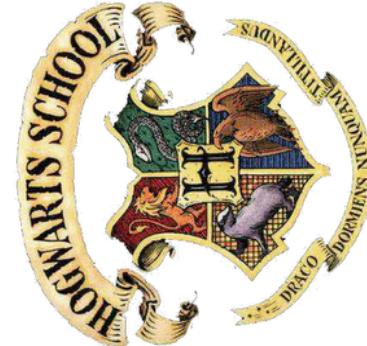


The best way to understand the night sky is through the classical idea of the ecliptic. As the Earth rotates daily, the Sun and planets move slowly along the ecliptic through the Zodiak constellations that divide it, with their sequence and apparent motion changing based on where they are in their orbits. Due to the Earth's tilt, the Sun and planets rise and set in sequence along the ecliptic. The celestial sphere appears to rotate, and the Sun, Moon, and stars move in nearly one line across the sky (the ecliptic). As the Earth rotates daily, we see the Sun, Moon, and planets in nearly one line. The Moon orbits the Earth in close to the same plane. So the Sun is nearly the same plane (the ecliptic plane), and the best way to understand the night sky is through the ecliptic.

The Ecliptic



Frustum-shaped star finder, celestial sphere, pinpoint planetarium

by BabbleIsland-Koel
[Facebook.com/Globetarium](https://www.facebook.com/Globetarium)

Harry Potter
Birthday Edition

Frustarium

Construction Instructions

- 1) Poke out holes for stars using a push-pin.
- 2) Fold up along dashed lines.
- 3) Tape together edges with clear tape.

Viewing Instructions

- 1) Look in from below to see constellations.
- 2) In a small darkened room, shine cellphone light in from below to see stars on ceilings and walls.

Never look at the sun except through eclipse glasses.

Selected constellations, asterisms, and bright stars shown. Sun, Moon, and planets not to scale.

Free Frustarium and other Globetarium pdf files at Globetarium.com and Facebook.com/Globetarium.

Your Birthday Sky

As the Earth orbits the Sun, the Sun appears to move along the ecliptic through the seemingly fixed Celestial Sphere, circling once every year. So on your birthday the Sun is in the same spot on the ecliptic that it was on the day you were born.

On your birthday the Sun should be in your Zodiac Constellation. Except it might be slightly off since the Zodiac system has not been adjusted over the millenia.

The other planets also appear to move along the ecliptic as they orbit the Sun, but their orbits are either shorter or longer than one earth year, so they are not in the same spot every year.

The stars are so far away that they appear to not move at all during your lifetime.