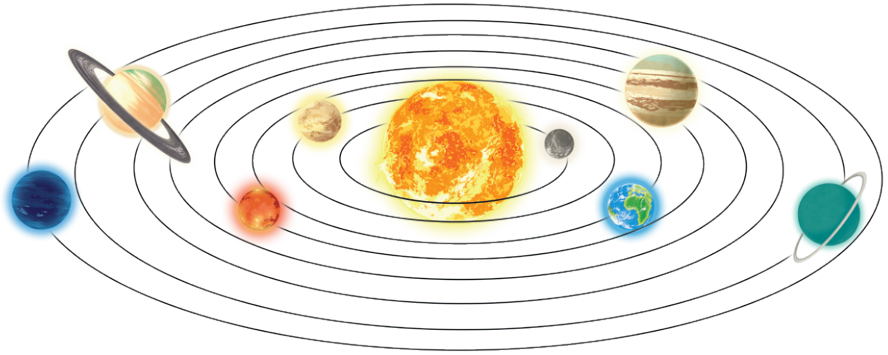
Key Vocabulary Overview	
solar system	the Sun and everything in its orbit
planets	large, spherical celestial bodies that orbit stars
spherical	something that is sphere-shaped, such as a ball
stars	giant, glowing balls of hot, burning gas
Sun	the huge star at the centre of our Solar System
celestial body	a natural object outside Earth's atmosphere
orbit	a regular, repeating curved path that an object follows around another object
surface	the top layer of an object
appearance	how something or someone looks
model	a way to physically represent a process, system or idea that is difficult to see or understand
gravity	a pulling force exerted by a celestial body (or anything else which has mass)
gravitational pull	the pull force that one object exerts on another object, pulling it towards its centre
heliocentric	a model of the Solar System that views the Sun as being at the centre
geocentric	a model of the Solar System that viewed the Earth as being at the centre
axis	an imaginary line that a body rotates around
rotation	the spinning movement of an object around its axis
North Pole	the northernmost point on Earth
South Pole	the southernmost point on Earth
night	when part of the Earth faces away from the Sun
day	when part of the Earth faces towards the Sun
satellite	an object or body that orbits a larger object
moon	a natural satellite that orbits a planet

The Solar System

The **Solar System** includes the **Sun** (our **star**) and everything in its gravitational **orbit**: the eight **planets** and their **moons**, dwarf **planets**, icy bodies, asteroids, meteoroids and comets. The **Sun** is at the centre of our **Solar System**. Earth and the other **planets** **orbit** the **Sun** and its **gravitational pull** holds the **Solar System** together.

This **model** of the **Solar System** is known as the **heliocentric model**, which views the **Sun** as being at the centre, with the **planets** **orbiting** around it.



It takes each **planet** a different amount of time to **orbit** the **Sun**.

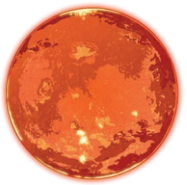
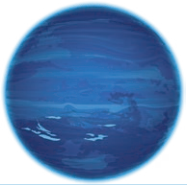
Stars

Stars may look like tiny, twinkly objects but they are actually giant, glowing balls of hot, burning gas that are held together by **gravity**. There is only one **star** in our **Solar System** – the **Sun**.

Planets

Planets are **celestial bodies** that **orbit** **stars** and vary in size and composition. They are all roughly **spherical** due to the pull of **gravity**. There are eight **planets** in our **Solar System**. The **planets** closest to the **Sun** are known as the rocky **planets** or inner **planets**. These are Mercury, Venus, Earth and Mars.

The **planets** farthest from the **Sun** are known as the gas **planets** or outer **planets**. Jupiter and Saturn are known as 'gas giants' due to their size, while Uranus and Neptune are known as 'ice giants' due to their freezing conditions.

Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune
							
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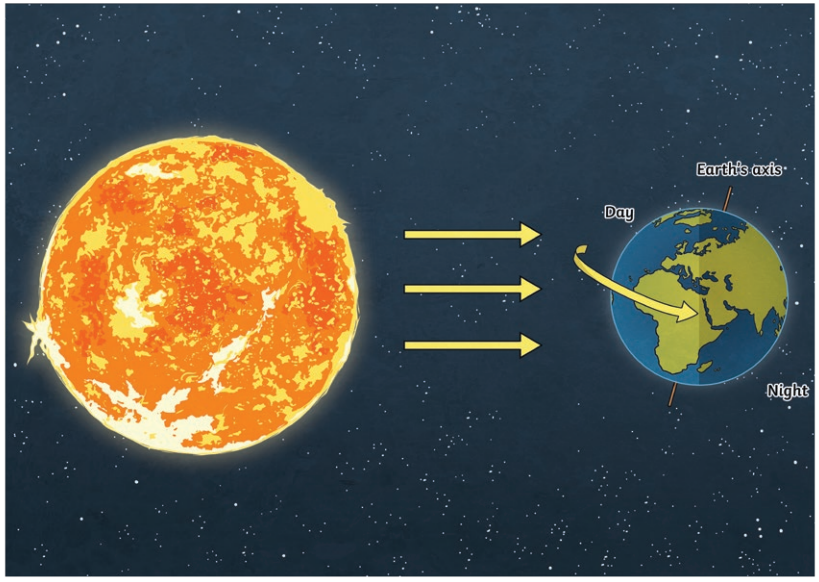
Earth's Orbit and Rotation

It takes just over 365 days (or 1 year) for Earth to **orbit** the **Sun**. It takes 24 hours for Earth to rotate once on its **axis**. This is why we have 24 hours in one day.

Day and Night

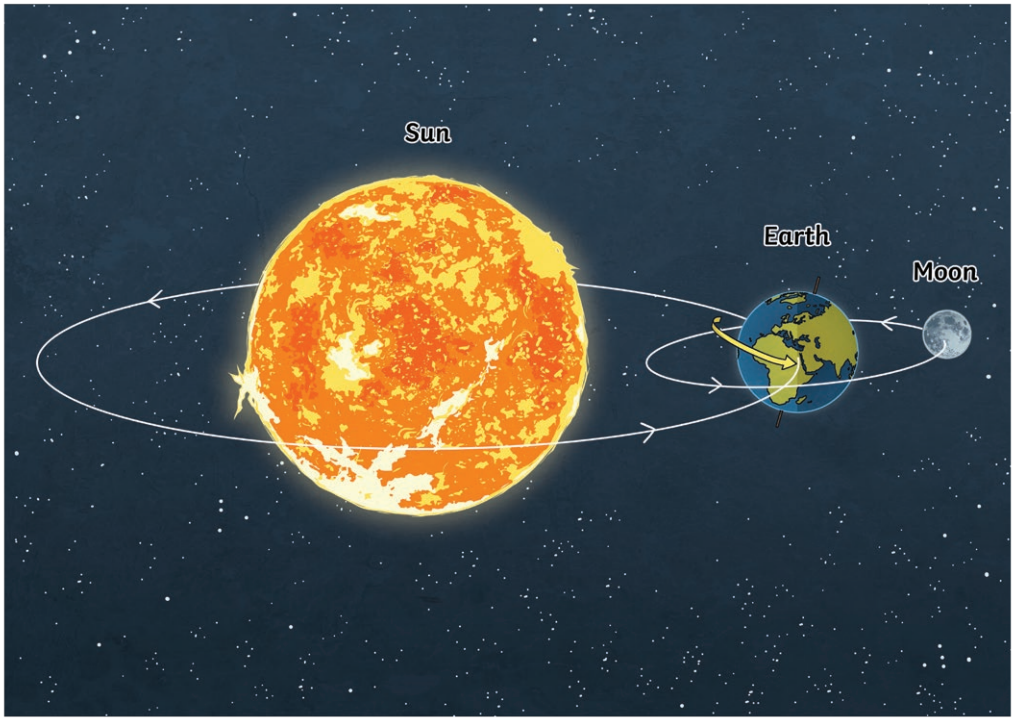
Night and **day** are caused by the Earth's **rotation** on its **axis**. When Earth rotates, one side faces the **Sun** and experiences daytime, while the other side faces away from the **Sun** and experiences **night** time.



People living in different countries around the world experience **night** and **day** at different times, especially if they are on opposite sides of the Earth.

The Moon's Orbit and Rotation

The **Moon orbits** Earth and each **orbit** takes approximately 27 days. As the **Moon orbits** Earth, it also rotates and it does so at the same rate as it **orbits** (one **rotation** every 27 days).



Satellites

A **satellite** is an object or body that **orbits** a larger object such as a **planet** or a **star**. **Satellites** can be human-made or natural objects. Earth is a natural **satellite** because it **orbits** the **Sun**. The **Moon** is also a natural **satellite** because it **orbits** Earth.