





<u>Knowledge Organiser – Year 5 – Autumn 2 – Space (Science)</u>

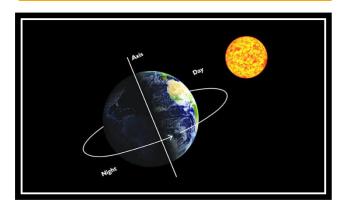






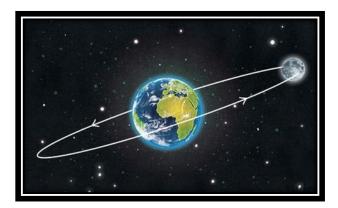
Where do days come from?

Earth <u>rotates</u> on its <u>axis</u>. It does one full <u>rotation</u> every 24 hours which is the same length of time as a day. Daytime occurs when the side of Earth is facing towards the Sun and night occurs when the side of the Earth is facing away from the Sun.



Where do years come from?

Earth takes just over a year (365 days and a quarter) to <u>orbit</u> the Sun. One full <u>orbit</u> of the Sun equals one calendar year!



The planets that make up our solar system

In order from the closest to the sun, the planets are:

Mercury

Venus

Earth

Mars

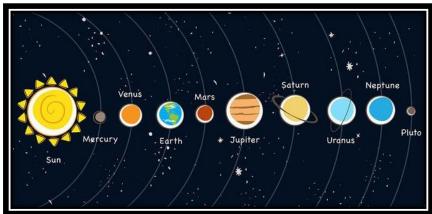
Jupiter

Saturn

Uranus

Neptune

A mnemonic for remembering the order of the planets is: My Very Excited Monkey Just Sits Under Noses.



But what about Pluto?

Pluto used to be considered a planet but it was reclassified as a dwarf planet in 2006.

<u>The Moon</u>

The Moon <u>orbits</u> Earth in an oval-shaped path while spinning on its <u>axis</u>. At various times in a month, the Moon appears to be different shapes. This is because the Sun lights up different parts of the Moon as it <u>rotates</u> around Earth.

Key Vocabulary and Spellings

<u>Sun</u> – A huge star that Earth and the other planets in our solar system orbit around.

<u>Star</u> – A giant ball of gas held together by its own gravity.

<u>Moon</u> – A natural satellite which orbits Earth or other planets.

<u>Planet</u> – A large object, round or nearly round, that orbits a star.

Sphere – A round 3D shape, much like a ball.

<u>Satellite</u> – Any object or body in space that orbits something else. For example: the Moon is a satellite of Earth.

<u>**Orbit**</u> – To move in a regular, repeating curved path around another object.

<u>Rotate</u> – To spin. For example: Earth rotates on its own axis.

Axis – An imaginary line that a planet rotates around. For example: Earth's axis runs from the North Pole to the South Pole.

<u>Astronomer</u> – Someone who studies or is an expert in astronomy (space science).

What are the planets made from?

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.