Name: _____Date: _____Per: _____

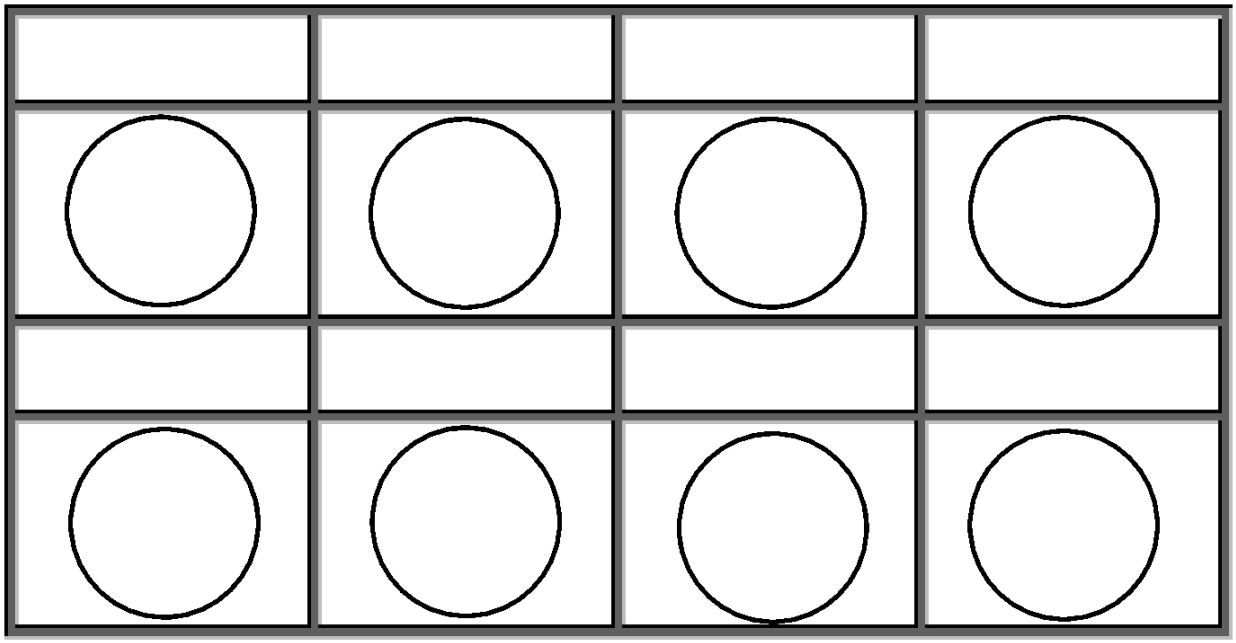
Webquest: Earth, Moon, Sun System

Lunar Phases

Task One

Windows to the Universe

There are eight major phases of the Moon. In the top of each square, write the phase of the Moon. In the circle, draw a picture of what it looks like.



Task Two

Moon Connection Glossary

There are three terms that are used to describe the Moon. Define the following terms:

