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# The Solar System and Its Eight Orbiting Planets

KS2 SCIENCE

KS3 SCIENCE

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## What is the Solar System?

The **solar system** is our cosmic neighbourhood in space. It consists of the **Sun** at the centre, eight **planets**, their moons, asteroids, comets, and lots of dust and rock. Everything in the solar system orbits (travels around) the **Sun** because of its enormous gravitational pull.

Think of it like a giant game of marbles rolling around a ball in the middle. The **Sun** is the ball, and the planets are the marbles spinning around it endlessly.

The **Sun** is so massive and powerful that it holds everything in place with its gravity. Without the **Sun**, the planets would drift off into the cold emptiness of space.

## The Eight Planets

Our solar system has **eight planets**, divided into two main groups. The first four planets closest to the **Sun** are called the **terrestrial planets** (or rocky planets): **Mercury**, **Venus**, **Earth**, and **Mars**. These are small, solid worlds made mostly of rock and metal.

The other four planets are much larger and are called **gas giants** or **ice giants**: **Jupiter**, **Saturn**, **Uranus**, and **Neptune**. These enormous planets are made mostly of gases and liquids, with no solid surface to stand on.

Think of it like a classroom: the rocky planets are like wooden desks you can sit on, while the gas giants are like clouds of air you'd fall right through.

## A Quick Tour of the Planets

**Mercury** is the smallest and closest to the **Sun**—it's scorching hot! **Venus** is the hottest of all. **Earth** is our home, the only planet we know has life. **Mars**, the red planet, is cold and dusty.

**Jupiter** is the largest planet—you could fit **1,300 Earths** inside it! **Saturn** is famous for its beautiful rings. **Uranus** and **Neptune** are the icy, distant planets at the edge of our solar system.

Learning about our solar system helps us understand our place in the universe and how special our home planet truly is.