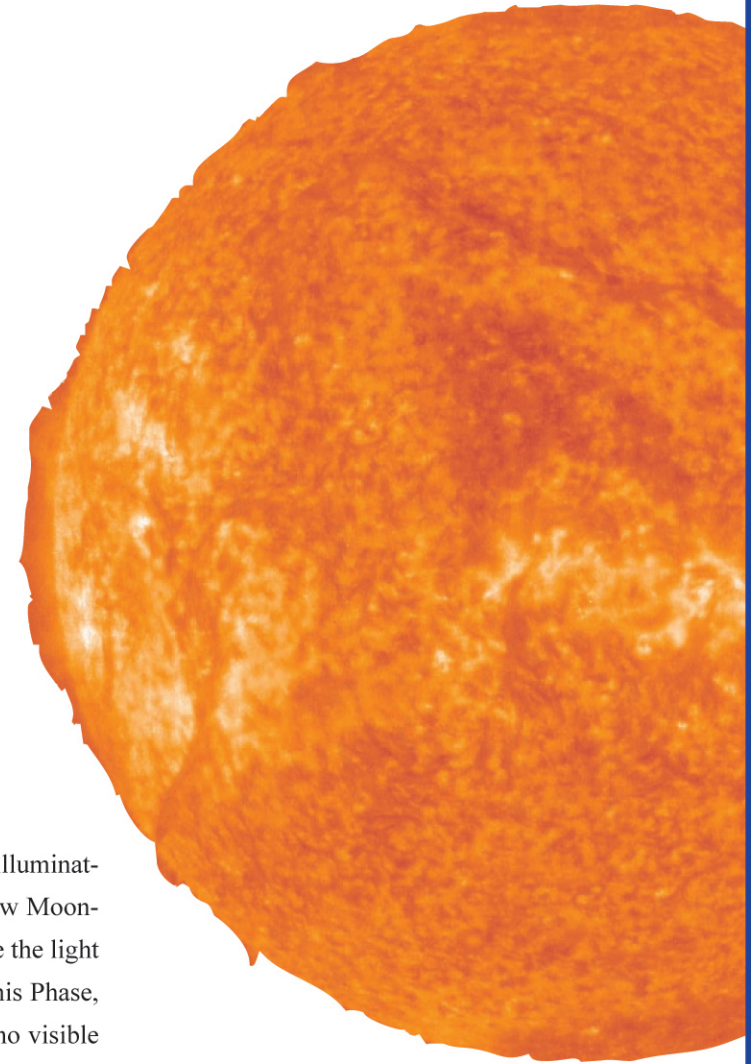
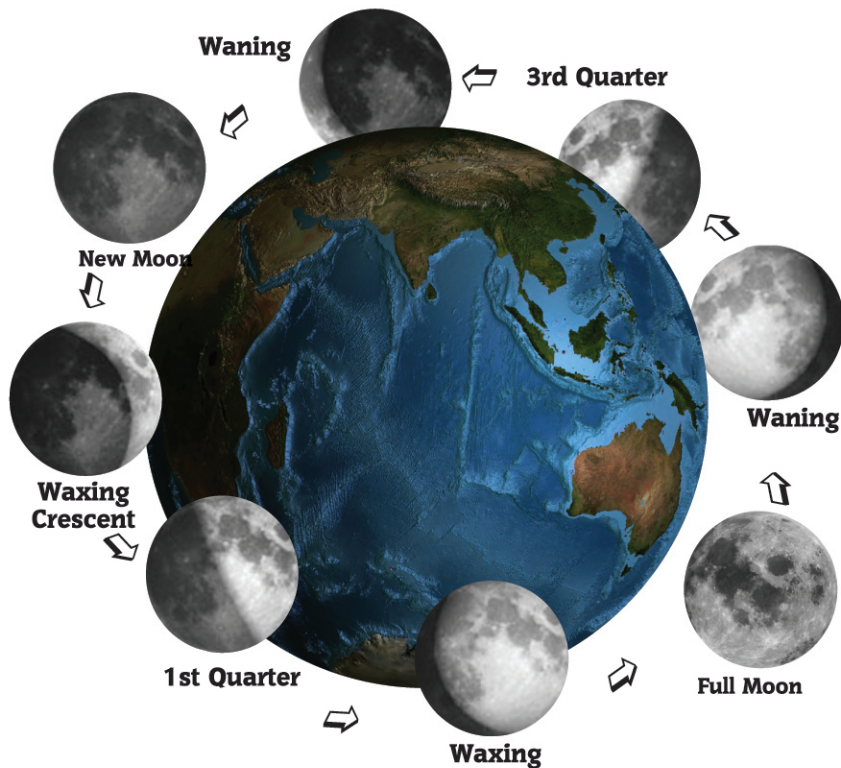


# Visible phases of the moon during the monthly orbit of the earth.

An observer on the Earth sees the Moon progress through "Phases" since only that part of the moon which is illuminated (Lit up) by the sun can be seen. Only that part of the moon which is lit up in the diagram is visible from the Earth, and therefore different fractions of the moon are visible at different times of the month. The usual names for these phases are shown under the phase. With the diagram in mind, you can roughly tell the time of the month from the moon's shape and position. (Example: If a Waxing Gibbous Moon is directly overhead, then it is about the 11-12th of the month)



As the Moon orbits around the earth, the side facing the Sun is always illuminated, just like Earth's daylight side is illuminated by the Sun. What we see from Earth, however, is a different story. The first of each month begins with the New Moon—when the Moon does not reflect any light from the sun making it unseen in the night sky. As the Moon rotates, we see the light from the Sun shine on part of the Moon, "growing" from a sliver (Crescent) to a half (Quarter) to a Full Moon. At this Phase, the cycles are half way complete and then the illuminated part begins to decrease, becoming thinner until there is no visible Moon in the sky and we are at the New Moon part of the cycle again.