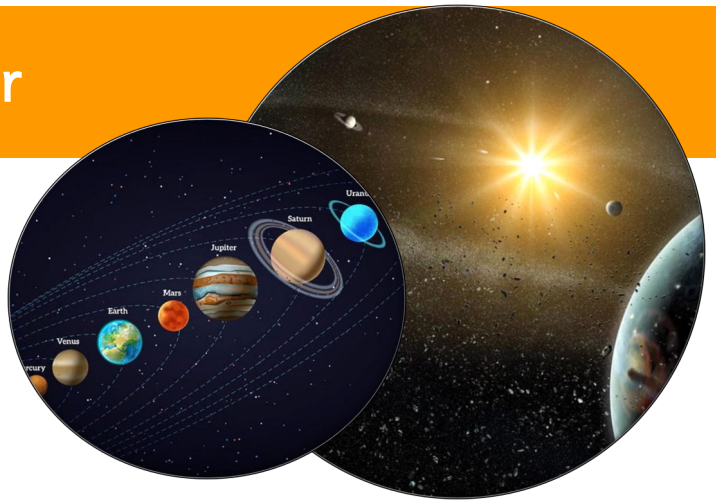
Year 5 - Summer - Science Knowledge Organiser



What I will learn...

- The eight planets in the Solar system are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- The sun is the only star in our Solar System.
- Famous astronomers: Aristotle, Ptolemy, Nicolaus Copernicus, Johannes Kepler and Galileo.
- The Geocentric model: the Earth is at the centre of the universe, it is stationary. There are 8 spheres around the Earth.
- The Heliocentric model: The Earth is one of seven planets that are circling a stationary Sun. The Earth moves in three ways: it rotates every day causing day and night, it moves around the Sun once a year; it tilts on its axis, which causes the seasons.
- The spherical Earth: astronauts have flown around it and taken photographs.
- At sea, you can see high mountains before low ground because the Earth curves.
- The Earth appears as a sphere from space, no matter where you are looking from.

Key Vocabulary

Solar System	A series of planets which orbit a star.
Sun	The star at the centre of our Solar System.
Star	An astronomical body that produces its own energy.
Planet	A celestial body that orbits a star, is round and has cleared smaller objects away from its orbit.
Night-time	The time when part of the Earth is in darkness.
Daytime	The time when part of the Earth is in daylight.
Orbit	The path of a planet or moon around another celestial object.
Time zone	A geographical region where the same time is set.
Centric	Situated at the centre.
Geocentric	With the Earth at the centre.
Heliocentric	With the Sun at the centre.
Timeline	A way of displaying according to the date they occurred.

What I already know...

- The Earth has one moon. It is the fifth largest moon in the Solar System.
- Both sides of the Moon receive the same amount of light from the Sun.
- Famouns cosmonauts: Yuri Gagarin, Valentina Tereskova, Alan Shepard.
- Famous astronauts: Neil Armstrong and Buzz Aldrin.

Making a difference at The Merton

In this topic, children will journey beyond our planet and uncover exciting facts about our Solar System. Cross curricular links will be made with our "Ancient Greeks" topic—who were the driving force behind the development of astronomy and science. The children will investigate how scientists ideas about astronomy have evolved over time, and why people once thought that the Earth was at the centre of the solar system.