

Diagram the solar system; indicate the 8 planets, the asteroid belt, the Kuiper Belt and the Oort Cloud; label the inner and outer planets.

Describe the three major motions of the Earth.

List several differences between the inner and outer planets

Write the equation for eccentricity; define the variables  $a$  and  $p$ ; describe what happens to  $e$  as the foci move farther apart

Describe the Nebular Theory and how it accounts for the formation of the solar system.

List all 3 of Kepler's Laws

Describe 3 types of galaxies

Compare and contrast the light and dark areas of the Earth's moon

List the 4 terrestrial planets and major distinguishing characteristics of each

Draw and label the layers of the Sun; include the solar wind and a sunspot

Describe 4 early civilizations and their contributions to astronomy

Diagram the earth/sun system and label the seasons for the northern hemisphere. Make sure to tilt the earth and label the equinoxes and solstices.

Diagram the earth/sun/moon system and label the moon phases

List the 4 Jovian planets and major distinguishing characteristics of each

Diagram the earth/sun/moon system and label the position of the moon during a solar eclipse, a lunar eclipse, a spring tide (there should be 2 of them), and a neap tide (also 2 of them).

Draw the magnetosphere; label the solar wind, magnetic poles, geographic poles, the aurora borealis and the aurora australis

Sketch a Hertzsprung-Russell Diagram; label the x and y axes; also label the Main Sequence stars, white dwarfs, red dwarfs, red giants, supergiants, and blue dwarfs.

Draw a comet moving around the Sun; label the nucleus, the coma, and the tail. Make sure the tail is pointed in the correct direction.