

Unit 1 Study Guide

1. Define the following key terms:

- a. Precession
- b. Nutation
- c. Barycenter
- d. Rotation
- e. Revolution
- f. Hemispheres
- g. Seasons
- h. Spring tides
- i. Neap tides
- j. Nuclear fusion
- k. Radiation
- l. Conduction
- m. Convection
- n. Electromagnetic waves
- o. Solar energy
- p. Photosynthesis

2. Explain the difference between precession and nutation.

3. What causes the following Earth cycles:

- a. Day to Night
- b. Seasons (Winter-Spring-Summer-Fall)
- c. a Year
- d. Phases of the moon (New Moon- 1st Quarter- Full Moon-Last Quarter)

4. Why is the Earth NOT completely round? Why does it bulge near the equator? (Think about gravitational pull and alignments. Hint: Spring tides!)

5. What reaction causes the sun to burn?

6. What type of celestial body is the Sun?

7. What are the types of electromagnetic waves produced by the Sun?

8. How does energy flow from the Sun to the Earth?

9. Is it hotter on land or water? Why? (Think about the beach and what burns your feet.)

10. Why is solar energy so important for green plants?

11. How does the Earth's magnetic field protect the planet from the harmful effects of radiation.