

# Earth and Space

Year 5

Knowledge  
organiser

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 known to have **life**.



## 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?

There were once **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 2006 when **scientists changed what it means to be a planet**. It is now categorised as a **dwarf planet** instead.



## Orbits

All of the **planets** in our solar system **orbit the Sun**. Each planet takes a **different amount of time** to orbit the Sun. Planets orbit the Sun because of **gravity**. The **Sun's gravitational pull** keeps all the planets in orbit.

## Sun, Earth and Moon

The **Sun, Earth, and Moon** are **spherical bodies**.

**Earth orbits the Sun**. It takes **365.25 days** (a year) to complete **one full orbit** around the **Sun**.

**The Moon orbits the Earth**.

It takes about **27.3 days** to make **one full orbit** of the **Earth**.



## Did you know?

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

## Key vocabulary

Tier 1



day



night



star



Sun



moon

Tier 2



analyse



cycle



data



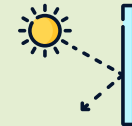
evidence



orbit



planet



reflect



space



sphere



test

## Day and night

The Earth is **constantly spinning on its axis**. It takes the Earth approximately **24 hours** to complete **one full spin**.

When the UK is **facing the Sun**, it is **daytime**. When the UK is **facing away from the Sun**, it is **night-time**.

The **Earth's rotation** is what also gives us **time zones**. In one part of the world, it will be **night-time**, while at the same point in time in another part of the world, it will be **daytime**.

