

Ideas Organiser: Space: Out of this World



Knowledge:

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 round Earth, the **Sun** lights up different parts of it.

Key Knowledge

It appears to us 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.

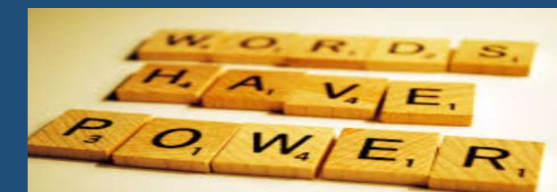
Earth **rotates** (spins) on its axis. It does a full **rotation** once in every 24 hours. At the same time that Earth is **rotating**, it is also **orbiting** (revolving) around the **Sun**. It takes a little more than 365 days to **orbit** the **Sun**. Daytime occurs when the side of Earth is facing towards the **Sun**. Night occurs when the side of Earth is facing away from the **Sun**.

The work and ideas of many **astronomers** (such as Copernicus and Kepler) combined over many years before the idea of the **heliocentric model** was developed. Galileo's work on gravity allowed **astronomers** to understand how **planets** stayed in **orbit**.



Vocabulary and background knowledge:

Orbit	To move in a regular, repeating curved path around another object.
Axis	An imaginary line which a body rotates around.
Spherical Body	An object in space which is the shape of a sphere.
Sun	A huge star which Earth and other planets in our solar system orbit.
Star	A giant ball of gas held together by its own gravity.
Satellite	Any object in space which orbits something else e.g. The Moon of a satellite of Earth.
Rotate	To spin e.g. Earth rotates on its own axis.
Geocentric Model	A belief which people used to have that the planets and the Sun orbited the Earth.
Heliocentric Model	The structure of the Solar System where the planets orbit the Sun.



Recommended Reads:

