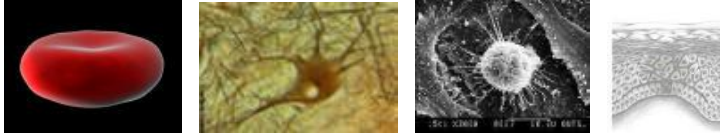


What in the Cell is going on?

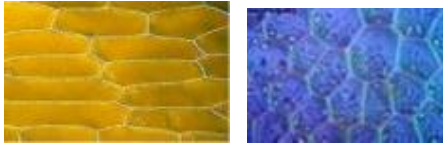
The Cell is the smallest unit of _____

Cells make up _____ Tissue makes up _____,
Organs make up _____, and Systems make up the organism.

Animal cells have many _____ and _____.

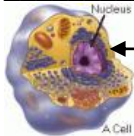


Plant cells are typically _____.



_____ are the _____ parts of a cell.

The _____ is the “_____” or control center of the cell. It contains _____ (genetic material) and controls all other _____. The nucleus acts as a _____.



Nucleus in a cell

Not all cells have a nucleus!

_____ do have a nucleus, these cells are found in _____, _____, _____, and _____.

_____ do NOT have a nucleus, these cells are found in _____. In fact, bacteria are the ONLY prokaryotic cells!



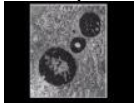
EUKARYOTE



Has cell membrane, cell wall, ribosomes, cytoplasm & DNA

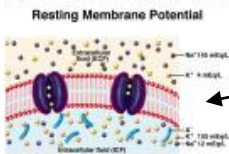
PROKARYOTE

The _____ digests unused _____, _____, _____. It cleans the cell of debris. It contains _____ that dissolve material. The lysosome acts like a _____ for the cell.



lysosomes

Surrounding all cells is a _____. It _____ what _____ and _____ the cell. It is composed of a _____ layer of _____ embedded with _____. The cell membrane acts as _____ for the cell. The membrane is _____. This means it allows only _____ to pass through. It is "_____” permeable – it selects what is able to permeate (go through) it.



Cell membrane

Extensions of the cell membrane allow for movement: Two extensions are _____ (one or more LONG hairlike projections) and _____ (many SHORT hairlike projections).

The _____ is the clear _____ inside the cell that _____. Much like a _____ staff.

The _____ provides _____, _____, and _____. Much like the structure of a building.

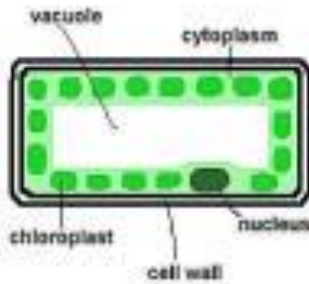
THE PREVIOUS ORGANELLES ARE FOUND IN BOTH PLANT AND ANIMAL CELLS (with the exception of the vesicle in animals and the vacuole in plants). BELOW ARE ORGANELLES FOUND IN PLANT CELLS (AND BACTERIA).

The _____ provides _____ for plant (and bacteria) cells using _____. It is actually _____ in color because of chlorophyll. It contains its own _____ material to reproduce. It is usually found around the _____ in a plant cell. It acts as a _____ for the cell.



chloroplasts

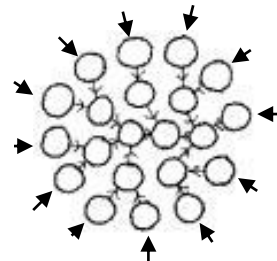
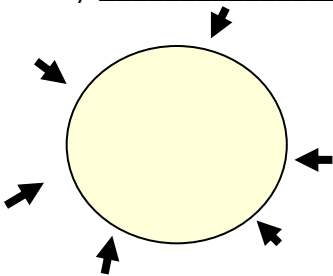
The _____ provides _____ and _____ for plant and bacteria cells. The cell wall surrounds the _____, so it is the outer most structure.



typical plant cell under microscope (other organelles are not visible)

Large cells have _____ surface area and generally have _____ function.

Small cells have _____ surface area and are specialized for many _____.



Which is more efficient – a small cell or a large cell? _____