

A [satellite](#) is a body that orbits a planet. By contrast, stars appear as tiny points of light

a [star](#) is a giant ball of superheated gas, or plasma, composed of hydrogen and helium. As seen from Earth, the positions of stars relative to each other do not seem to change.

A [planet](#) is an object that orbits the sun, is large enough to have become rounded by its own gravity, and has cleared the area of its orbit of any debris. There are eight planets in our solar system.

A [meteor](#) is a streak of light produced when a small piece of rock or ice, known as a meteoroid, burns up as it enters Earth's atmosphere.

A [comet](#) is a cold mixture of dust and ice that develops a long trail of light as it approaches the sun. When a comet is far from the sun, it is frozen. As it gets close to the sun, the cloud trailing behind the comet forms a glowing tail made up of hot dust and gases.

A pattern or group of stars that people imagine represents a figure, animal, or object is a [constellation](#).

Because *ge* is the Greek word for "Earth," an Earth-centered model is known as a [geocentric](#)

Many early observers, including the Greek philosopher, Aristotle, thought Earth was the center of the universe, with all the planets and stars circling it,

An ancient Greek scientist named Aristarchus, who lived over 400 years before Ptolemy, developed a sun-centered or [heliocentric](#) model. *Helios* is Greek for "sun." In a heliocentric system, Earth and the other planets revolve around the sun. Astronomer Nicolaus Copernicus further developed the heliocentric model. Copernicus proposed that Earth's rotation and revolution around the sun explained the observed movements of the stars and planets.

[ellipse](#), an oval shape, rather than a perfect circle. (Planet orbits are slightly elliptical)