

PHASES OF THE MOON

Have you ever asked yourself what causes the different phases of the moon?

Like all planetary bodies, half of the moon is always sunlit, while the other half is dark. However, the phases we see depend on how much of the lightened half we can view as the moon orbits the Earth once every 27 days.



The Bigger Moon

Represents the phase of the moon as the observer on Earth views it.



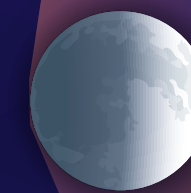
The Smaller Moon

Represents the moon's position on its orbit, (showing the always illuminated half).



3 First Quarter

After another 3.5 days the "First Quarter", begins where the moon is at a 90 degree angle with respect to the Earth and Sun.



2 Waxing Crescent

After 3.5 days begins Waxing Crescent in which the moon positions itself at a 45 degree angle with respect to the Earth and Sun. So we see a small part of the lightened half.



1 New Moon

The first phase is the New Moon where the Moon sits between the Earth and Sun. The dark half faces the earth, so we can't see the moon.



Sun, Moon & Earth alignment line

Sun

5 Full Moon

The full moon is where we see its full lightened half.



6 Waning Gibbous

The last set of phases is exactly the same but in reverse. In the first phases we say that the moon is waxing and in the last we say it is waning.



7 Third Quarter



8 Waning Crescent

