

Year 5 – Earth and Space

Scientific Definitions

Earth	Earth is a planet in the Solar System and third from the Sun. It is the only place in the Universe where life is known to exist.
Moon	The Moon is a natural satellite which orbits the Earth every 28 days. It is not a light source, but reflects the Sun's light.
Planet	A planet is an object orbiting the Sun, which is made of rock or gas.
Star	A star is a huge, bright ball of burning gas.
Sun	The Sun is the closest star to Earth.
Solar System	The solar system includes the Sun and all the objects that orbit around it due to its gravity, including Earth.

Quiz Questions and Answers

Name the eight planets which go around the sun in their correct order.	MVEMJSUN
What do the planets orbit?	The Sun
What force holds the planets in orbit?	Gravity
What shape do they orbit the Sun in?	Nearly circular shape
How many days does it take for the earth to orbit the sun?	365.25 days
True or False? Gravity is a pulling force.	True
Where is the Sun in relation to the Solar System?	Middle
What shape are the Earth and Sun?	Roughly spherical
How long does it take the Earth to turn once on its axis?	24 hours
Which part of the Earth is in daylight?	The part of the Earth's surface facing the Sun
Why do we have seasons?	The Earth is tilted
How long does it take the Moon to orbit the Earth?	28 days
Why does the Moon seem to change shape?	We only see the part of the Moon that reflects the light of the Sun

Scientific Concepts

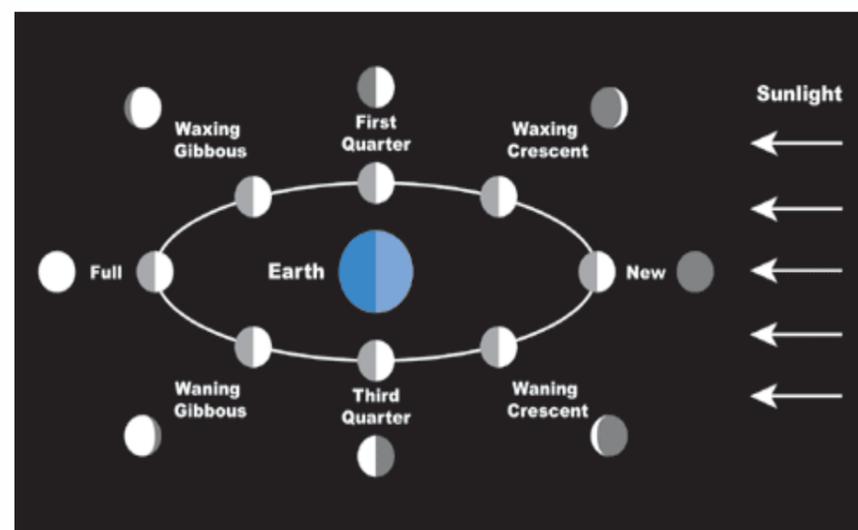
The Solar System

- The Solar System is made up of all the planets that orbit our Sun, including moons, comets, asteroids, minor planets, and dust and gas.
- The eight planets in our solar system in order from the Sun are: **Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.**
- The heliocentric model places the sun at the centre of the solar system. **The planets move around the sun in a nearly circular orbit.**
- The Sun, planets and moons are **roughly spherical.**



The Moon

- The Moon is a roughly spherical object that orbits Earth.
- It takes 28 days to orbit Earth.
- The Moon is not a light source; it reflects the Sun's light.
- The Moon appears to change shape. This is due to the Sun lighting up different parts of the Moon as the Moon orbits Earth.



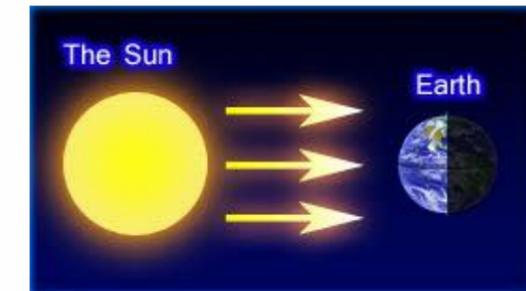
Scientific Concepts

Orbits

- The Earth travels around the Sun in a loop that is in a nearly circular shape. We call this the Earth's **orbit**.
- The Earth rotates as it orbits the Sun. It takes one day to complete a rotation.
- It takes 365 days for the Earth to complete one circuit around the Sun. We call this a year.

Day and Night

- The Earth rotates on its axis.
- It takes 24 hours for the Earth to rotate all the way around; we call this a day.
- The part of Earth that is lit by the Sun is in day.
- The part of Earth that is not lit by the Sun is in night.



Seasons

- The Earth's axis is the imaginary line through the centre of the Earth between the South and North poles.
- This axis is tilted slightly compared to the way the Earth orbits the Sun.
- We get different seasons (winter, spring, summer and autumn) because the Earth is tilted.
- When the northern hemisphere is tilted towards the Sun it is summer in the UK.
- When the northern hemisphere is tilted away from the Sun it is winter in the UK.

