Name_____

LUNAR PHASES

Directions: Read the information below.

Phases of the Moon

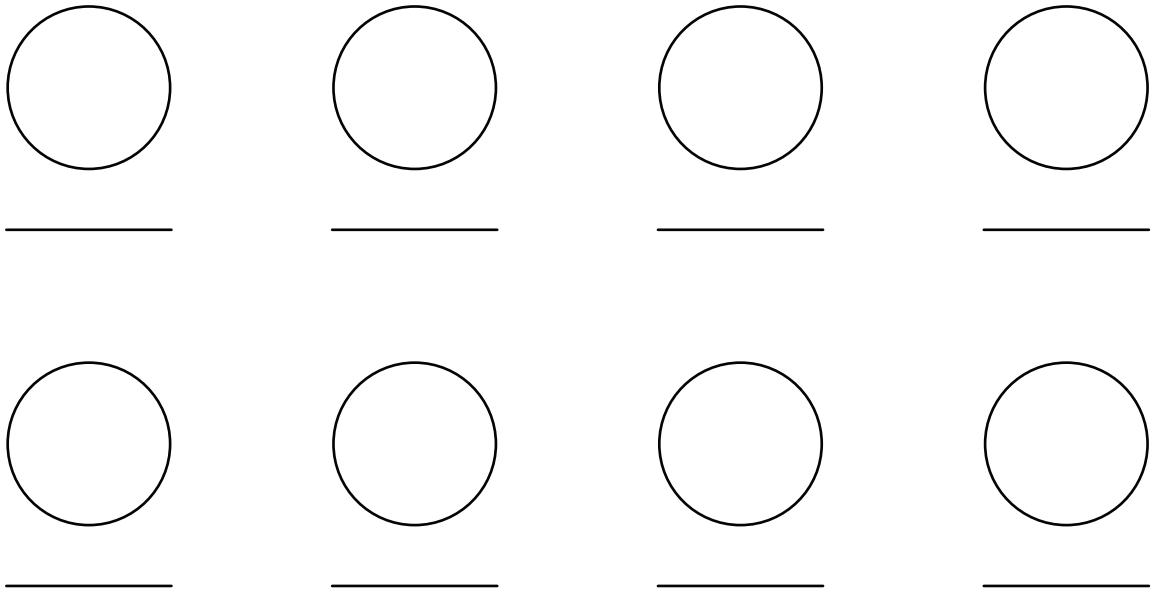
When you look up into the sky at night, what do you see? It depends on when you look. Over the course of about a month, 29 days to be exact, the moon goes through a series of eight different phases.

The cycle begins with a New Moon. During this phase you cannot see the moon in the sky because it is completely dark. Don't be fooled, though, it's still there! Next it moves to Waxing Crescent. During this time the moon is partially visible, but less than half of it can be seen. Once 50%, or half, of the moon can be seen is it called the First Quarter. As greater than half of it is illuminated it becomes Waxing Gibbous. Eventually we will see the entire moon in what is called a Full Moon. You have probably heard people talk about a full moon, which means that the entire moon will be visible at night.

Once the Full Moon has passed we begin to see more of it become dark again. This time, it is the opposite side that will appear to be darkened first. The Waning Gibbous phase is where the moon is more than 50% illuminated, but still somewhat dark. The Third Quarter sees the moon once again halfway visible. After this phase more of the moon becomes darkened in the Waning Crescent phase. Finally, it returned to the beginning of the cycle again and is entirely dark in the New Moon phase.

The different phases are caused by the rotation of the moon around the earth. Despite what it may seem, the moon does not actually give off light — it only reflects light from the sun. If the moon is in a position that is increasingly hidden from the sun's light, we will see less of it.

Directions: Sketch and label each phase of the moon.



Directions: Answer the questions below.

1. How many days does it take the moon to revolve around the earth?
2. How many hours is this? (Hint: 24 hours in a day)
3. Describe how the First Quarter and Third Quarter phases are alike and different.