

Year 5 - Term 4 Earth and Space

In our solar system, there are **eight planets**. They **all orbit the Sun**, which sits in the centre. The **planets closest to the Sun** are the **hottest**, and the **planets furthest away** are the **coldest**. Our planet, **Earth**, is just the **right temperature for life**. Earth is the **only planet in our solar system** that has **life**.



The Sun is **not a planet!** It is a **star**. It is at the **centre of our solar system** and gives **light** and **heat** to all the planets in it. It also has a **gravitational pull** that keeps all the planets in orbit around it.

There used to be **nine planets** in our **solar system**. There was a planet called **Pluto** that was even further away than Neptune. Pluto used to be a planet until scientists deemed it **'too small'** as some other planets' moons were bigger than it. It is now categorised as a **dwarf planet** instead.



Orbits

All the planets in our solar system **orbit the Sun**. The Sun is at the **centre of our solar system**. Each planet takes a different amount of time to orbit the Sun, depending on how far away it is and how slowly it moves.

Planets orbit the Sun because of **gravity**. The Sun's gravitational pull keeps all the planets in orbit. Planets travel on an **elliptical path** around the Sun, which keeps them from falling into the Sun. Below is a table showing how long each planet takes to orbit the Sun.

Mercury	87.97 Earth days
Venus	224.70 Earth days
Earth	365.25 Earth days
Mars	686.98 Earth days
Jupiter	4332.82 Earth days
Saturn	10,755.70 Earth days
Uranus	30,687.15 Earth days
Neptune	60,190.03 Earth days

Did you know?

People used to think the Earth was flat! Around **350 BC**, a scientist named **Aristotle** proved it was a **sphere**.

Key Vocabulary

dwarf planet - a small planet

friction - the force that acts upon one surface when it moves against another

gravity - a pull force that acts at a distance

orbit - the curved path around a star, planet or moon

planet - an object in space that orbits a star

pull - to move something towards

push - to move something away

solar system - the name given to our Sun and eight planets and their moons

star - an object in space made of luminous plasma (bright gas) held together by its own gravity

Moons

We are not the only planet with a moon.

Some planets have more moons than us!

Mercury and Venus - **0** moons

Earth - **1** moon

Mars - **2** moons

Jupiter - **79** moons

Saturn - **82** moons

Uranus - **27** moons

Neptune - **14** moons

