

Year 5 Science Knowledge Organiser

Earth and Space



Key Knowledge

Earth is the name of the planet that we live on. It is the 3rd planet from the sun in our **solar system**. It is mostly made from rock, unlike other planets in our solar system. It is a large sphere shape. Earth is the only known planet that we know can support life as it is the right distance from the sun. This means it is not too hot or too cold and water mostly stays as a liquid.

The **solar system** is the name we give to the part of space around the sun.

There are 8 planets in our solar system. **Mercury, Venus, Earth and Mars** are all rocky planets. **Jupiter, Saturn, Uranus and Neptune** are all gas planets.

The **sun** is at the centre and the planets all **orbit** around the sun. They do not move in a perfect circle, it is more of an elliptical path that they follow around the sun.

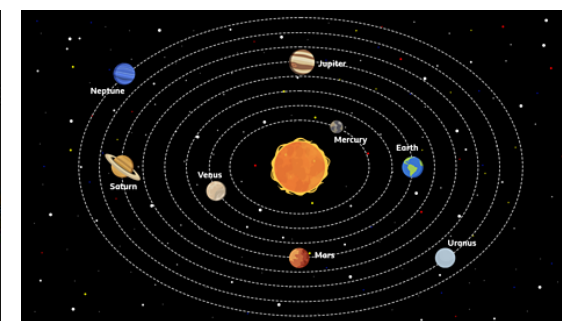
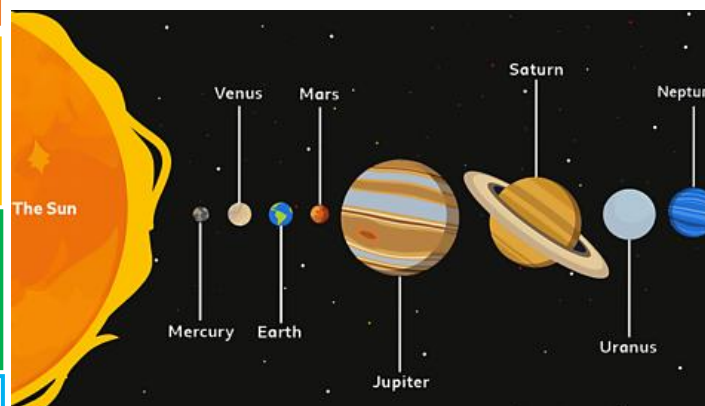
The **moon** is a large ball of rock. It is a natural **satellite** (something that orbits around the Earth). It rotates on an axis, like Earth, while it orbits. It takes approximately 27 days to orbit our planet. **Gravitational pull** towards Earth keeps the moon the same distance from Earth at all times.

We see a different view of the moon each night, sometimes it appears in shadow making it look a different shape, but it always remains a sphere.

The Earth rotates on an **axis**. When it is turned towards the sun, it is **day** and when it is turned away it is **night**. The axis is tilted, so when it is tilted towards the sun it is **summer**.

Key Vocabulary

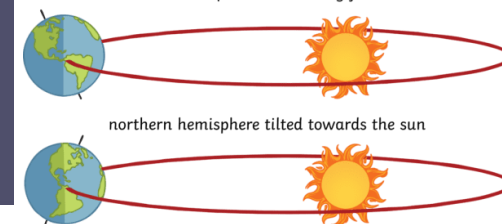
Rotate	To move in a circle around an axis
Axis	The imaginary line that runs through the Earth from the North to the South pole.
Orbit	The curved path of something that moves around something else with gravity (like the moon and Earth)
Spherical Body	Something that is perfectly or near perfectly round



The planets orbit in an elliptical shape.



northern hemisphere tilted away from the sun



northern hemisphere tilted towards the sun