

Gunthorpe Primary School – Science Knowledge Organiser

Science Topic: Earth & Space

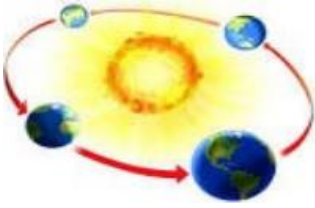


Year 5

Autumn 1

What? Key Vocabulary

Spelling	Definition/ Sentence
Solar	Relating to the sun
Orbit	The curved path of an object around a star
Axis	An imaginary line around which something rotates
Rotating	Moving in a circle around an axis
Gravitational	Moving towards a centre of gravity

Diagrams & Symbols

	The Earth orbiting the Sun, which takes one year.
	The Moon orbiting the Earth, which takes about 28 days.
	The Earth spinning on its Axis, which takes 24 hours.

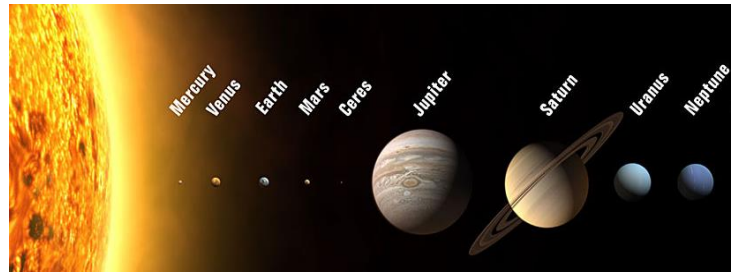
Recommended Experiments

Using balls as a model to investigate & describe the movement of the Earth in relation to the Sun.
Investigate making shadow clocks & sundials. Children to question other group's designs based on subject knowledge.
Using secondary resources to establish the time of day is different in different places in the world.

What? Key Knowledge

The Earth & the Sun

WARNING	IT IS NOT SAFE TO EVER LOOK DIRECTLY AT THE SUN, EVEN WHEN WEARING SUNGLASSES
What is the Sun?	<ul style="list-style-type: none"> The sun is a star at the centre of our solar system
What is the solar system?	<ul style="list-style-type: none"> The solar system has eight planets; Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus & Neptune
How is the Earth related to the Sun?	<ul style="list-style-type: none"> The Earth orbits (goes around the Sun) The Earth takes one year to orbit the Sun The Earth is held in its orbit round the Sun by the Sun's gravitational pull



The Earth & the Sun

What is a moon?	<ul style="list-style-type: none"> A moon is a celestial body that orbits a planet The Earth has one moon; Jupiter has four large moons and numerous small ones
How is the moon related to the Earth?	<ul style="list-style-type: none"> The moon orbits the Earth It takes about 28 days for the moon to orbit the Earth The moon is held in its orbit round the Earth by the Earth's gravitational pull
Why does the moon change shape?	<ul style="list-style-type: none"> It does not change shape It appears to change shape because we cannot always see the side of the moon that is in sunlight or we can only see part of the sunlit side of the moon as it orbits Earth.

The rotation of the Earth

How else does the Earth move?	<ul style="list-style-type: none"> The Earth spins on its own axis The Earth takes 24 hours (1 day) to completely rotate on its axis
What causes day and night?	<ul style="list-style-type: none"> The Earth spins once in a day The side of the Earth facing the Sun is in daytime The side of the Earth facing away from the Sun is in night time
What causes Sunrise & sunset?	<ul style="list-style-type: none"> The Sun doesn't move – it is us that moves Because the Earth is rotating, the Sun appears to move across the sky as the day goes on.