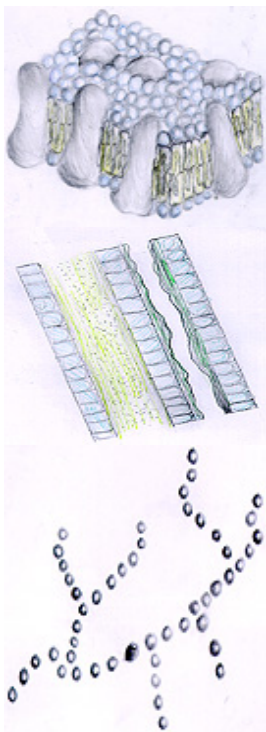


Organelle Function Notes

Questions/Pictures / Key Words

“...” means something the teacher said



Recap on Cells:

Cell Structure & Function

Cell Parts:

Cell theory:

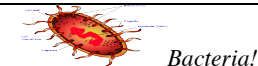
- All living things are made up of cells.
- Cells are the smallest working units of all living things.
- All cells come from preexisting cells through cell division.

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

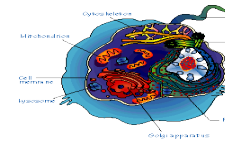


Bacteria!

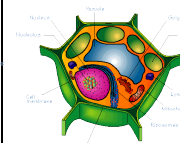
Eukaryotic Recap

- Contain organelles surrounded by membranes
- Most living organisms

Animal Cell



Plant Cell



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
- Selectively Permeably
- Only lets **SOME** things in - Only lets SOME things out, -
- Not all

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

Cytoplasm

- Gel-like mixture
- Surrounded by cell membrane
- Contains hereditary material

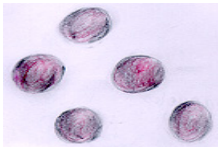
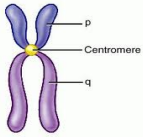
Ribosomes

- Each cell contains thousands
- Function:** Make proteins

Questions/Pictures/
Key Words



"the powerplant"



B) Organelle Inside the Cell (Continued)

Mitochondria

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

Chromosomes

- In nucleus
- Made of DNA
- Function:** Contain instructions for traits & characteristics

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?

What would happen if a Lysosome exploded in the cell?