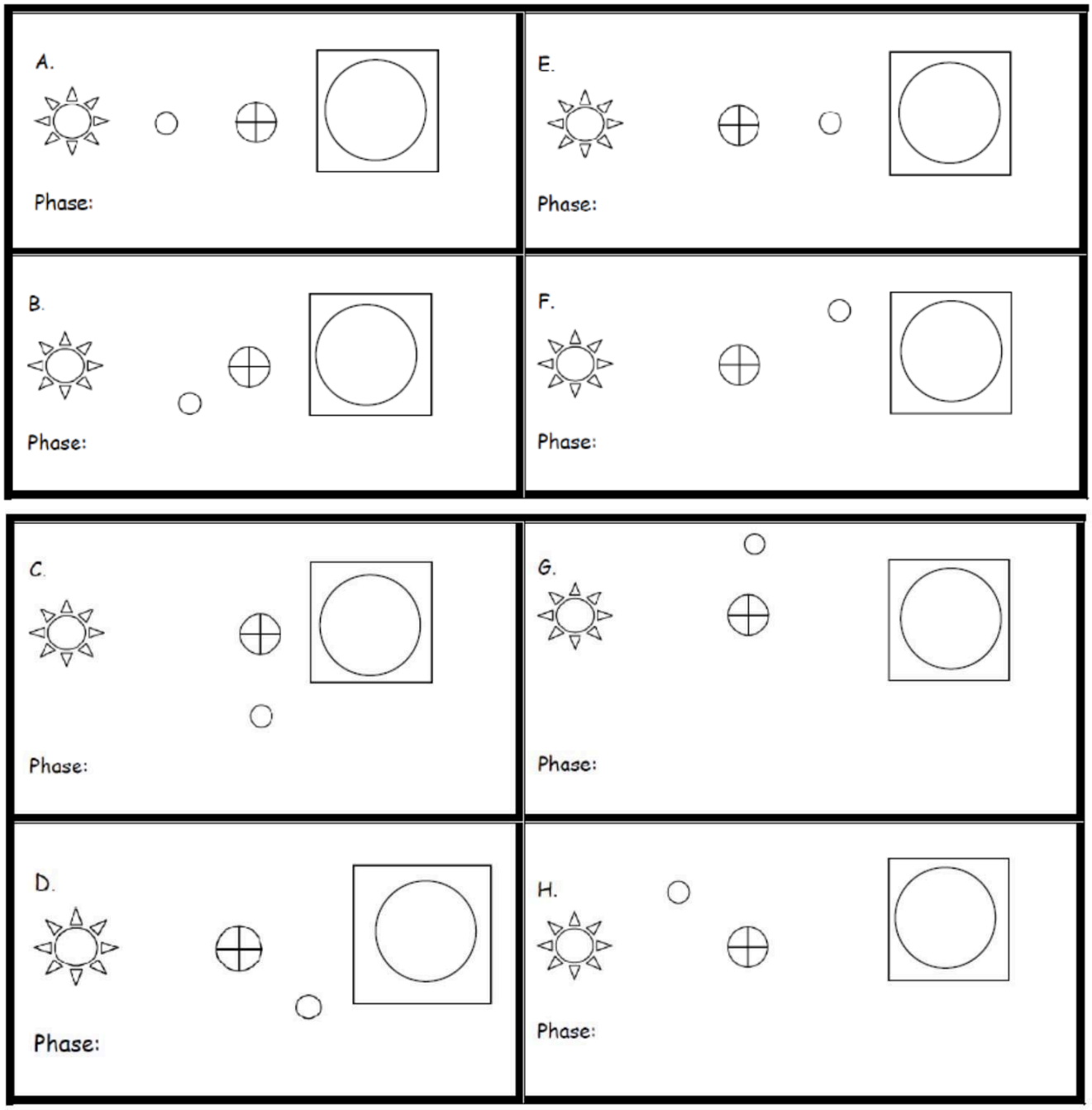
☽ Gibbous - _____
☽ Waxing - _____
☽ Waning - _____

Task Three

Sumanasinc The Moon's Phases

Moon Phase Animation Moon Phases Explained

The Moon changes appearance throughout the month because of the position of the Earth, Moon, and Sun. Complete the table below, identifying the phase and drawing a picture of the correct Moon phase.



Seasons

Click on the following link to answer the questions.

Astronomy.org The Reasons for the Seasons

1. During which season is the Earth closest to the sun? _____
   Scroll down to the Direct Energy vs. Indirect Energy picture of the flashlights.
2. Direct energy always produces _____shadows while indirect energy creates _____shadows.
3. Why is this important to how warm we feel?

   _____

   _____

Scroll down to the box titled "The Tilt of Earth's Axis Gives Us the Season"

