3.2 Study Guide

Cells have an internal structure.

Each eukaryotic cell has a *cytoskeleton- a network of proteins that is constantly changing to meet the needs of a cell*

The cytoskeleton is made up of 3 main types of fibers

1. microtubules- gives the cell its shape and allows for the movement of organelles

2. intermediate filaments- give a cell strength

3. microfilaments- enables the cell to move and divide

***Cell membrane****-* forms a boundary between a cell and the outside environment and controls the passage of materials into and out of a cell

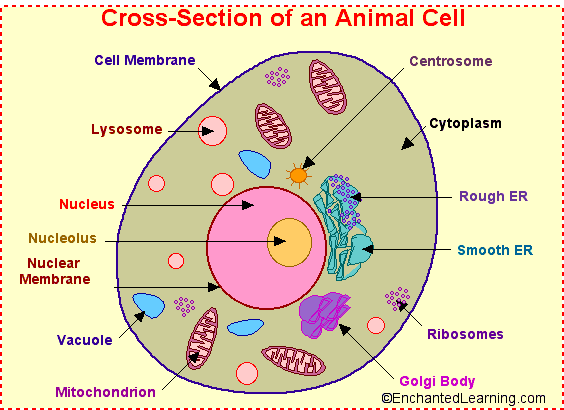
***Lysosome-*** membrane-bound organelles that contain enzymes- they also defend a cell from invading bacteria and viruses

***Nucleus***- storehouse for most of the genetic information (DNA) of a cell

***Nucleolus-*** a dense region where tiny organelles essential for making proteins are assembled

***Vacuole-*** fluid-filled sac used for the storage of materials needed by a cell

***Mitochondrion-*** supply energy to the cell

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***Centrosome-*** produces microtubules

***Cytoplasm-*** a jelly-like substance that contains proteins, nucleic acids, minerals, and ions.

***Endoplasmic Reticulum-*** numerous processes, including the production of proteins and lipids

***Ribosomes-*** tiny organelles that link amino acids together to form proteins

***Golgi Body-*** processes, sorts, and delivers proteins