**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