4. Explain how the tilt of Earth's axis is responsible for the seasons on Earth.

_____

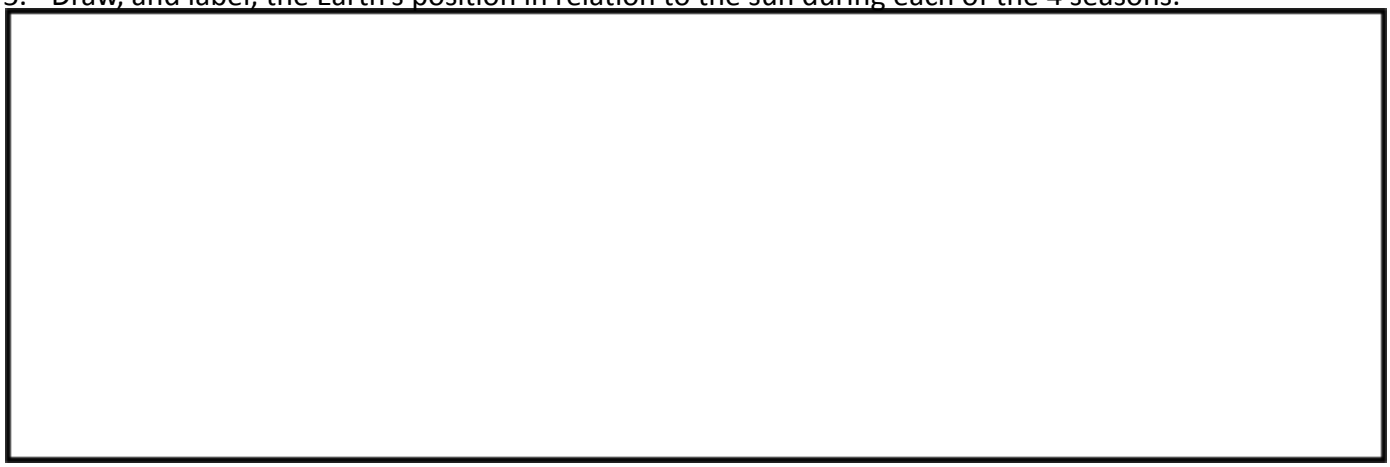
_____

_____

PBS Learning: Why Do We Have Seasons

Click on Our Orbit (on the left)

5. Draw, and label, the Earth's position in relation to the sun during each of the 4 seasons.



6. During what season does the Northern Hemisphere receive more concentrated energy from the sun and what does that mean for the temperature? _____
7. During what season does the Sun have to travel through more atmosphere and what does that mean for the temperature? _____

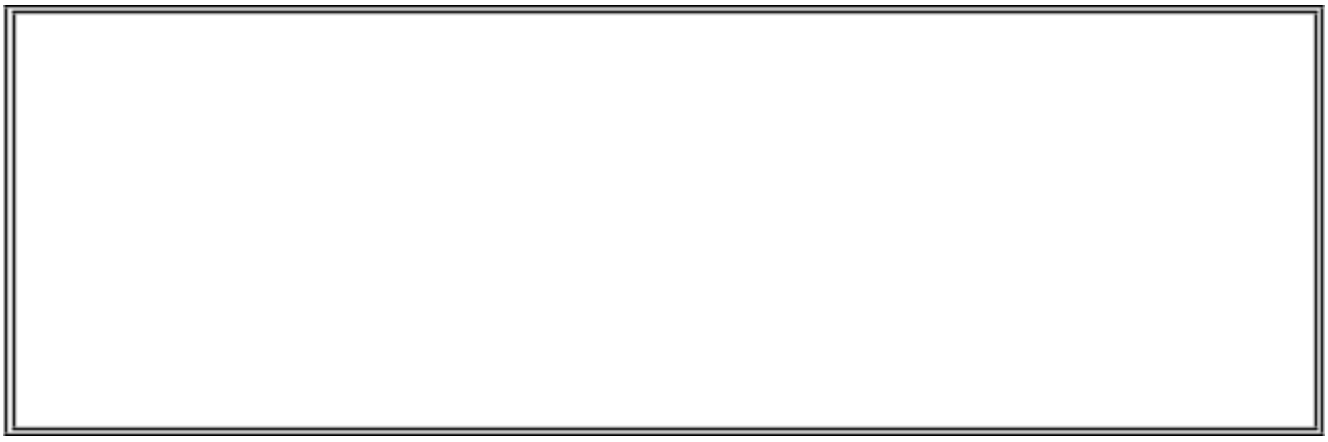
Eclipses

Directions: Refer to the websites and answer the questions that follow.

Lunar Eclipse - http://www.mreclipse.com/Special/LEprimer.html

1. What is the only lunar phase in which a lunar eclipse can occur?

2. Sketch and label the lunar eclipse geometry:



3. Name and describe the three different kinds of lunar eclipses.
   1.

   2.

   3.

4. On average, how many lunar eclipses are there every year?

5. Why does the Moon appear to take on a colored hue during an eclipse?

Go to the following website:

Solar Eclipse **-** ***http://www.mreclipse.com/Special/SEprimer.html***

1. What is the only lunar phase in which a solar eclipse can occur?

2. Sketch the solar eclipse geometry: