**Cell Structures and Functions**

**2 Types of Cells**

|  |  |
| --- | --- |
|  |  |
| * No nucleus
 | * Has a nucleus
 |
| * Organelles have no membranes
 | * Organelles have membrane
 |
| * Very small
 | * Much larger
 |

Cell Organelles

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are the tiny working parts of cells.
* All organelles are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* All cells have organelles which help to carry out the processes for life

Animal & Plant Cell Organelles

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-the outer layer of the cell; separates the cell from the outside environment
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-the jelly-like fluid that takes up most of the inside of the cell; all interior organelles are suspended in the cytoplasm; gives the cell shape and support
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**small in animal cell; it stores water and other materials.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**breaks down food molecules for energy to sustain the cell.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**digests food particles, wastes, and foreign particles.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**where proteins are made in the cell
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**largest organelle in the cell; contains DNA and is the control center for the cell
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-** protects genetic material in the nucleus

**Plant Cell Organelles**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-** Is **MUCH** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a plant cell
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-** Is much more rigid than only having a cell membrane. Makes cell look square
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-** Uses energy from the sun to make food; makes plants appear green