

The Zodiac And Ecliptic - Educator's Guide (Ages 12-15)



At the end of these Night Sky activities students will understand:

- The Sun's annual path through the sky
- The twelve Zodiac constellations lie along this path
- This path is called the ecliptic
- The orbits of the Moon and planets are also along or near the ecliptic

Astronomy background information

Ancient peoples grouped the stars into constellations which were fixed in position. They also noticed that the Sun, Moon and planets all gradually moved along fixed paths in front of the stars.

These paths passed through twelve constellations. They became famous as the constellations of the "Zodiac". The word zodiac means "line of animals" as most of the twelve zodiac constellations represent living creatures. The twelfth, Libra, represents a set of scales.

Nowadays we know that the Moon is moving around the Earth and the Earth is just another planet moving around the Sun. The Sun appears to move in front of the stars because our vantage point on Earth is moving. The path the Sun seems to follow is called the ecliptic. The planets including the Earth and the Moon are orbiting around the Sun so they also move close to the ecliptic. In Night Sky the Ecliptic Line appears as a yellow dashed line around the sky.

Night Sky App Essential Settings

Go to Night Sky Settings  and make sure the following Preferences are set.

Turn On these Effects:

Environment Based Horizons
Show Glass Mythology
Stop Glass Mythology Melting
Show Constellations Lines
Stop Text and Lines Disappearing

Turn Off these Effects:

Show Satellites
Real Sky Representation
Draw Trajectories and Orbits
Enable Messier Objects
Show Ecliptic Line (at start of lesson)
Hipparcos catalog

Accessible Learning:

- Text size can be increased in the Preferences section
- Star numbers can be reduced by sliding two fingers down the screen

