

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## ***STUDY GUIDE CHAPTER 23***

1. Identify the 8 phases of the moon and list them in order. Know how the four main phases (new, full, first quarter, third quarter) are made using the sun, earth, moon, and the appropriate shadows.
2. For the fall equinox, vernal equinox, summer solstice, and winter solstice...
  - a. know the dates
  - b. know the season in the northern hemisphere
  - c. know the season in the southern hemisphere
  - d. draw the sun/Earth diagram
  - e. know the line of latitude where the sunlight hits the Earth
3. Understand Earth's tilt and how it causes different seasons. Know the angle of the tilt.
4. Vocabulary to know: roundness ratio, equatorial circumference, polar circumference, ellipse, waxing, waning, gibbous, crescent, rotation, revolution, umbra, penumbra
5. Draw and explain the 2 types of eclipses.
6. Know the definition of light pollution and ways to reduce it.
7. Why does the moon "shine"? Does it shine only at night?
8. Know the 2 theories of how the moon originated. Explain!
9. Explain SAD.
10. Numbers to know!
  - a. Earth's rotation time
  - b. moon's rotation time
  - c. Earth's revolution time
  - d. Earth's revolutions per year
  - e. Earth's rotations per year
  - f. Moon's revolution time
11. Know what the seasons would be like if the Earth was not tilted.
12. There will be a number of thought questions on this test! Make sure you understand all of the concepts. Don't just memorize everything!!!