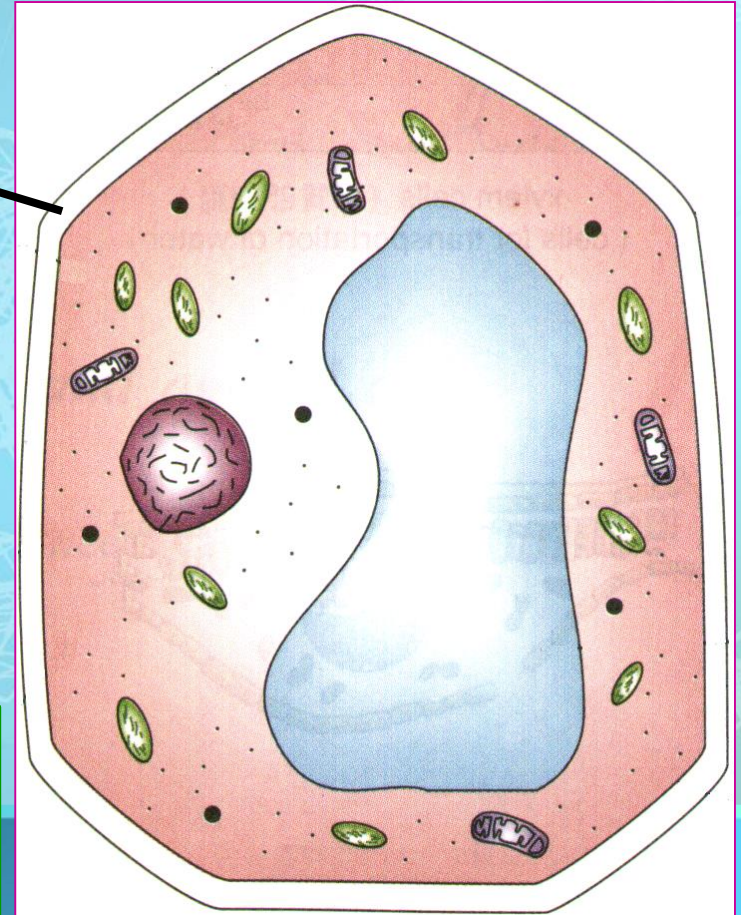


- Traps sunlight to make sugars (food)



Plant Cells

- Dead layer
- Large empty spaces present between cellulose fibers
- Freely permeable

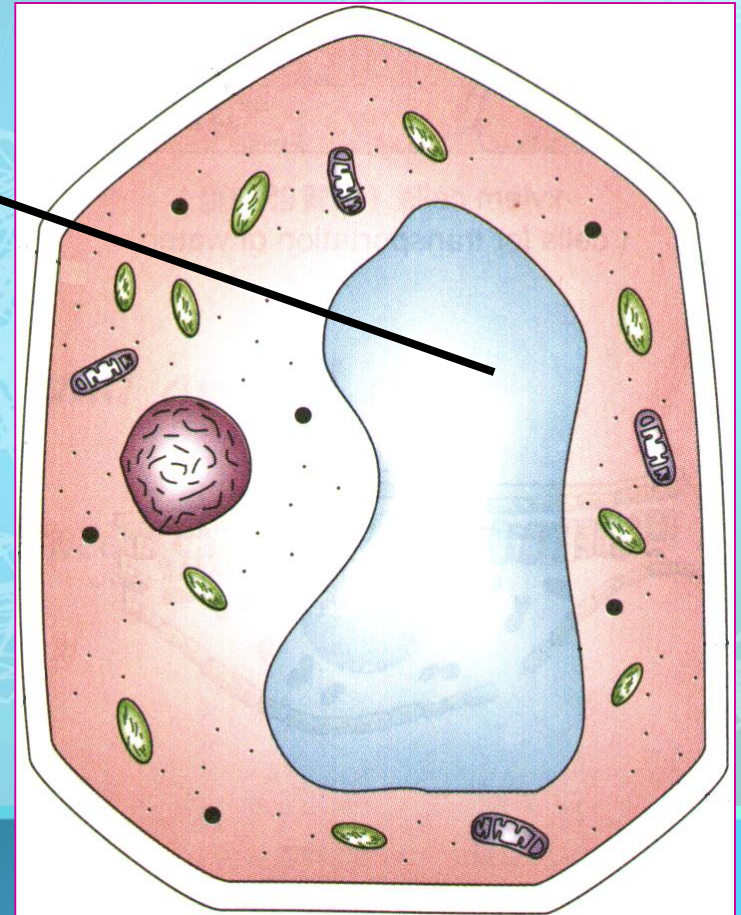


Plant Cells

Blank box for notes.

Blank box for notes.

Blank box for notes.



Similarities between plant cells and animal cells

A large, empty rectangular box with a green border, intended for taking notes or providing an answer.A large, empty rectangular box with a green border, intended for taking notes or providing an answer.A large, empty rectangular box with a green border, intended for taking notes or providing an answer.

Differences between plant cells and animal cells

Animal cells

Plant cells

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