Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_ Ast: \_\_\_\_\_

**SUN & EARTH STUDY GUIDE**

GRAVITY

1. What role does GRAVITY play in the Sun, Earth, & Moon system (list three things)?
2. How does Earth’s ROTATION around its axis affect its shape (ie: the equatorial bulge)?

EARTH’S ORBIT

1. What is the shape of Earth’s ORBIT around the Sun?
2. Where is the Sun in relation to Earth’s ORBIT?
3. How does a “YEAR” relate to Earth’s movement?
4. How does a “DAY” relate to Earth’s movement?
5. Why do we say that Earth is “TILTED”?

SUN’S ENERGY

1. What types of energy does Earth receive from the Sun?
2. When the NORTHERN HEMISPHERE is tilted toward the Sun, how does it affect the energy we receive from the Sun (think about the flashlight activity)?
3. When the NORTHERN HEMISPHERE is tilted away from the Sun, how does it affect the energy we receive from the Sun (think about the flashlight activity)?

SEASONS

1. What causes Earth’s SEASONS?
2. Compare the length of daylight hours and the average temperature during the SUMMER and the WINTER.
3. Explain why the NORTHERN and SOUTHERN HEMISPHERES always have opposite SEASONS to one another.
4. What is the significance of a SOLSTICE? When does a SOLSTICE occur?
5. What is the significance of an EQUINOX? When does an EQUINOX occur?

SEASONS DIAGRAM - ***Label the following on the diagram below for just the NORTHERN HEMISPHERE.***

1. Seasons for the NORTHERN HEMISPHERE (Summer, Winter, Spring, Fall)
2. Soltices (June & December)
3. Equinoxes (September & March)
4. Length of Days for the NORTHERN HEMISPHERE (longest day, shortest day, equal day/night)
5. Light in NORTHERN HEMISPHERE (Direct, Indirect)

