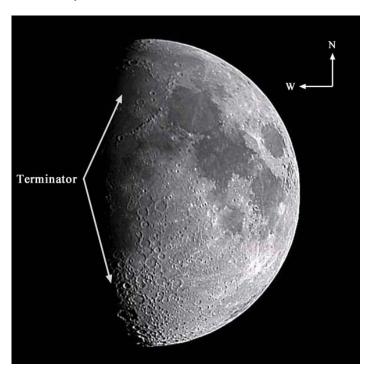
## The Moving Terminator

## What It Is

The terminator is the line separating the unlighted and lighted sides of the moon. When the phases are waxing it is the sunrise line on the moon, and when the phases are waning it is the sunset line. Notice that this means that *all* parts of the moon get sunlight during the course of a lunation—while there is a near side of the moon always facing Earth and a far side always facing away, there is no such thing as a "dark side of the moon" where it is always dark.



## When To See It

The terminator is visible whenever the moon is up. It's hard to spot with the unaided eye for a few days before and after full moon and new moon, but even in those times it can be spotted by telescope (being careful near new moon to stay away from the sun of course!)

## Where It Is

The terminator can be seen from the moon's north pole running across the apparent disk of the moon to the moon's south pole. It's pretty hard to miss!

Why It's Cool

Since the terminator is the place where the shadows on the moon are longest, craters, peaks, and many other details stand out best there. As the moon goes around Earth the position of the terminator changes every night, giving telescope observers a new batch of features to see. In fact, sometimes careful observers may be able to see changes along the terminator in just a few hours as the terminator creeps across the lunar surface! Look also for peaks that seem detached from the moon—they are in sunlight while their lower surroundings are not, and are another place where changes can often be seen in hours. Because of the orbital motions of both the moon and Earth, the exact position of the terminator on a given day after new moon varies a little each month and certain features may be better seen in some months than in others. In other words, along the terminator you get a different show every night!