**Cell Theory: Scientists**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: made first compound light microscope.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: coined the term “cell”
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: said that all plants are made of cells
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: said that all animals are made of cells
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: said that cells can only arise from pre-existing cells

**THE CELL THEORY**

1. All living things are made of one or more cells.
2. The cell is the basic unit of structure and function.
3. All cells arise from pre-existing cells.

**Other Important Scientists**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: challenged the theory of spontaneous generation.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: came up with Germ Theory of Disease—microscopic organisms cause disease.

**Cell Parts (organelles)**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: provides shape and support to plant cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: controls entry into and out of cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: traps light and is used to produce food for plants.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: food for plant cells is made here.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: contains code which guides all cell activities.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: jellylike substance within cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: surface for chemical activity: move proteins and other substances through the cell; classified as smooth or rough, based on absence or presence of ribosomes
* \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_: stores and releases chemicals; packages proteins; serves as packaging and distribution center of the cell (like UPS or Amazon)
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: digestion center
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: hollow cylinder that supports and shapes cell.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: “powerhouse” of cell; provides cell with energy by harvesting energy from organic compounds to make ATP (Adenosine triphosphate—currency of energy for cells)
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: holds nucleus together.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: spherical body or a non-membrainianic bound structure composed of proteins and nucleic acids found within the nucleus.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: chromosomes are found here; houses DNA of cell
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: protein factories
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: contains water and dissolved minerals; larger in plant cells than animal cells since animal cells are more mobile and can obtain more water.

 plant cells

animal cell