

Knowledge Organiser



Earth and Space



Key Concepts:

Atmosphere

Gravity

Models

Sticky Knowledge

- The sun is a star and is at the centre of our solar system.
- There are eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- The sun, Earth and the moon are approximately spherical bodies.
- The Earth and the planets orbit the sun.
- It takes approximately 28 days for the moon to orbit the Earth.
- The Earth takes 365 $\frac{1}{4}$ days to orbit the sun. We call this a year.
- The Earth rotates (spins) on its axis every 24 hours.
- As Earth rotates, half faces the sun (day) and the other half faces away from the sun (night).
- As the Earth rotates, the sun appears to move across the sky.
- The phases of the moon are caused by its orbit around the Earth.

Vocabulary

- **Planets** – large objects (celestial bodies) that orbit a star, like the Earth orbits the sun
- **Solar System** – the collection of planets, moons and other celestial bodies that orbit the sun
- **Spherical** – shaped like a ball
- **Rotation** – when something spins (turns) around its own centre
- **Celestial Body** – any object in space, like stars, planets, or moons
- **Orbit** – the path an object takes as it moves around another object in space
- **Axis** – an imaginary line that a celestial body rotates (spins) around
- **Geocentric** – a model where the Earth is at the centre of the universe
- **Heliocentric** – a model where the Sun is at the centre of the solar system
- **Moon Phase** – the different shapes of the moon we see from Earth as it orbits