

Year 5- Out of this world

Science

What do we already know?

In Year 5 we have been exploring different forces in science. This term we will investigate different planets and moons within our solar system and identify similarities and differences with earth.

Science- Working Scientifically skills

Identifying scientific evidence that has been used to support or refute ideas or arguments

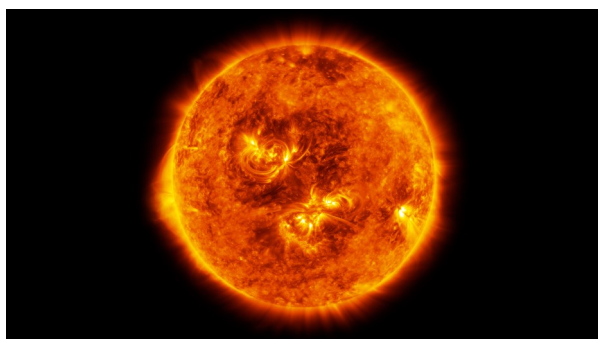
Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and should talk about how scientific ideas have developed over time.

Comparing the time of day at different places on the Earth through internet links and direct communication.

Creating simple models of the solar system.

Earth and space Vocabulary

Key Word	Definition
Spherical body	Planet shaped like a sphere.
Solar System	The collection of eight planets and their moons in orbit round the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets
Sun	The star round which the earth orbits.
Moon	A moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones).
Planet	A celestial body distinguished from the fixed stars by having an apparent motion of its own (including the moon and sun), especially with reference to its supposed influence on people and events.
Geocentric model	Any theory of the structure of the solar system (or the universe) in which Earth is assumed to be at the centre of it all .
Heliocentric model	The astronomical model in which the Earth and planets revolve around the Sun at the center of the



I will know at the end of the project...

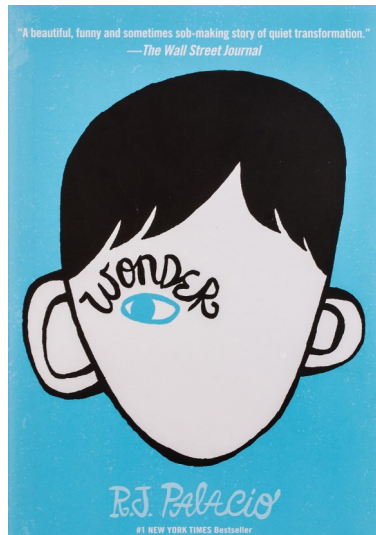
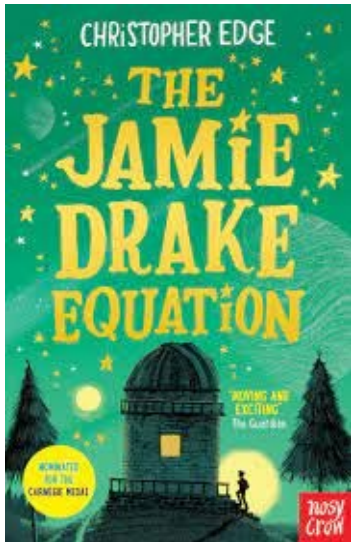
1. Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
2. Describe the movement of the Moon relative to the Earth.
3. Describe the Sun, Earth and Moon as approximately spherical bodies.
4. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
5. Find out about the way that ideas about the solar system have developed, understanding how the geocentric model of the solar system gave way to the heliocentric model by considering the work of scientists such as Ptolemy, Alhazen and Copernicus

Year 5 : Out of this world

Science

Key facts

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).



Facts

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

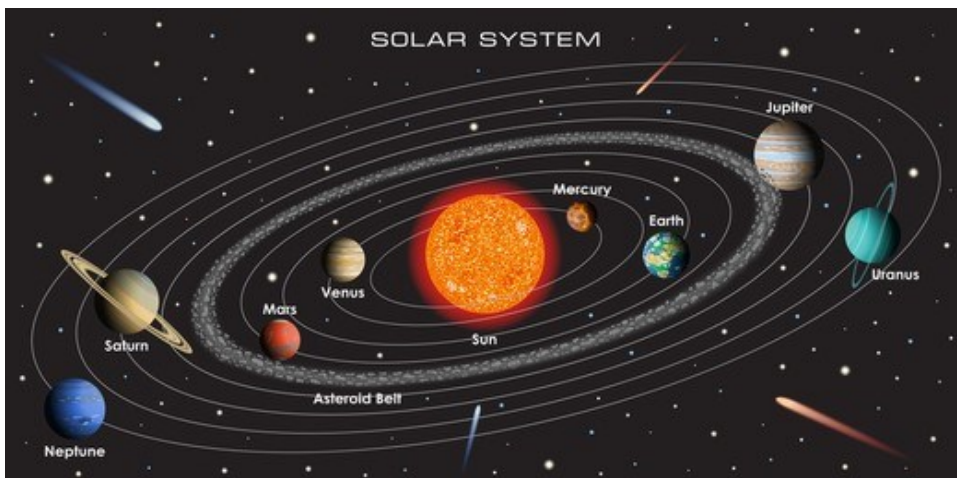
It is not safe to look directly at the Sun, even when wearing dark glasses.

Our solar system is around 4.571 billion years old.

The Sun makes up more than 99% of all the mass in the solar system.

In the visible universe, there are an estimated 2 trillion galaxies.

The Sun is so big that the Earth could fit inside it 1.3 million times



Links to

KS1 learning focused on the history of space.

Science learning in Year 6. (Earth and Moon's gravitational pull)