

Year 5 Science knowledge organiser - Earth and Space

The Solar System is a group of celestial bodies, including the Sun, planets, asteroids and moons, held together by gravity.

The Sun, Earth, moons and other planets are spherical in shape.

Ptolemy



100-170 CE

Alhazen



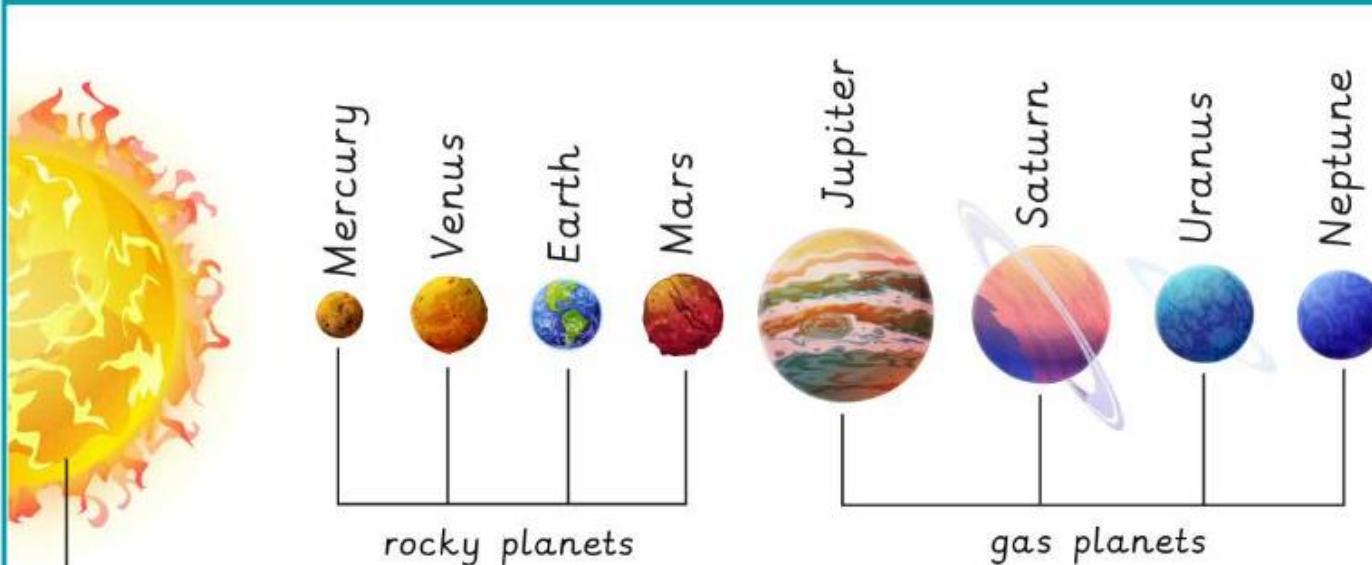
965-1040 CE

Copernicus



1473-1543 CE

Our Solar System



Sun - a star at the centre of our Solar System

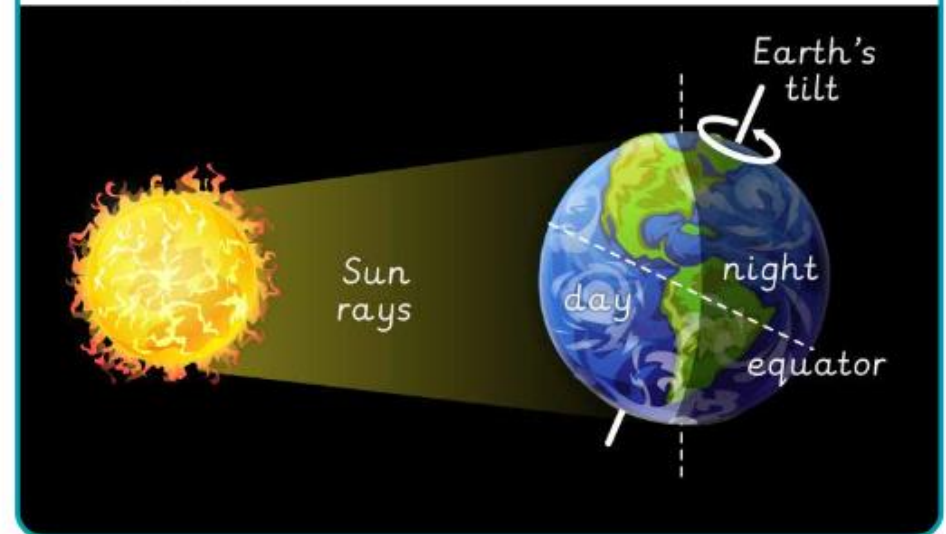
The heliocentric model was developed by Copernicus (1473-1543 CE) and theorised that the Sun was at the centre of the Solar System with the Earth and other planets orbiting around it.

The geocentric model was developed by Ptolemy (100-170 CE) and theorised that the Earth was at the centre of the Solar System with the Sun and other planets orbiting around it.



