## **Astronomy Study Guide**

- I. Planets
  - a. Inner vs. outer
    - 1. Composition
    - 2. Size
    - 3. Distance from sun
    - 4. Life ?
    - 5. Asteroid belt location
- II. Rotation vs. Revolution
  - a. Day/year
- III. Eclipses
  - a. Solar
  - b. Lunar
  - c. Celestial bodies involved and location
  - d. Moon phase associated with the eclipse
- IV. Moon
  - a. Phases
    - 1. Why we see the phases
    - 2. Location of sun, earth & moon.
    - 3. Names of phases
    - 4. Rotation and revolutionary periods
    - 5. Tides
    - 6. Formation (how it became the moon)
- V. Sun
  - a. Describe
  - b. Layers and properties
  - c. Sun spots
    - 1. Cycle
    - 2. Reason for
    - 3. Solar winds-what are they?
  - d. Solar activity
    - 1. Flares
    - 2. Prominences
    - 3. Winds
    - 4. Auroras
  - e. Source of heat and energy
  - f. Size compared to other stars

- VI. Stars
  - a. Life cycle for both high mass and low mass
    - 1. Define each stage
    - 2. Size
    - 3. Placement on the H-R diagram
  - b. Temperature and color association
  - c. Luminosity vs. brightness
  - d. Spectroscopy
- VII. Universe
  - a. Big Bang theory
  - b. Age
  - c. Evidence supporting the Big Bang Theory
  - d. Red/blue shift
- VIII. Galaxies
  - a. Types of
  - b. Type we live in and name of
  - c. Solar system age