

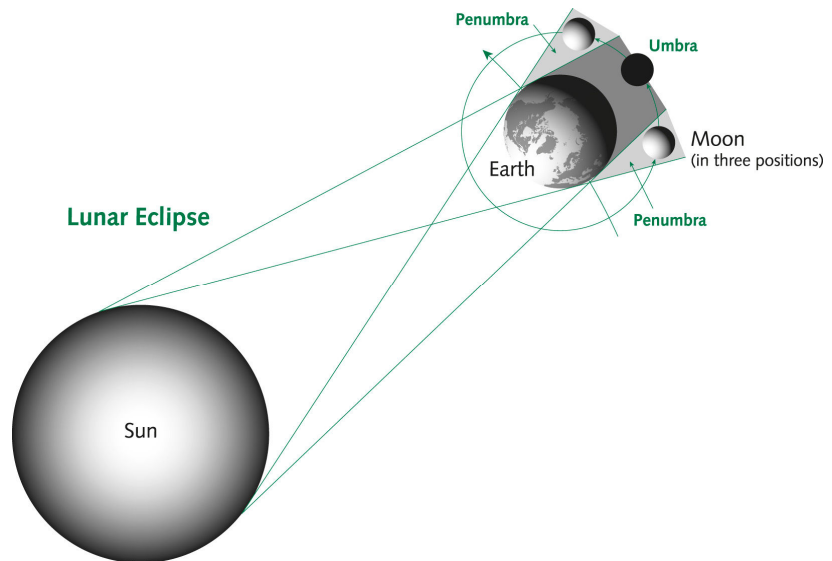
# Lunar Eclipses

By Sokol Sota

A lunar eclipse occurs when the Sun, Earth and moon are aligned in order, with the Earth in the middle. Arranged just right, the Earth blocks sunlight from reaching the moon, and it seems to disappear in our sky.

Lunar eclipses occur three to five times a year. Lunar eclipses can only occur during a full moon. A full moon happens every 29.5 days. There is not a lunar eclipse every full moon because the moon's position always moves as it orbits Earth. Only a few times a year will the moon be in the proper alignment with the Earth and the Sun for an eclipse to occur.

The lunar eclipse involves two types of shadows: the **umbra**, which creates complete darkness upon the moon, and the **penumbra**, which creates a partial darkness upon the moon. Similar to the solar eclipse the lunar eclipse also comes in two forms: **total lunar eclipse**, where the whole moon is shadowed and **penumbral lunar eclipse**, which occurs because the moon passes through only the penumbra shadow.



Lunar eclipses are very exciting to look at. The moon obtains a dark bright red color that looks very astonishing. The best thing about lunar eclipses is that you can just look at them without any eye protection because you are looking away from the Sun, not at it as you would during a solar eclipse.