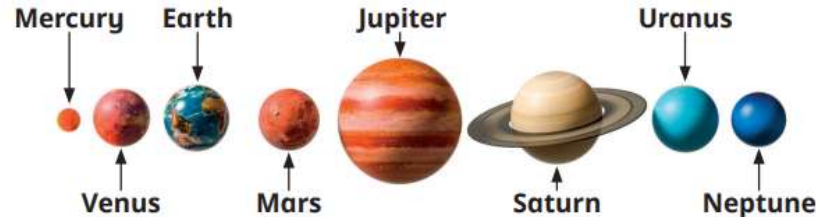


## Year 5 Knowledge Organiser - Earth and Space



### Solar System

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.



### Key vocabulary

**Solar System** – the Sun and the other bodies that orbit it  
**planet** – a roughly spherical object which orbits a star  
**orbit** – the path an object takes around another object because of gravity  
**Sun** – the star at the centre of our Solar System  
**gravity** – a non-contact force caused by objects with mass pulling each other  
**rotate** – to spin around an axis  
**axis** – an imaginary line which something rotates around  
**moon** – a natural satellite that orbits Earth  
**satellite** – an object that orbits a planet or a star  
**global warming** – the gradual increase in the Earth's temperature  
**climate change** – long term changes in the temperature and weather patterns of the Earth

### 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?

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.

### The Sun

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.



### Did you know?

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

