



Vocabulary

asteroid a mass smaller than a planet and made of rock and metals which orbit the sun.

comet a mass smaller than a planet made up of dust, gas and ice which orbits the sun, sometimes with tails.

galaxy a massive 'city' of between a million and a million million stars

Milky Way the name of the galaxy which includes planet Earth.

moon any natural object orbiting a planet or asteroid.

planet a body which orbits the sun, has enough gravity to make it almost spherical and reflects light.

solar system the sun and the celestial bodies which orbit it due to its strong gravitational force.

star a ball of exploding gas which produces heat and light due to nuclear reactions in its core.

sun The star the closest to the Earth which is the source of light and heat for the solar system.

universe everything that exists containing some one-hundred-thousand-million galaxies.

Physics

Science Y5: Earth and Space

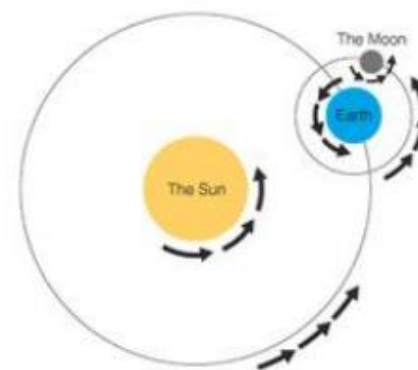
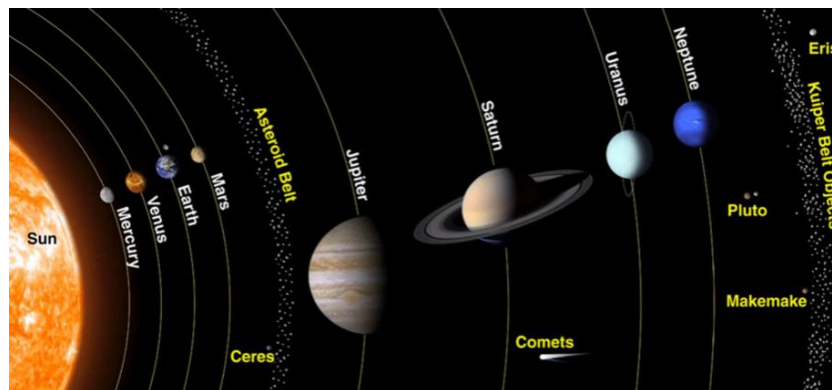
Key diagrams and knowledge

The Sun is a star. Its burning gases produce sunlight. The Sun's gravity holds the planets in orbits around it. We live on a small planet, the third of eight that orbits around the Sun. Together, the Sun and planets make up our solar system.

The Earth spins through one complete turn in a day. This produces sunrise, daylight, sunset and night. The Earth goes around the Sun once a year. This produces the seasons – spring, summer, autumn and winter. The seasons are caused by the way the Earth is tilted. The northern hemisphere has summer when it is tilted towards the Sun. The northern hemisphere has winter when it is tilted away from the Sun.

The Moon takes just over 28 days to go around, or orbit, the Earth. The way we see the Moon depends upon how we see the light it reflects from the Sun.

The Earth is about 4 times as wide as the Moon. The Sun is about 100 times as wide as the Earth.

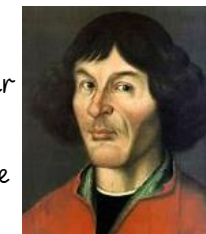


Scientists



Claudius Ptolemy
mathematician,
astronomer and
geographer.

Nicolaus Copernicus
placed the Sun, rather
than Earth, at the
centre of the universe



Galileo Galilei
"father of modern
physics"

Links to other subjects

Maths – data handling,

Art – pastel planets,

Geography – imaginary lines

D&T – sewing stars

Holst's – The Planets

Links to prior learning

Year 1 seasons, light

Year 3 light

Next steps

Year 6 light