**Organelle Function Notes**

Recap on Cells:

**Questions/Pictures/ Key Words**

**“…”** means something the teacher said

**Cell Structure & Function**

**Cell theory:**

•All living things are made up of cells.

•Cells are the smallest working units of all living things.

•All cells come from preexisting cells through cell division.

**Definition of a cell:**

•A cell is the smallest unit that is capable of performing life functions.

**Prokaryotic Recap**

|  |  |
| --- | --- |
| •Do not have structures surrounded by membranes  •Few internal structures  •One-celled organisms, Bacteria | prokaryote*Bacteria!* |

**Eukaryotic Recap**

|  |  |  |
| --- | --- | --- |
| •Contain organelles surrounded by membranes  •Most living organisms | **Animal Cell eukaryote_animal** | **Plant Cell**  **eukaryote_plant** |

**“…”** means something the teacher said

Cell Parts: Organelles

**A) Surrounding the Cell**

**Cell \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

•Outer membrane of cell

•Double layer of fats called \_\_\_\_\_\_\_\_\_\_\_\_\_\_ “they look like two tailed sperm”

•**Function**: controls movement in and out of the cell

**Cell Wall**

•Most commonly found in plant cells & bacteria

•Function: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_ cells

**B) Organelle Inside the Cell**

**Nucleus**

•**Function**: \_\_\_\_\_\_\_\_\_\_\_ cell activities

•Separated from cytoplasm by nuclear membrane

•Contains genetic material – DNA

**Cytoplasm**

•\_\_\_\_\_\_\_\_\_\_\_-like mixture

•Surrounded by cell membrane

**Ribosomes**

•Each cell contains thousands

•**Function**: Make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**B) Organelle Inside the Cell (Continued)**

**Questions/Pictures/ Key Words**

*“the powerplant”*

**Mitochondria**

•**Function**: Produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through chemical reactions – breaking down fats & carbohydrates

**Chromosomes**

•In nucleus

•Made of \_\_\_\_\_\_\_\_\_

•**Function**: Contain instructions for traits & characteristics

**Lysosome**

•**Function**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 'plant' for proteins, fats, and carbohydrates

–Transports undigested material to cell membrane for removal

–Cell breaks down if lysosome explodes

**Vacuoles**

•**Function**: Membrane-bound sacs for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, digestion, and waste removal

•Contains water solution

•Help plants maintain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chloroplast**

•Usually found in plant cells

•Contains green \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

•**Function**: Where \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ takes place

**Summary**:

**Who has organelle?**

**What would happen if a Lysosome exploded in the cell?**