

One Giant Leap for Mankind - KNOWLEDGE ORGANISER

All pupils must learn that:

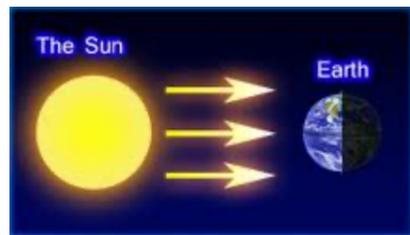
The Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a 'dwarf planet' in 2006).

The moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones).



Have you ever wondered what could happen in the time it takes Earth to orbit the sun just one time?

It takes a full year - or just over 365 days - for Earth to orbit, or revolve, around the sun. An **orbit** is a repeating path that one object in space takes around another. All orbits are **elliptical** in shape, meaning they're egg-shaped, or oval, rather than circular



Why do we have night and day?

As the **Earth** spins to face away from the **Sun** it is night and when it is facing the **Sun** it is daylight. Because the **Earth** rotates on its axis the **sun** appears to **move** across the sky; in fact, it is the **Earth** moving.

What causes the different phases of the Moon?

The **phases** of the **Moon** depend on its position in relation to the Sun and Earth. As the **Moon** **makes** its way around the Earth, we see the bright parts of the **Moon's** surface at different angles. These **are** called "**phases**" of the **Moon**.



Key Vocabulary

Earth - the planet on which we live; the world.

Sun - The star round which planets orbit

Moon - A natural satellite of any planet

Solar system - The collection of eight planets and their moons in orbit round the sun

Rotation - The action of rotating about an axis or centre

Star - A fixed luminous point in the night sky which is a large, remote body like the sun

Orbit - The regularly repeated oval course of a celestial object around a star or planet

Planet - A celestial body moving in orbit round a star

Extra Vocabulary

Heliocentric - Representing the sun as the centre of the solar system, the modern view of the solar system

Asteroid - A small rocky body orbiting the sun

Axis - An imaginary line about which a body rotates

Celestial - Positioned in or relating to the sky, or outer space as observed in the astronomy

Dwarf planet - A celestial body resembling a small planet but lacking certain technical criteria to be classed as a planet e.g. Pluto

Geocentric - Where people believed the earth was at the centre of the solar system

SPACE QUIZ!

Why not do some extra research at home and find out the answers to my space quiz questions below?

1. What is the closest planet to the Sun?
2. What is the name of the 2nd biggest planet in our solar system?
3. What is the hottest planet in our solar system?
4. What planet is famous for its big red spot on it?
5. What planet is famous for the beautiful rings that surround it?
6. Can humans breathe normally in space as they can on Earth?
7. Is the sun a star or a planet?
8. Who was the first person to walk on the moon?
9. What planet is known as the red planet?
10. What is the name of the force holding us to the Earth?