



Things you already know

- You know that gravity causes the planets in our solar system to orbit the Sun, and also the Moon to orbit the Earth
- You know that light on Earth comes from the Sun, and that the absence of light creates darkness
- You know that shadows change according to the time of day



Key Vocabulary

orbit	a regular repeating path that one object takes around another
planets	natural objects that orbit, or travel around, stars
rotation	rotating about an axis or centre
moon	an object that orbits a planet and accompanies the planet on its own orbit around the Sun
Earth	the planet on which we live
space	where all of the planets, stars, galaxies and other objects are found
gravity	force that attracts a body towards the centre of the earth, or towards any other physical body having mass
atmosphere	layer of gas that surrounds Earth

- You will know that the Earth is 4.5 billion years old, that it orbits the Sun, and that the Moon orbits the Earth
- You will know that it takes 24 hours for the Earth to complete a full rotation, and one year for it to travel around the Sun
- You will know that daylight occurs in the part of the Earth that is facing the Sun, and night occurs when it is facing away
- You will know that our closest star in the Solar System is the Sun, and orbiting around the Sun are eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune



Skills you already have

- You can observe shadows and patterns when a light source moves or the distance between the light source and the object changes



New Science Skills

- You will compare the time of day at different places on the Earth
- You will create simple models of the solar system
- You will construct simple shadow clocks and sundials
- You will research why some people think that structures such as Stonehenge might have been used as astronomical clocks