Cell and Mitosis Study Guide

Organells - Be able to identify and explain the function of the following cell parts / organelles.

* Lysosomes
* Rough Endoplasmic Reticulum
* Smooth Endoplasmic Reticulum
* Ribosomes
* Vacuole
* Nucleus
* Nuclear Membrane (Envelope)
* Cell Wall
* Cell Membrane
* Cytoplasm
* Golgi Body
* Mitochondria
* Chloroplast

Types of Cells - Be able to explain the difference between

* prokaryotic and eukaryotic cells
* stem cells and somatic cells
* plant and animal cells

Cell Cycle

Parts of the cell cycle

* Interphase
  + G1
  + S
  + G2
* Mitosis (M)

Phases of Mitosis - Be able to explain what major events occur in each phase and visually recognize the phases in a cell. Define Mitosis

* Prophase
* Metaphase
* Anaphase
* Telophase

Cell Structures / Components involved in cell division -

* Chromosomes (Homologous)
* Chomatid (Sister)
* Chromatin
* Centromere
* Centriole (Centrosome)
* Aster
* Spindle Fiber