

Earth and Space

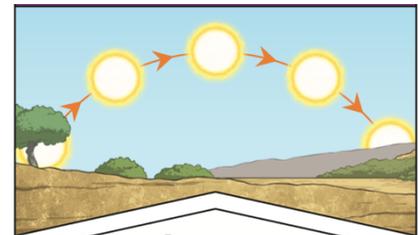
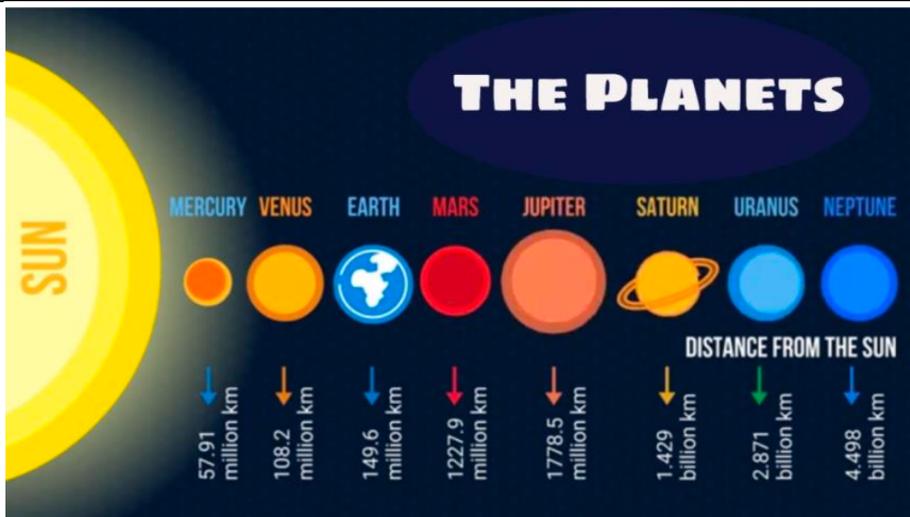


Year 5 Science: Earth and Space

Scientific Concepts

Light	A form of energy that travels in a wave from a source.
System	a group of related things that work together as a whole
Core Vocabulary	
Celestial Body	An astronomical object outside of the earth's atmosphere: a planet, star, moon, asteroid, comet or meteor.
Axis	An imaginary line that a spherical body rotates around, e.g. Earth's axis runs from North Pole to the South Pole.
Satellite	an object either natural (moon) or man-made that orbits around a planet
Star	a burning mass of gas that makes heat and light energy (e.g. the sun)

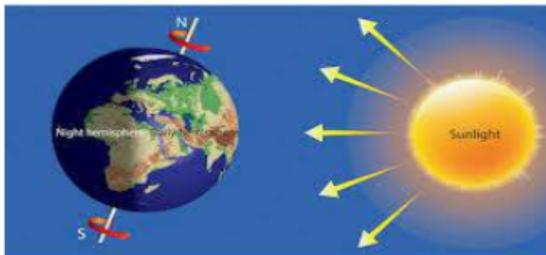
Images/diagrams



It appears to us that the **Sun** moves across the sky during the day but the **Sun** does not move at all. It seems to us that the **Sun** moves because of the movements of Earth.



The **Moon** orbits Earth in an oval-shaped path while spinning on its axis. At various times in a month, the **Moon** appears to be different shapes. This is because as the **Moon** rotates round Earth, the **Sun** lights up different parts of it.



Key Knowledge

- In our Solar system there are 8 planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- At the same time that Earth is rotating, it is also orbiting (revolving) around the Sun. It takes a little more than 365 days to orbit the Sun.
- The moon orbits Earth in an oval-shaped path whilst it spins on its axis. At different times in the month the moon appears to be different shapes, this is because the sun lights up different parts of the moon as the moon moves around the Earth
- Earth rotates (spins) on its axis, it does a full spin once every 24 hours, which is our day and night. Daytime occurs when the side of the Earth is facing the sun and night occurs when the side of the Earth is facing away from 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.
- All the planets in our solar system **orbit the Sun**, it's a heliocentric model. The Sun is at the **centre of our solar system**. Planets orbit the Sun because of **gravity**. The Sun's gravitational pull keeps all the planets in orbit