

St Saviour's Catholic Primary and Nursery School



Subject: Science

Topic: Earth and Space

Year: 5

Strand: Physics

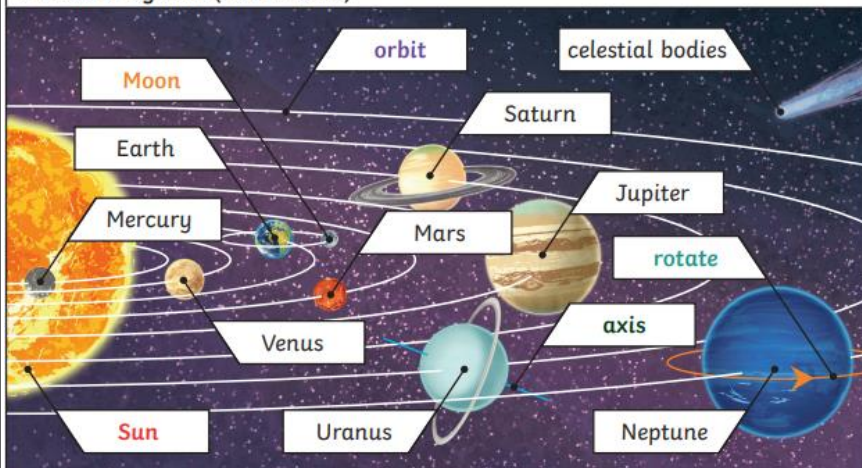
What should I already know?

- We live on a place called 'Earth' or 'the world'
- There are many countries on our planet
- There are seven continents on our planet
- There is life on our planet and has been for millions of years
- Our planet consists of sea and land (with other features such as mountains)
- There are other planets in a place we call 'Space'
- Space is far away
- There are stars, the moon and the sun in Space

What am I going to learn?

- Mercury, Venus, Earth and Mars are rocky planets. They are mostly made up of metal and rock
- Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal

Our Solar System (not to scale)



- 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 around Earth, the Sun lights up different parts of it
- Pluto used to be classed as a planet but it was reclassified as a dwarf planet in 2006
- It appears 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
- Earth rotates on its axis. It does a full rotation every 24 hours. At the same time that Earth is rotating, it is also orbiting around the Sun. It takes a little more than 365 days to orbit the sun
- This creates night and day

Vocabulary

Sun- A huge star that Earth and the other planets in our solar system orbit around

Star- A giant ball of gas held together by its own gravity

Moon- A natural satellite which orbits Earth or other planets

Planet- A large object, round or nearly round, that orbits a star

Sphere- A round 3D shape in the shape of a ball

Spherical Bodies- Astronomical objects shapes like spheres

Satellite- Any object or body in space that orbits something else, for example: the Moon is a satellite of Earth

Orbit- To move in a regular, repeating curved path around an object

Rotate- To spin, e.g. Earth rotates on its own axis

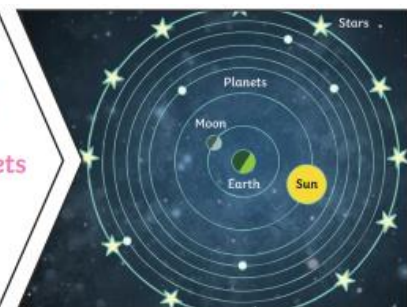
Axis- An imaginary line that a body rotates around, e.g. Earth's axis (imaginary line) runs from the North Pole to the South Pole

Geocentric Model- A belief people used to have that other planets and the Sun orbited around the Earth

Astronomer- Someone who studies or is an expert in astronomy (space science)

Geocentric model

Years ago people believed that planets moved around the Earth.



Useful Websites

<https://www.bbc.co.uk/bitesize/topics/zkbbkqt>

<https://www.theschoolrun.com/learnin-g-about-space-in-primary-school>