Saint Elizabeth's Knowledge Mat

Year: 5	**Subject:** Science	**Topic:** Earth & Space

Earth and Space

1. What I Know Already

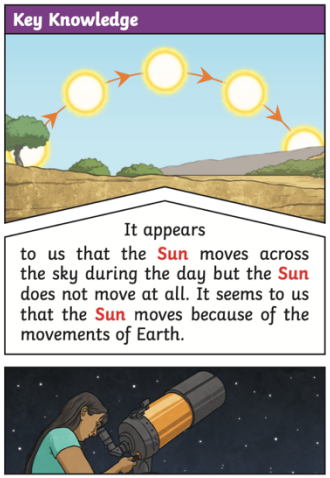
-To observe the **apparent** movement of the Sun during the day (KS1)
-The planets in our solar system and their order from the Sun (KS1)
-That the length of a day varies in line with seasonal changes (Y1)
-That gravity is a pulling force exerted by a planet (Y5)

2. Key Concepts- What I'll Learn

The Earth and moon are **spherical bodies,** meaning they are **spheres.**

Whilst it appears to us that the Sun moves across the Sky during the day, it doesn't really move at all. It seems that way because of the Earth's **rotation** on its **axis.**

The solar system is **heliocentric**, meaning that all planets orbit the sun – which is in the centre of our solar system. Many years ago, people believed it was the other way around and that the sun orbited the Earth (geocentric).



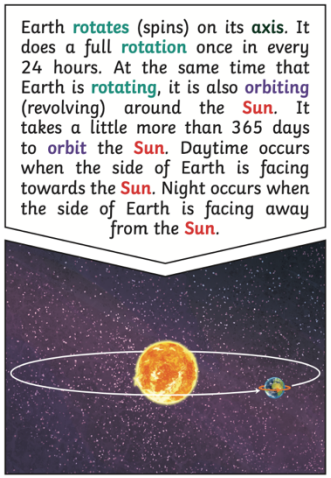


Image A- showing our solar system (not to scale)

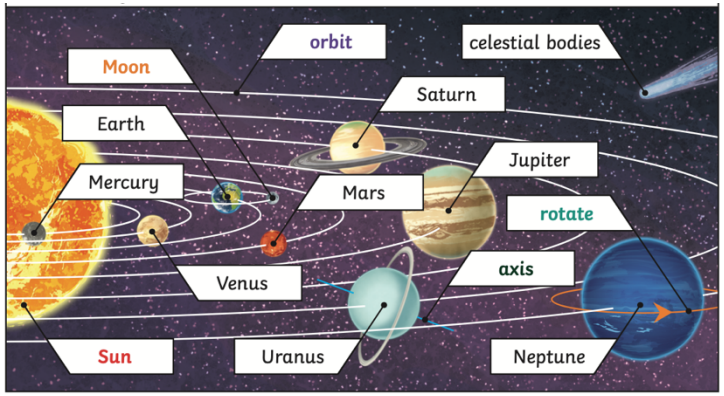


Image B- the orbit of the Moon

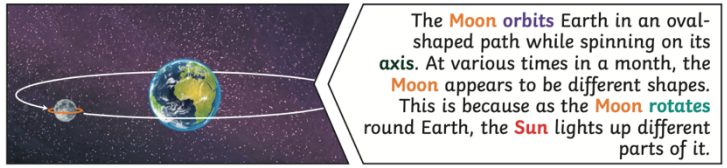


Image C- the heliocentric model of the solar system

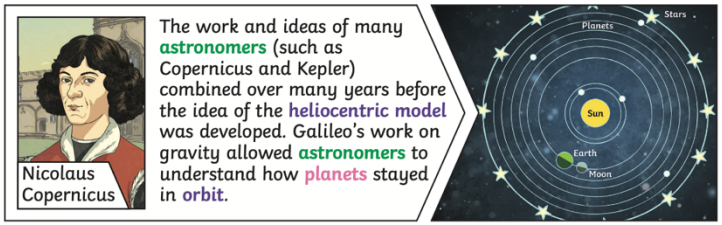
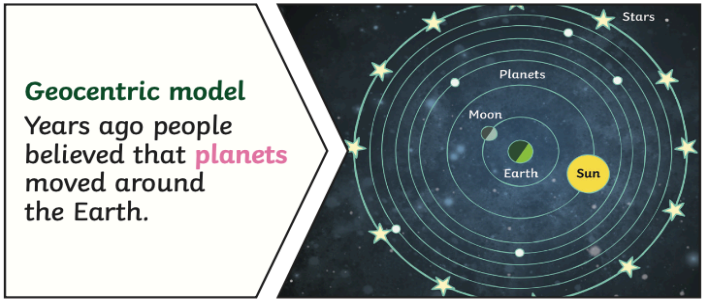


Image D- the geocentric model (proven incorrect!)



3. Key Vocabulary

forces	Pushes or pulls.
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.
astronomer	Someone who studies or is an expert in astronomy (space science).
geocentric model	A belief people used to have that other plants and the Sun orbited around Earth.
heliocentric model	The structure of the Solar System, where the planets orbit around the Sun.
moon	A natural satellite which orbits Earth or other planets.
orbit	To move in a regular, repeating curved path around another object.
planet	A large object, round or nearly round, that orbits a star.
rotate	To spin e.g. Earth rotates on its own axis.
satellite	Any object in space that orbits something else, for example: the moon is a satellite of Earth.
sphere	A round 3D shape in the shape of a ball.
spherical bodies	Astronomical objects shapes like spheres.
star	A giant ball of gas held together by its own gravity.
Sun	A huge star that Earth and the other planets in our solar system orbit around.