

Cell Structure and Function Notes

A Cell is: _____.

Scientists:

- _____ first discovered cells by looking through a _____.
- Robert Hook first used _____.
- _____.
- In the 1830s Mathias Schleiden identified the first _____.

Cell Theory:

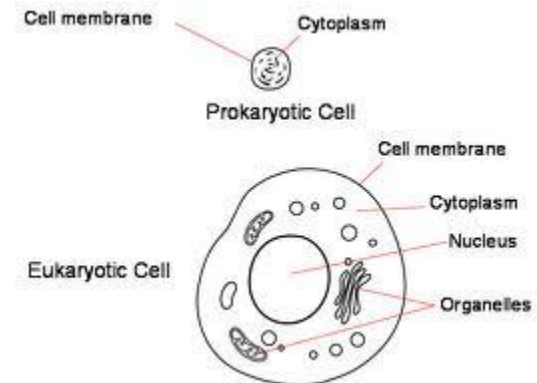
1. All living things are made up of _____.
2. Cells are the _____ of all living things.
3. All cells come from _____ through cell division.

Number of Cells:

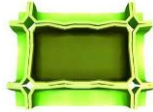







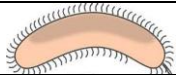
- Unicellular: _____
- Multicellular: _____

Two types of cells:

- Prokaryotes: _____
- Eukaryotes: _____



Organelles: _____

Cell Structure	Picture	Function	Found in? Prokaryote, Eukaryote- Plant, Animal)
Plasma (Cell) Membrane			
Cell Wall			
Nucleus		The control center of the cell and dictates what all of the other organelles do. Stores the DNA.	
Nucleolus			
		Separates DNA from cytoplasm. Openings called pores allow some materials to enter and leave the nucleus	
Cytoplasm			
		Tiny bodies attached to the ER and found free in the cytoplasm; help in synthesizing proteins.	
		Stacked membranes that receive, store, package, and secrete proteins transported in vesicles.	
Vesicles		Small, round sacs that transport proteins from the golgi apparatus.	
Rough Endoplasmic Reticulum (ER)		Transport system of the cell; tubules and sacs from the nuclear membrane to all the parts of the cell; contains numerous ribosomes on the surface.	
		Similar in appearance to rough ER, but without the ribosomes. Produces lipids, involved in carbohydrate metabolism, and detoxification of drugs and poisons.	
Mitochondrion			
Chloroplast			
Central Vacuole			
		Small, round structures that contain enzymes used in digestion.	
Flagellum		Whip like tail used for movement.	
Cilia			
Pseudopods		Long, arm-like extensions "false feet" used for movement and engulfing prey.	
Centrioles		Made of bundles of long filaments- microtubules that help in cell division.	
Cytoskeleton	