











Year 5 - Autumn 1 - Earth and Space - What if the Earth stopped spinning?

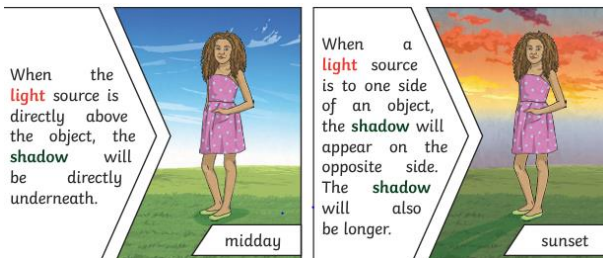
Key Vocabulary

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.
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 another object.
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 Earth.
Heliocentric model		The structure of the Solar System where the planets orbit around the Sun .

Prior knowledge

In Year 3, during the topic 'Light and Shadows' we:

- Recognised that they need light in order to see things and that dark is the absence of light
- Noticed that light is reflected from surfaces
- Recognised that shadows are formed when the light from a light source is blocked by a solid object
- Recognised that light from the sun can be dangerous and that there are ways to protect their eyes
- Found patterns in the way that the size of shadows change

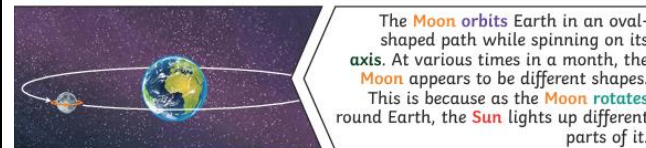
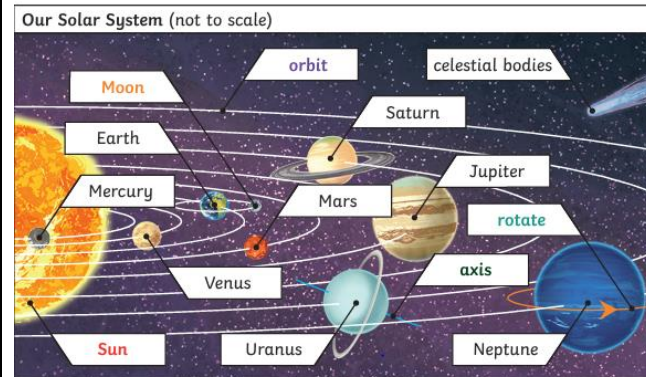


Knowledge and Assessment

- Describe the Sun, Earth and Moon as approximately spherical bodies
- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
- Describe the movement of the Moon relative to the Earth

Sticky Knowledge

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.



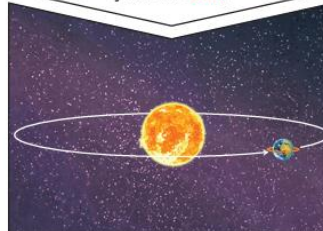
Key Knowledge



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**.



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