**Study Guide**

**Chapter 3: The Solar System**

Name: Class: Date:

**Chapter 3.1 Models of the Solar System**

1. What is the difference between a heliocentric and geocentric model of the solar system?

1. Early astronomers believed that all celestial bodies revolved around what?

**Chapter 3.2 Introducing the Solar System**

1. How do scientists believe the solar system formed? (key concept on p. 86)

2. What are planetesimals?

**Chapter 3.3 The Sun**

1. What happens in the sun’s core?
2. Explain nuclear fusion.

1. Explain how convection currents work.

1. What layer of the sun are you looking at when you look at an image of the sun?
2. What are solar winds?

**Chapter 3.4 The Inner Planets**

1. What do all the inner planets have in common?
2. Know the order of the planets from the sun out.
3. Why is Mar’s surface a reddish-brown color?

**Chapter 3.5 The Outer Planets**

1. What do the four outer planets have in common?

1. What is the Great Red Spot on Jupiter?
2. What comprises the rings of the gas planets?
3. How is Uranus considered different from most other planets?

4. What similarities do Uranus and Neptune have?

**Chapter 3.6 Small Solar System Objects**

1. Where do asteroids reside in our solar system?
2. Where do dwarf planets reside?
3. Where do comets originate and reside?
4. A comet’s dust tail usually points in which direction?
5. A comet’s ice/ion tail usually points in which direction?
6. What is the difference between Meteoroid, Meteor, and Meteorite?

Short Answer

1) Explain the similarities and differences between Venus and Earth.

2) Explain why the outer planets did not lose the gases in their atmospheres.