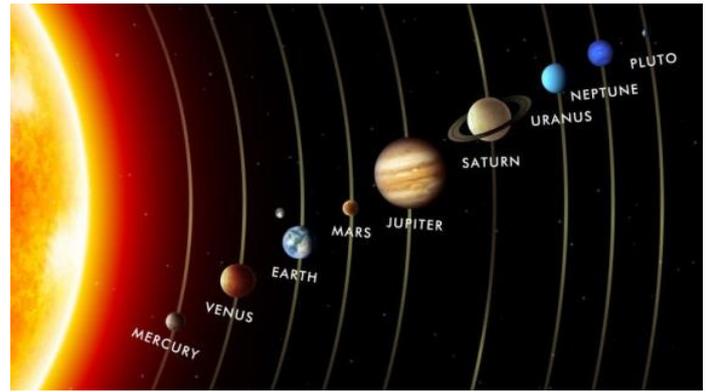


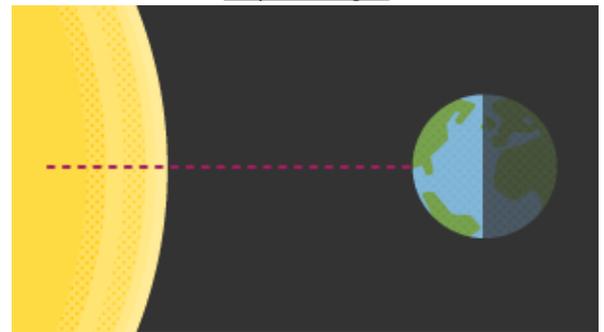
Earth and Space – knowledge organiser

Key knowledge	
The Earth	<ul style="list-style-type: none"> The planet Earth is about 4.5 billion years old. Earth spins at 1000 miles per hour. It takes 24 hours to complete a full rotation. It's daytime on the side of the Earth that faces the Sun and night-time on the side that is facing away. The Earth takes a year to travel around the Sun. Planet Earth has one moon, which is held in orbit by gravity.
The Solar system	<ul style="list-style-type: none"> The Sun is a star. The Earth is one of eight planets that travel around the Sun. The planets are called Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. The solar system is also home to lots of asteroids, moons, and dwarf planets such as Pluto.
Is Pluto a planet?	Pluto used to be considered the ninth planet in our solar system, but in 2006 scientists reclassified it as a dwarf planet. So now we have eight planets in the solar system.
What is a day?	A day is 24 hours long. This is because it takes 24 hours for the Earth to spin once on its axis. The half of the Earth facing the Sun is in daylight. The half facing away from the Sun has no sunlight and so becomes night-time.
What is a year?	A year is how long it takes to travel once around the Sun. This takes 365 days.
Seasons	The Earth's axis is tilted as it travels around the Sun, so some parts of the Earth receive more sunlight each day than others. This changes during the year because the Earth moves about the Sun, which gives rise to the seasons.
Scientists we need to know about	
5 facts about Galileo Galilei	<ul style="list-style-type: none"> Born in Pisa in Italy in 1564 He has been credited as the father of modern science. Galileo enrolled to do a medical degree at the University of Pisa but never finished, instead choosing to study mathematics. Famous for his invention of the first space telescope In 1610 he made observations of 4 objects surrounding Jupiter that behaved unlike stars, these turned out to be Jupiter's four largest satellite moons.

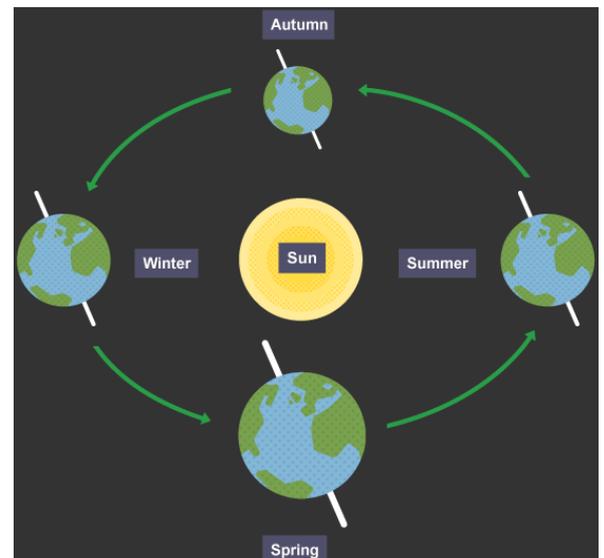
The solar system



Day and night



Seasons



Key Vocabulary

Day - The time taken for a planet to turn once on its axis.

Dwarf planet - An object orbiting a star that is massive enough to be rounded by its own gravity but has not 'cleared the neighbourhood' of other objects and is not a satellite.

Galaxy - A cluster of billions of stars, held together by gravity.

Gravity - The force of attraction between all objects. The more mass an object has, the larger the force of gravity it exerts.

Light year - The distance travelled by light in one year. The closest star to our own is about 4.3 light years away.

Mass - The amount of matter an object contains. Mass is measured in kilograms (kg) or grams (g).

Matter - Sub-atomic particles and anything made from them, such as atoms and molecules, are matter. Energy and forces are not matter.

Northern Hemisphere - The top half (north) of the world, found anywhere above the equator.

Satellite - Body that orbits a planet. For example, the Moon is a natural satellite of the Earth but communication satellites are artificial satellites of the Earth.

Season - One of four times of the year (winter, spring, summer or autumn).

Star - A large mass at the centre of a Solar System (if there are other bodies present) that produces heat and light

Weight - The force acting on an object due to the pull of gravity from a massive object like a planet. The force acts towards the centre of the planet and is measured in newtons (N).

Year - The time taken for a planet to make one orbit of its star.