**Organelle Function COMPLETE Notes**

**Questions/Pictures/ Key Words**

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

Recap on Cells:

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

**Cell Structure & Function**

**“Typical” Animal Cell:**

**“Typical” Plant Cell:**

Cell Parts: Organelles

A) Surrounding the Cell

**Cell Membrane**

•Outer membrane of cell

•Double layer of fats called lipids “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: Supports & protects cells

B) Organelle Inside the Cell

**Nucleus**

•**Function**: Directs cell activities

•Separated from cytoplasm by nuclear membrane

•Contains genetic material - DNA

**Nuclear Membrane**

•Surrounds nucleus

•Made of two layers

•**Function**: Openings allow material to enter and leave nucleus

**Chromosomes**

•In nucleus

•Made of DNA

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

Summary:

B) Organelle Inside the Cell (*Continued*)

**Questions/Pictures/ Key Words**

*“the powerplant”*

*“THIS IS THE UPS STORE”*

**Cytoplasm**

•Gel-like mixture

•Surrounded by cell membrane

•Contains hereditary material

**Endoplasmic Reticulum**

•**Function**: Moves materials around in cell

•**Types:**

–**Smooth** type: lacks ribosomes

–**Rough** type (pictured): ribosomes embedded in surface

**Ribosomes**

•Each cell contains thousands

•**Function**: Make proteins

**Mitochondria**

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

**Golgi Bodies**

•**Function**: Protein 'packaging plant'

–Move materials within the cell

–Move materials out of the cell

**Lysosome**

•**Function**: Digestive '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 storage, digestion, and waste removal

•Contains water solution

•Help plants maintain shape

**Chloroplast**

•Usually found in plant cells

•Contains green chlorophyll

•**Function**: Where photosynthesis takes place=

**Summary**:

**Who has organelle?**