

Name _____



Homework Night Sky

Circle the correct answers or fill in with the correct phrase:

1) Which of the following show retrograde?

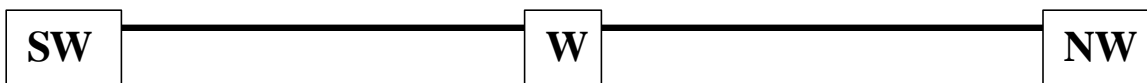
Venus **Mars** **Sun** **Jupiter** **Moon** **Earth** **Stars**

2) Match the term with its definition

- | | |
|---|--|
| <input checked="" type="checkbox"/> Horizon | a) Motion east to west relative to stars |
| <input type="checkbox"/> Zenith | b) Path of the Sun in the sky |
| <input type="checkbox"/> Meridian | c) Where the sky meets the ground |
| <input type="checkbox"/> Ecliptic | d) The first day of summer or winter |
| <input type="checkbox"/> Retrograde | e) Set of constellations where planets are found |
| <input type="checkbox"/> Equinox | f) Point straight over head |
| <input type="checkbox"/> Solstice | g) Line that divides sky into 2 halves: rising and setting |
| <input type="checkbox"/> Zodiac | h) Time when sun rises due east/ sets due west |

3) The moon must be in the _____ phase for a total eclipse of the moon to occur.

4) Below is the horizon facing west. Draw and label the sun at sunset for the summer solstice, winter solstice, vernal equinox and the autumnal equinox.



4) The sun takes one _____ to go around the zodiac, the moon requires one _____ to go around the zodiac and the sun takes one _____ to go from the meridian back to the meridian.

5) How did Eratosthenes measure the size of the Earth?

6) Which of the following convinced the ancient people that the Geocentric model was correct?

The stars did not change brightness over the seasons.

The stars did not move over the seasons.

Retrograde motion of the planets.

Height of the noon sun over the seasons.

7) If we are moving, why don't the walls of the room hit us when we jump up?

8) Ptolemy used _____ to explain retrograde motion.

9) In Ptolemy's model, which object is closest to the Earth?

Sun Mercury Moon Jupiter Stars

10) In Ptolemy's model, all the objects came very close to each other in their epicycles. Why?