Name _____ Date _____ Hour ____

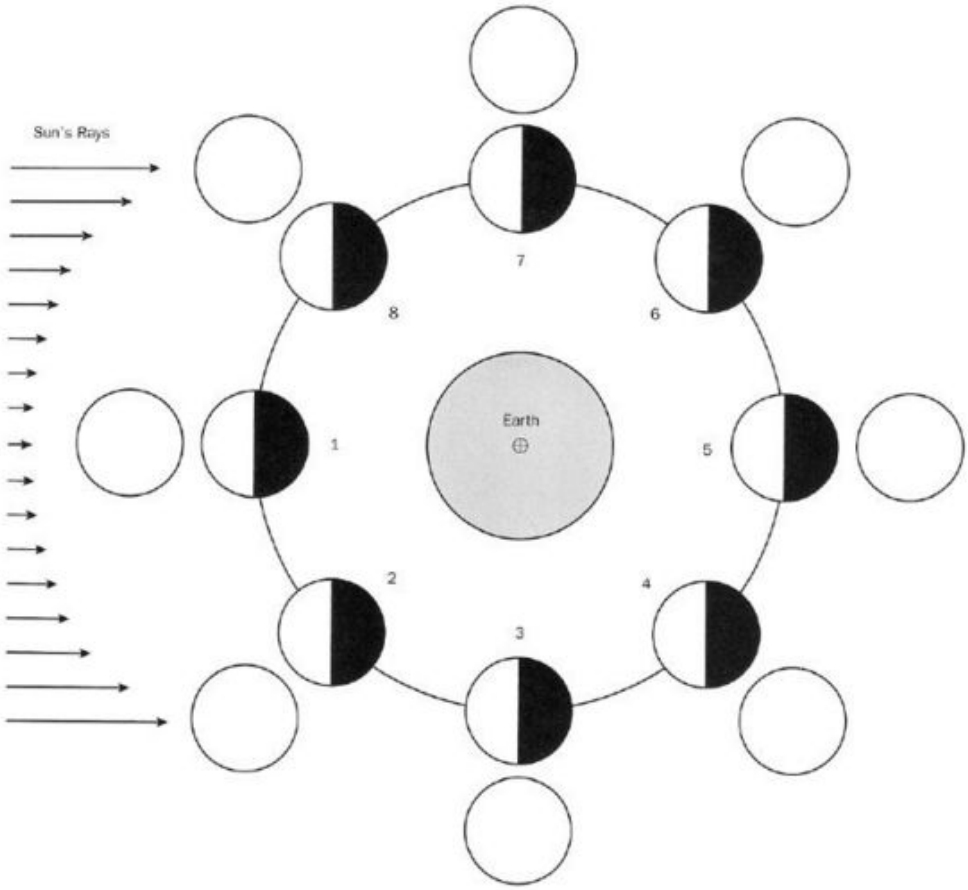
Got It!	Not Yet
18 - 14	13 - 0

Astronomy #4 - Moon Phases and Eclipses

The diagram below represents the Moon orbiting the Earth as it would be viewed from space above the North Pole.

1-2. The Moon orbits the Earth in a _____ (clockwise, counter-clockwise) direction. **Draw** and l**abel** an arrow on the diagram below to show the direction of the Moon's orbit.

3-10. **Shade** and **label** the 8 empty circles to represent the phases of the moon as they would be viewed on Earth.



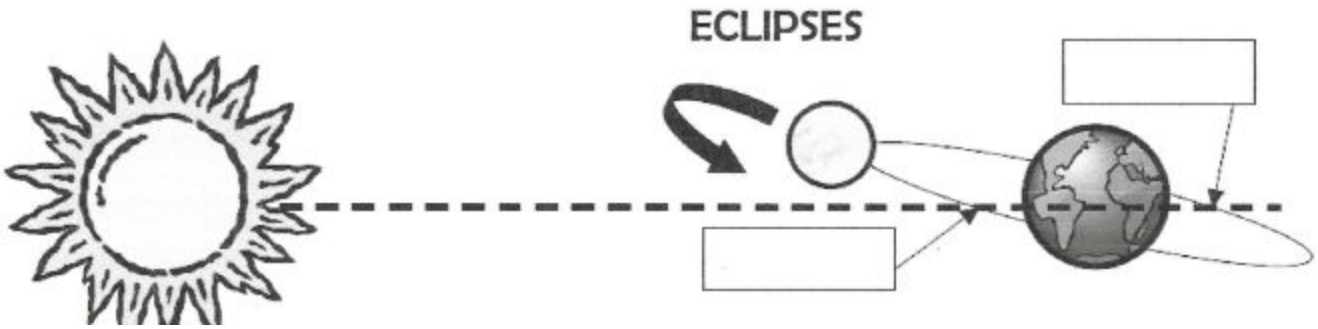
11. When the ***right*** side of the Moon is reflecting sunlight and is illuminated we call it _____ (waning, waxing). When the ***left*** side of the moon is illuminated it is called _____.

12. It takes the Moon approximately _____ days to cycle through the Moon phases.

13. _____ **True** or **False** - The Moon gives off it's own light which is why we can see it at night. **Explain.**

14. The moon's orbit is tilted 5 degrees from the Earth's orbit. there are two points in this orbit that can cause an eclipse to occur.

Label the two boxes to indicate where a **solar** eclipse and a **lunar** eclipse would occur.



15. During a solar eclipse the _____ (Earth, Moon) is in the shadow of the _____ (Earth, Moon).

16. During a lunar eclipse the _____(Earth, Moon) is in the shadow of the _____(Earth, Moon)

17. A total solar eclipse was visible to observers in the southeastern United states on February 26, 1998. The diagram below shows the Sun and earth as they were viewed from space on that date. **Draw the Moon** as a small circle showing its position at the time of the **solar** eclipse.

18. Use the diagram below to **draw the Moon** as a small circle but this time where it would be located at the time of a total **lunar** eclipse.