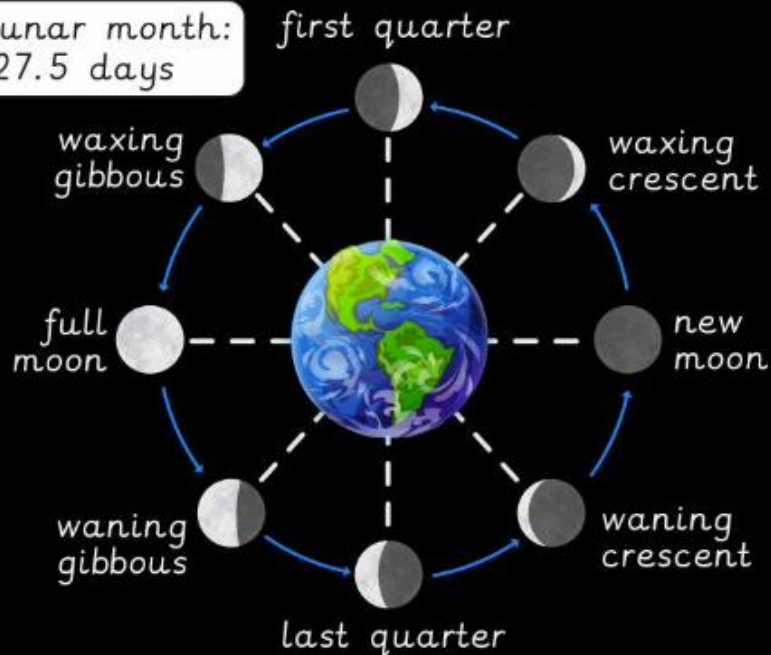
Artificial satellites are human-made objects that orbit planets. They have many uses, including gathering data, communications and taking images.

Day and night: the Earth rotates on its axis every 24 hours, creating periods of daylight and nighttime.



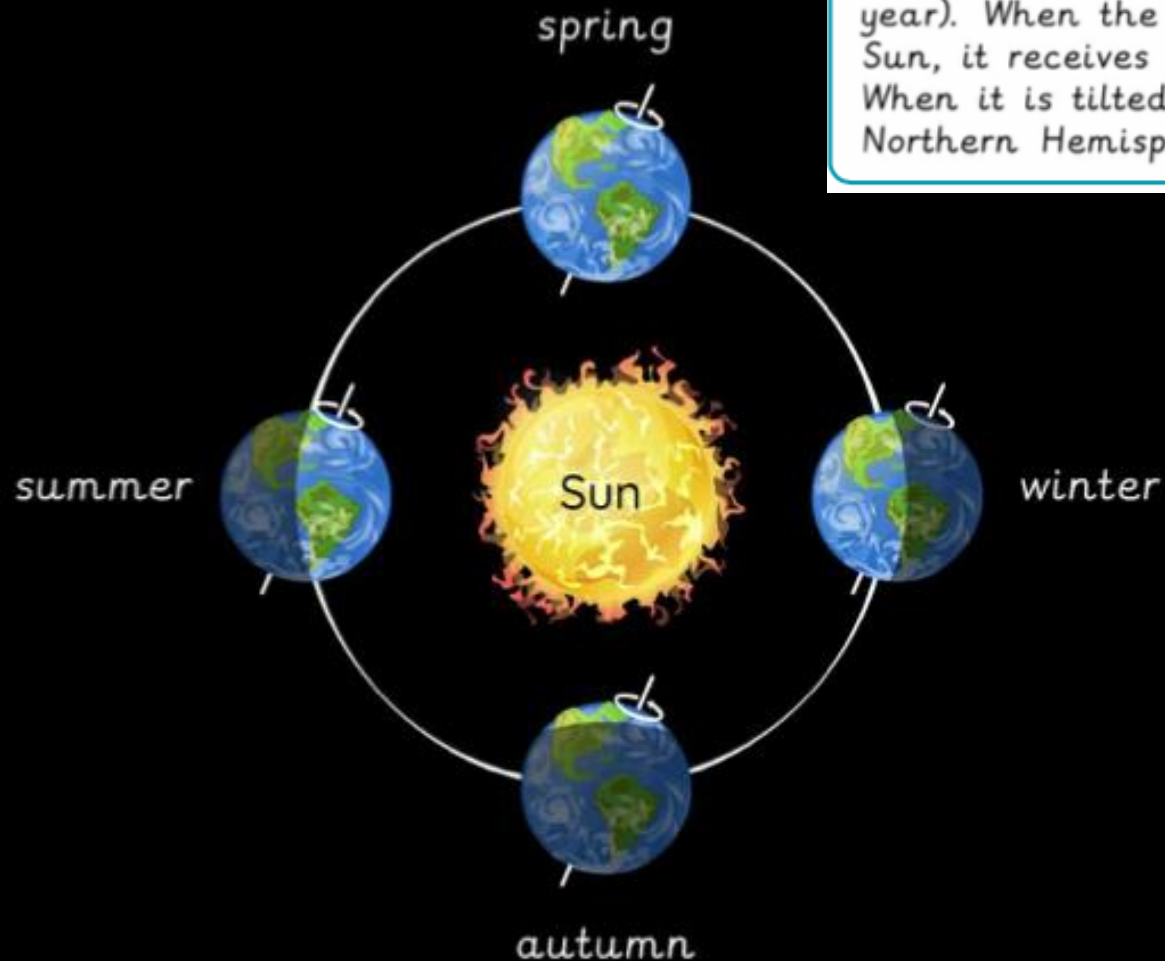
Phases of the Moon: the Moon appears to change shape as it orbits the Earth because we see different amounts of its lit-up side (the side reflecting light from the Sun).

lunar month:
27.5 days



Moons, also called natural satellites, are celestial bodies that orbit planets. The Earth has one moon. Some planets, like Mercury, have no moons and other planets, like Saturn, have many moons (the current count is 146).

The Earth's seasons



The Earth orbits the Sun once every 365.25 days (one year). When the Northern Hemisphere is tilted towards the Sun, it receives more light for longer so it is summer. When it is tilted away from the Sun, it is winter in the Northern Hemisphere.