**Chapter 10: Cell Growth and Division**

**Vocabulary**

**DNA:** Molecule that contains your genetic information; tells the cell what to do; cannot be seen when it is loose; all cells have DNA; eukaryotic cells have DNA in the nucleus

**Chromosome**: Package of tightly coiled DNA; can only be seen during cell division

**Sister Chromatid**: Identical copy of a chromosome; copies of chromosomes are made before the cell divides

**Centromere**: Holds Sister Chromatids together in the beginning of cell division

**Parent Cell:** Original cell that is about to divide

**Daughter Cell:** New cells formed after cell division

Cell Cycle:

**Interphase**

G1: Cell Grows

S: Chromosomes Copy

G2: Cell Grows

**Mitosis**

**Prophase:** Nucleus Dissolves; Spindles Form

**Metaphase:** Chromosomes line up down the middle; centromere attaches to spindle

**Anaphase**: Spindles pull sister chromatids apart to opposite ends of the cell

**Telophase:** New nuclear membranes form around each set of chromosomes

**Cytokinesis:** Cytoplasm/rest of cell divides



