Knowledge Organiser	
Term: Autumn 2 Year 5 Science - Physics	**Topic: Earth and Space**

Celestial bodies	Things we see in the sky are called celestial bodies. The two main celestial bodies we can see from Earth are the moon and sun.
Earth	The planet we live on. It is the third planet from the Sun.
Sun	The Sun is the star at the centre of our solar system. It is a ball of gas.
Moon	A large rock that orbits a planet.
Planets	Large round objects, made of rock or gas, that move around the sun.
Solar system	The sun and all the planets that orbit around it.
Star	A huge ball of glowing gas in space.
Rotates	When an object rotates it turns (spins) on its axis.
Orbits	The curved path that an object follows going around a star or a planet.
Astronomy	The study of space and the universe

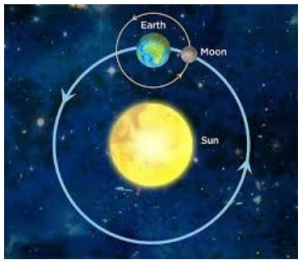
The solar system is made up of the sun and everything that orbits around it. This includes planets, moons, asteroids, comets, and meteoroids.

There are 8 planets within our solar system, they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. These all orbit the sun.

People used to think the Earth was flat. The Earth, Sun & Moon are actually spherical.

The Earth orbits the Sun.

It takes 365¼ days to complete its orbit around the Sun. This is a year.

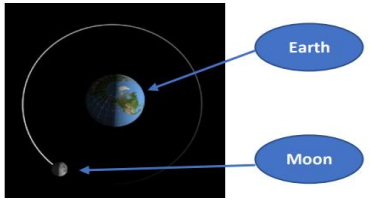


The Moon appears to change shape as we see more or less of it. These shapes are called the phases of the Moon. The Moon is a lot smaller and closer to Earth than the Sun. There are 8 different phases of the moon. The moon effects the tides in the sea. It is not a light source.

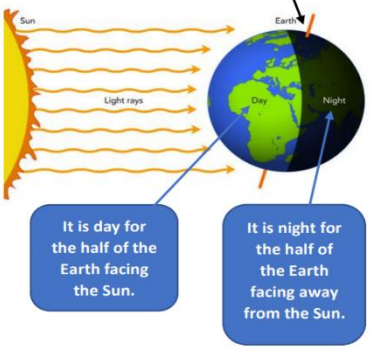
The Sun, Earth and Moon are approximately spherical bodies.

The moon orbits the Earth

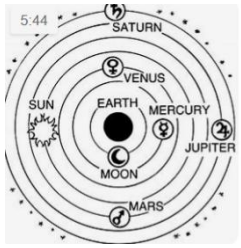
It takes about 28 days to complete its orbit.



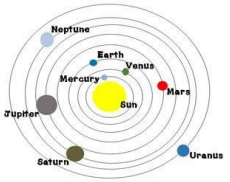
The Earth rotates (spins) on its axis once every 24 hours.



Learning Objectives			
Lesson 1	I can explain that the moon, earth and sun are spherical. I can explain how the planets orbit the sun.		
Lesson 2	I can describe the movement of the Moon relative to the Earth.		
Lesson 3	I can explain why we have day and night.		
Lesson 4	I can explain how ideas about the solar system have developed over time.		
Lesson 5	I can show what I have learnt.		



Ptolemy came up with the Geocentric model which mistakenly put the Earth at the centre of everything.



Galileo first used a telescope to look at the night sky. He agreed with the Heliocentric model that put the sun at the centre of everything.