

Cell Theory has 3 Parts

1. All living things are made of cells.

2. Cells are the basic unit of structure & function.

3. All cells come from other cells.

**Cell Membrane only allows
select substances through.**

That is called being semi-

permeable

skin
TSA
filter

Strainer
gauze
fishnet

Organelle-

Cells have
common features
called
Organelle

Prokaryotes-

- Single celled organisms

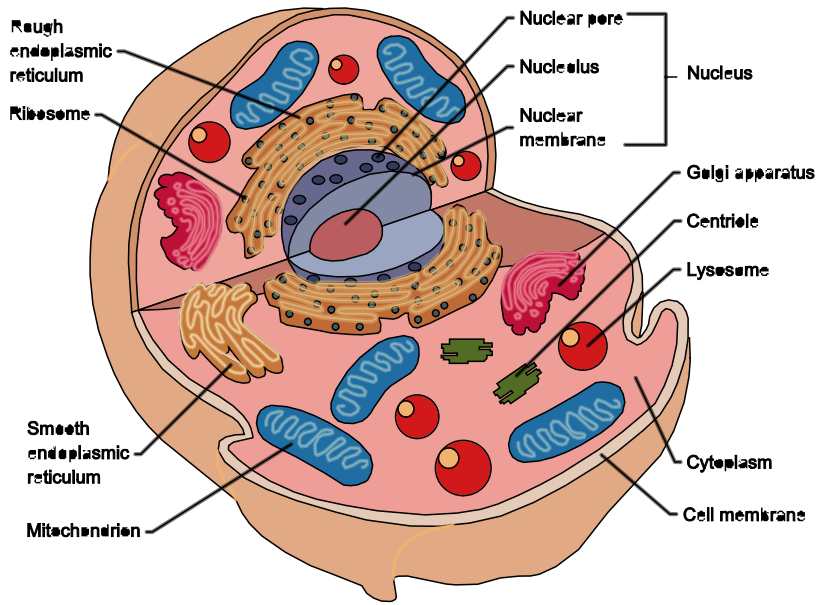
- lack a nucleus

Bacteria

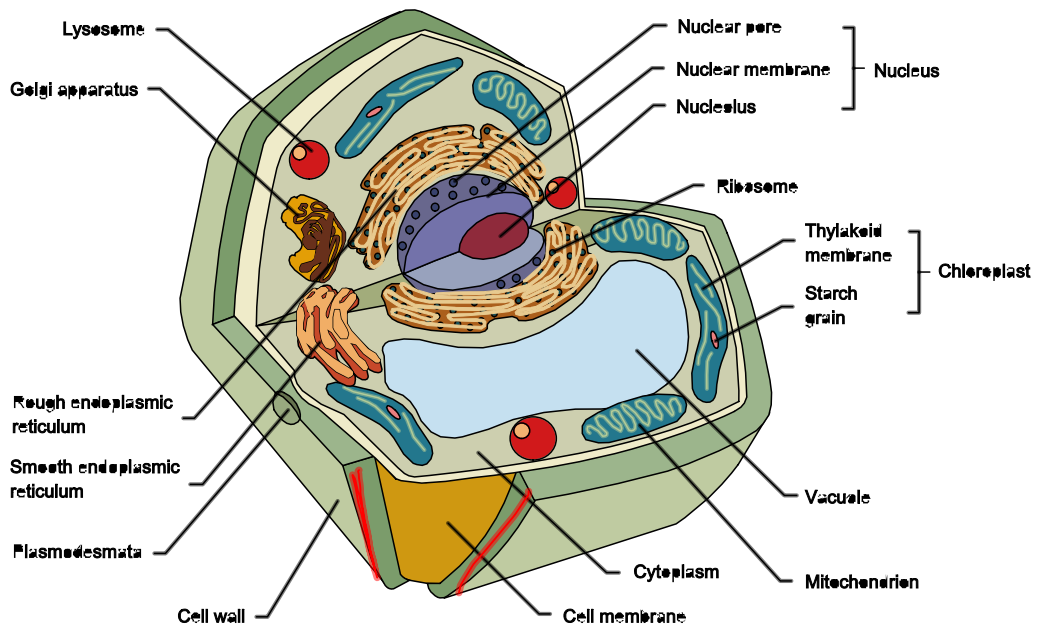
Eukaryotes-

w/ a
nucleus

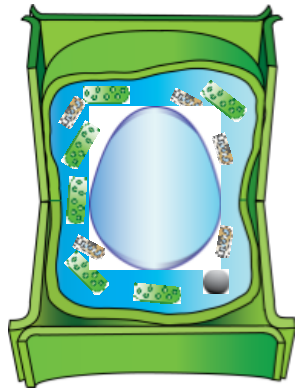
Animal



Plant



Plant Cells have-



cell wall

chloroplast



Nucleus

Function

Control center,
"brain, contains'
DNA

Appearance

egg yolk

Location

inside the cell

Nucleolus

Function

makes ribosomes
& RNA

Appearance

egg yolk inside
an egg yolk

Location

inside the nucleus

Cell Wall

Function

Structure &
support

Appearance

orange peel

Location

outside of a
Plant Cell

Cell Membrane

Function

lets things in
& out

Appearance

egg shell

Location

Animal - outside of cell
Plant - inside cell wall

Cytoplasm

Function

holds stuff

Appearance

jello

Location

inside the cell

Ribosomes

Function

translate RNA
make protein

Appearance

Candy buttons
mini m+m

Location

in the cytoplasm

Chromatin

Function

the form of
DNA when not
dividing

Appearance

ramen noodle

Location

in the nucleus

Endoplasmic Reticulum

ER

Function

transports
within a cell

Appearance

ribbon candy
in the cytoplasm

Location

Golgi Complex

Function

packages, processes,
& distributes 'UPS'

Appearance

ribbon candy
in the cytoplasm

Location

Lysosome

Function

break down +
digest damaged parts

Appearance

button candy
mini m&ms

Location

in the cytoplasm

Vacuole

Function

Store H_2O

Appearance

pond
wax bottles

Location

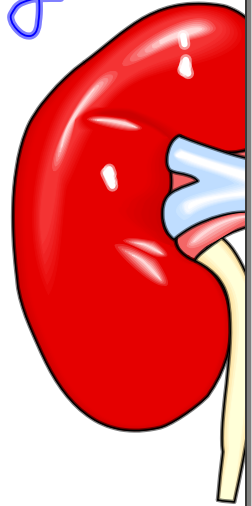
in the cytoplasm

Mitochondria

Function make energy
"powerhouse"

Appearance Kidney bean

Location in the cytoplasm



Chloroplast

Function make food

PLANTS only

Appearance Pea pod

Location in the cytoplasm

Cilia

Function

movement

Appearance

Kiwi fruit

Location

outside

Flagella

Function

movement

Appearance

angel hair

Location

outside