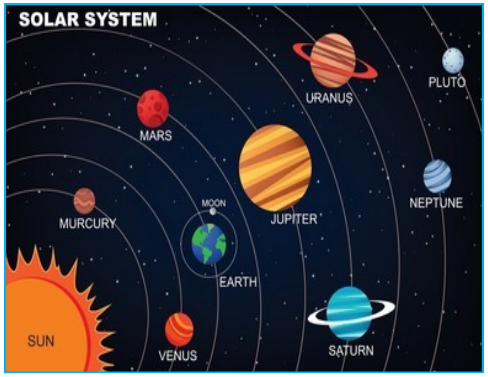
Earth and Space- Year 5

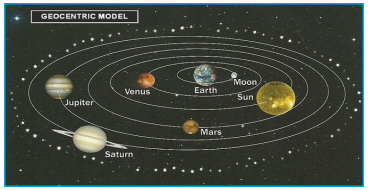
Previous Learning:

In Early years, you explored the natural world around you by describing what you could see, hear and feel. In Year 1, you observed changes across the four seasons. You also described weather associated with the seasons and how day length varies.

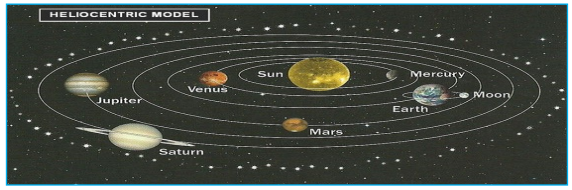
Mercury, Venus, Earth and Mars are rocky planets. They are mostly made up of metal and rock. Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal.



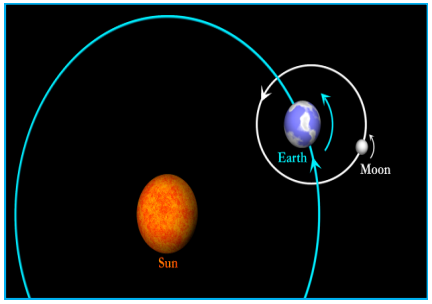
Years ago people believed that planets moved around the Earth this is known as a Geocentric model.



The work and ideas of many astronomers (such as Copernicus and Kepler) combined over many years before the idea of the heliocentric model was developed. Galileo's work on gravity allowed astronomers to understand how planets stayed in orbit.



The Moon orbits Earth in an oval shaped path while spinning on its axis. At various times in a month, the Moon appears to be different shapes. This is because as the Moon rotates round Earth, the Sun lights up different parts of it.



It appears to us that the Sun moves across the sky during the day but the Sun does not move at all. It seems to us that the Sun moves because of the movements of Earth.

Earth rotates (spins) on its axis. It does a full rotation once in every 24 hours. At the same time that Earth is rotating, it is also orbiting (revolving) around the Sun. It takes a little more than 365 days to orbit the Sun.

Daytime occurs when the side of Earth is facing towards the Sun.

Night occurs when the side of Earth is facing away from the Sun.

Key vocabulary	Definitions
Sun	A huge star that Eartha nd other planets orbit around.
moon	A natural satellite which orbits Earth and other Planets.
star	A giant ball of gas held together by its own gravity.
planet	A large object, round or nearly round, that orbits a star.
sphere	A round 3D shape in the shape of a ball.
satellite	Any object or body in space that orbits something else.
rotate	To spin.
orbit	To move in a regular, repeating curved path around another object.
axis	An imaginary line that a body rotates around.
heliocentric models	The structure of the Solar System where the plants orbit around the Sun.
geocentric models	A belief people sued to have that other planets and the Sun orbited around Earth.
Astronomer	Someone who studies or is an expert in space Science.

Margaret Hamilton worked for NASA and wrote a computer code for the on-board computer. She was responsible for the successful navigation and safe landing of the Apollo 11 mission.

Future learning:

You will revisit Earth and Space in secondary school. You will look at the structure of the Earth and how it was composed.