

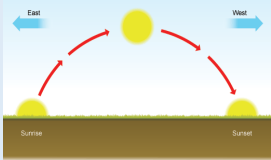
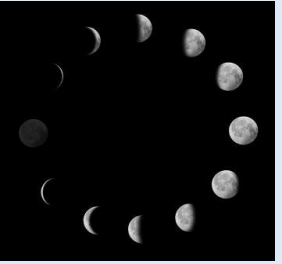


Year 5 – Earth and Space

SCIENCE KNOWLEDGE ORGANISER

Key Vocabulary		Key Knowledge	
Spherical	Describes any 3D shape that is round like a ball.	Our Solar System consists of the Sun and everything that orbits around it, such as the planets, moons, asteroids and comets.	
Gravity	A pulling force that acts between two objects.		
Orbit	To keep moving in a curved path around another object.	The Sun, planets and their moons are roughly spherical.	
Sun	A huge star that Earth and the other planets orbit around.	The Earth rotates on its axis. It takes 24 hours (day) to complete a full rotation. The side of the Earth facing towards the Sun is in day time, the side facing away from the Sun is in night time.	
Star	A giant ball of gas held together by gravity.		
Planet	A large, round object that orbits a star.	The Sun seems to move across the sky in the day because the Earth is rotating. This causes shadows to change during day.	
Moon	A natural satellite that orbits a planet, such as Earth.	While the Earth rotates, it also orbits around the Sun. It takes just over 365 days (1 year) to orbit the Sun once.	
Satellite	Any object in space that orbits something else.	The Moon orbits the Earth once every 28 days (lunar month). At different times of the month, the moon appears to be a different shape. This is because the Moon is lit up in different positions, as it orbits around the Earth.	
Rotate	To spin eg the Earth rotates on its own axis.		
Axis	An imaginary line that an object rotates around.		

Key Questions

What shape are the Sun, Earth and Moon?	They are roughly spherical. This is due to the pull of gravity from the centre.
How long does it take Earth to rotate once?	A full rotation takes 24 hours, which is one day.
What causes day and night?	The Earth's rotation gives us day and night.
How do shadows change through the day?	Shadows get shorter up until midday, then get longer again until the Sun sets.
Does the Sun orbit the Earth?	No, the Earth orbits the Sun. It takes over 365 days to complete one orbit.
Why does the Moon seem to change shape?	As the Moon orbits around the Earth, the Sun lights up different parts of it.