

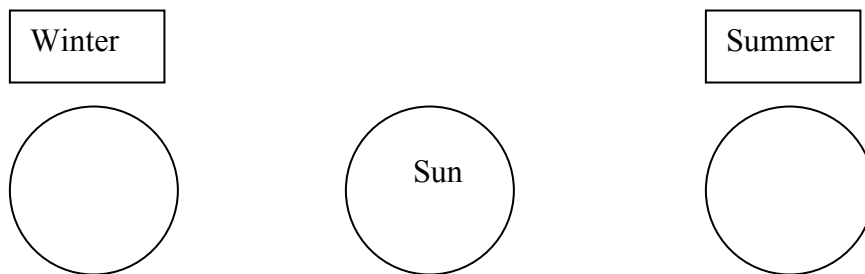
Name: \_\_\_\_\_ Date: \_\_\_\_\_ Hour: \_\_\_\_\_

**Preparation for the quiz**

**Objective #2 (E5.p1A, E5.p1B, E4.p2H): Describe the motion of the moon and planets around the sun and some effects of these motions (seasons, moon phases, eclipses).**

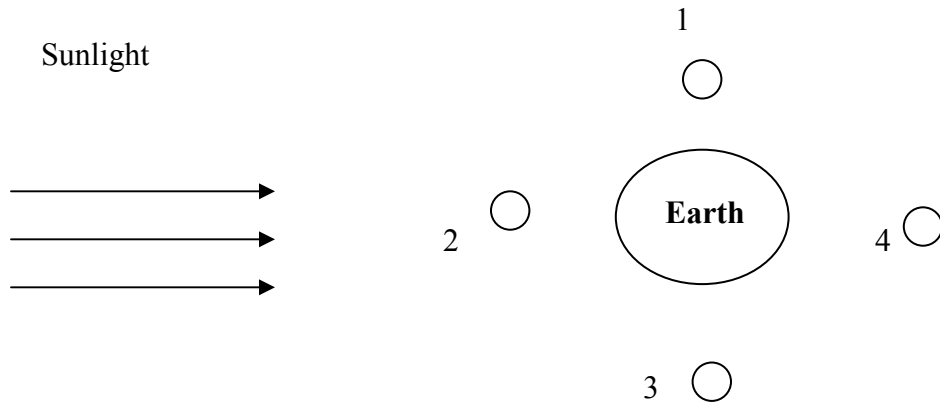
- 1) What 2 things cause seasons on Earth?
- a. \_\_\_\_\_  
\_\_\_\_\_
- b. \_\_\_\_\_  
\_\_\_\_\_

- 2) Label and draw the following: **north pole (NP)**, **south pole (SP)**, **axis**, and **equator** for the Northern Hemisphere in summer and winter.



- 3) As the Northern Hemisphere heads towards **summer** we start getting \_\_\_\_\_ (more/less) direct sunlight and \_\_\_\_\_ (more/less) total sunlight making our temperatures \_\_\_\_\_ (cooler/warmer).
- 4) As the Northern Hemisphere heads towards **winter** we start getting \_\_\_\_\_ (more/less) direct sunlight and \_\_\_\_\_ (more/less) total sunlight making our temperatures \_\_\_\_\_ (cooler/warmer).
- 5) Compare an “equinox” and a “solstice”.
- 6) Twice during the revolution around the sun the Earth is not tilted toward or away from the sun and all parts of the Earth receive the same amount of daylight as nighttime. These two days are called \_\_\_\_\_ (equinoxes/solstices).
- 7) At what angle does the earth tilt, relative to the Sun? \_\_\_\_\_

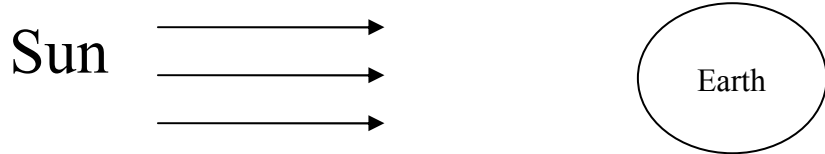
**Moon phase diagram:**



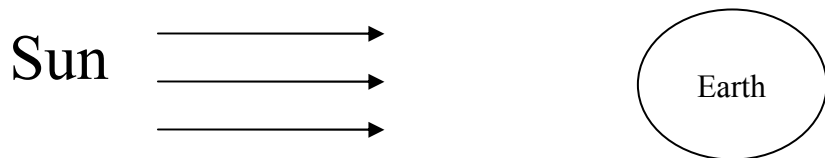
8) Draw and name the moon phases as seen from Earth!

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_

9) Draw a **lunar** eclipse and label: *Moon, Umbra, & Penumbra*.



10) Draw a **solar** eclipse and label: *Moon, Umbra, & Penumbra*.



11) Why do we not have a solar and lunar eclipse once each month?

**Distributive Practice**

Mr. Knapp wants to know which candy bar teenagers prefer, Snickers or Butterfinger. Help him come up with the test variable and at least 5 constant variables.