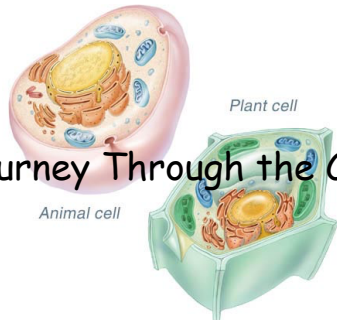
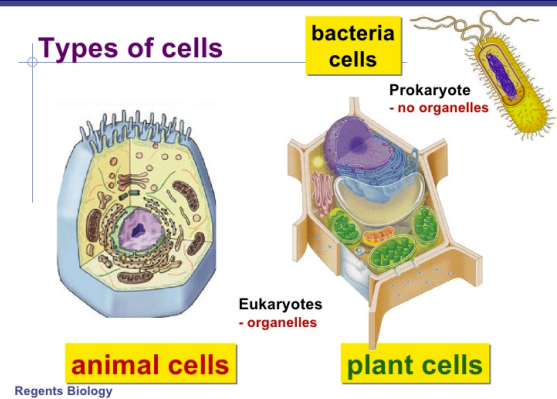


## Journey Through the Cell



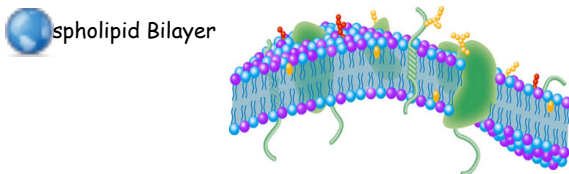
## Types of cells



## Cell Membrane

Protects the cell by keeping the organelles inside and letting some materials in or out.

Selectively Permeable: some materials can pass through

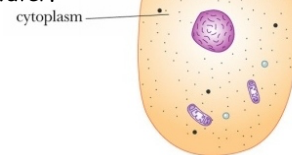


## Cytoplasm

Gel-like material that holds organelles in place.

Gives structure to the cell.

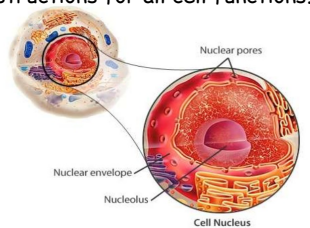
Made mostly of water.



## Nucleus

Control center of the cell.

Holds the instructions for all cell functions.



## Chromatin

Genetic material - DNA

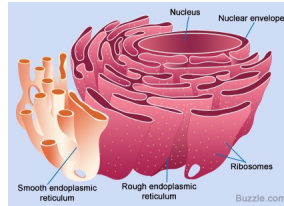
Instructions for the cell.



## Endoplasmic Reticulum

"Highway" of the cell.

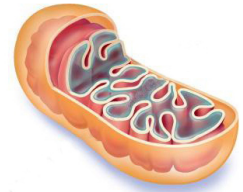
Transports materials made in the cell.



## Mitochondria

"Power factory" of the cell.

Make energy (ATP) from food (glucose).



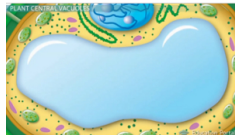
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## Vacuole

Water storage.

Plant Cell = 1 large central

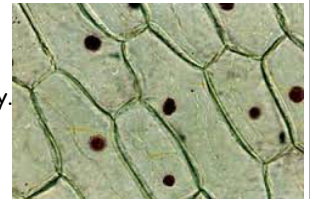
Animal Cell = many small spread around.



## Cell Wall

Rigid layer outside of cell membrane that gives strength and structure.

Plant and Bacteria cells only.



## Chloroplast

"Solar panel" that collects energy from sun light to make food (glucose).

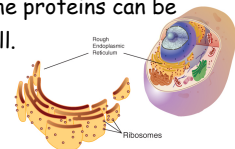
Only Autotrophic cells.



## Ribosomes

"Factories" to make the proteins needed in the cell.

Work on/near the ER so the proteins can be transported around the cell.



## Golgi Body/Apparatus

Creates packages of molecules to move around the cell.  
Near ER and Lysosomes.



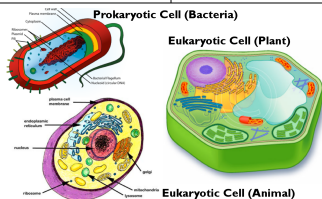
## Lysosome

Recycles materials/organelles/cells so pieces can be used in a cell.



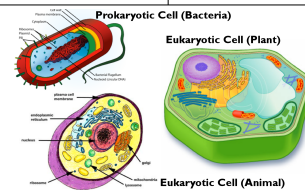
## Different Cells All Around:

Prokaryotic	Eukaryotic
Does NOT have a nucleus.	Does have a nucleus.



## Different Cells All Around:

Autotrophic	Heterotrophic
Obtains energy and makes food.	Obtains food and makes energy.



## Different Cells All Around:

Bacteria	Plant	Animal
Prokaryotic	Eukaryotic	Eukaryotic
Cell Wall	Cell Wall	No Cell Wall
May have Chloroplasts	Chloroplasts	No Chloroplasts

