

Glossary of Astronomical Keywords

Gibbous – A gibbous Moon is one which appears to be mostly illuminated, bulging into an almost full circle.

Horizon – Observers on Earth see the horizon as a flat plane extending in all directions. The Sun and Moon tend to rise on the eastern horizon, ascend through the sky over a six hour period, and then descend into the west for another six hours. They hide below the horizon for twelve hours, and then rise again.

Lunar phase – The lunar month is divided into eight basic phases. Each phase last about 3.7 days (half a week), for a monthly cycle of 29.5 days.



- A new Moon cannot be seen with the naked eye.
- A waxing crescent marks the re-appearance of the Moon each month, as a thin crescent.
- A first quarter Moon is a half-circle, appearing one-fourth of a month (a week) after the new Moon.
- A waxing gibbous Moon swells from a half-circle into an almost full circle.
- A fully illuminated Moon appears as a full, round circle in the night sky.
- A waning gibbous Moon is a truncated circle, with one side falling into darkness.
- A last quarter Moon appears as a half-circle. (It occurs in the last week, or last quarter, of the lunar month since the last new Moon.)
- A waning crescent Moon is a thin crescent.

Rise – The Moon and Sun are said to rise when they appear above the eastern horizon.

Set – The Moon and Sun set when they disappear below the western horizon (twelve hours after rising).

Transit – An astronomical object transits when it passes across the observer's meridian, an arc of constant longitude (the east/west coordinate) along the surface of the Earth connecting the North and South Poles and the observer's location. An object which is transiting lies either to the north, to the south, or directly overhead of an observer. The Moon and Sun reach their highest elevation in the sky as they transit, shifting from the eastern sky to the west. The Sun transits each day at local noon.

Waning – When a smaller and smaller fraction of the Moon appears to be illuminated with each passing day, it is said to be waning, or diminishing.

Waxing – When a larger and larger fraction of the Moon appears to be illuminated with each passing day, it is said to be waxing, or increasing.