Phases of the Moon

Perspective of the illuminated half of the moon, as seen from Earth.



Lunar Phases and Configurations

As the Moon orbits the Earth, we see varying portions of its sunlit side. The phases sketched here (outside the circle representing the Moon's orbit) show the Moon as it appears to an observer in the northern hemisphere.

Phases of the Moon

Perspective of the illuminated half of the moon, as seen from Earth.



Solar and Lunar Eclipses

The relative positions of the Sun, Earth, and Moon are shown at the times of solar (upper) and lunar (lower) eclipses. Only the dark portion of the shadow (the umbra) is shown in each case. (Not to scale)

<u>Seasons</u>

Caused by the 23.5 degree tilt of the Earth's axis with respect to the normal vector of its orbit plane.



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