

Science Knowledge Organiser

Year: Y5 Term: 2 Topic: Space



Prior knowledge / Key knowledge	
Prior knowledge	Seasonal changes: Year 1
Earth	Earth rotates (spins) on its axis. It does a full rotation once every 24 hours. At the same time that Earth is rotating, it is 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 the sun. Night time when the side of Earth is facing away from the sun.
Sun	It appears 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.
Moon	The Moon orbits the 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 the moon rotates around Earth, the sun lights up different parts of it.




Vocabulary	
Asteroid	A small rocky body orbiting the sun
Axis	An imaginary line about which a body rotates
Celestial	Positioned in or relating to the sky, or outer space as observed in the astronomy
Day	A twenty-four hour period, from one midnight to the next, corresponding to a rotation of the earth on its axis
Dwarf planet	A celestial body resembling a small planet but lacking certain technical criteria to be classed as a planet e.g. Pluto
Geocentric	Where people believed the earth was at the centre of the solar system
Heliocentric	Representing the sun as the centre of the solar system, the modern view of the solar system
Moon	A natural satellite of any planet
Night	The period from sunset to sunrise in each twenty-four hours
Orbit	The regularly repeated oval course of a celestial object around a star or planet
Planet	A celestial body moving in orbit round a star
Rotation	The action of rotating about an axis or centre
Solar system	The collection of eight planets and their moons in orbit round the sun
Star	A fixed luminous point in the night sky which is a large, remote body like the sun
Sun	The star round which planets orbit

Key skills /investigative focus

Investigative focus : Research	Why does the moon change every night? What planets are in our solar system? What planets sustain life and why? Why not?
Observing	How does the shape of the moon change during a month? Does the sun move across the sky?
Key skill	Asking relevant questions and using different types of scientific enquiries to answer them.

Big Questions/Challenging Perceptions

	Why do we see history when ever we look at the stars? What is between the Earth and the sun? Why do the sun and the moon look the same size when we look at them in the sky? PMI The Earth stopped spinning Odd One Out: Earth Sun Moon
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