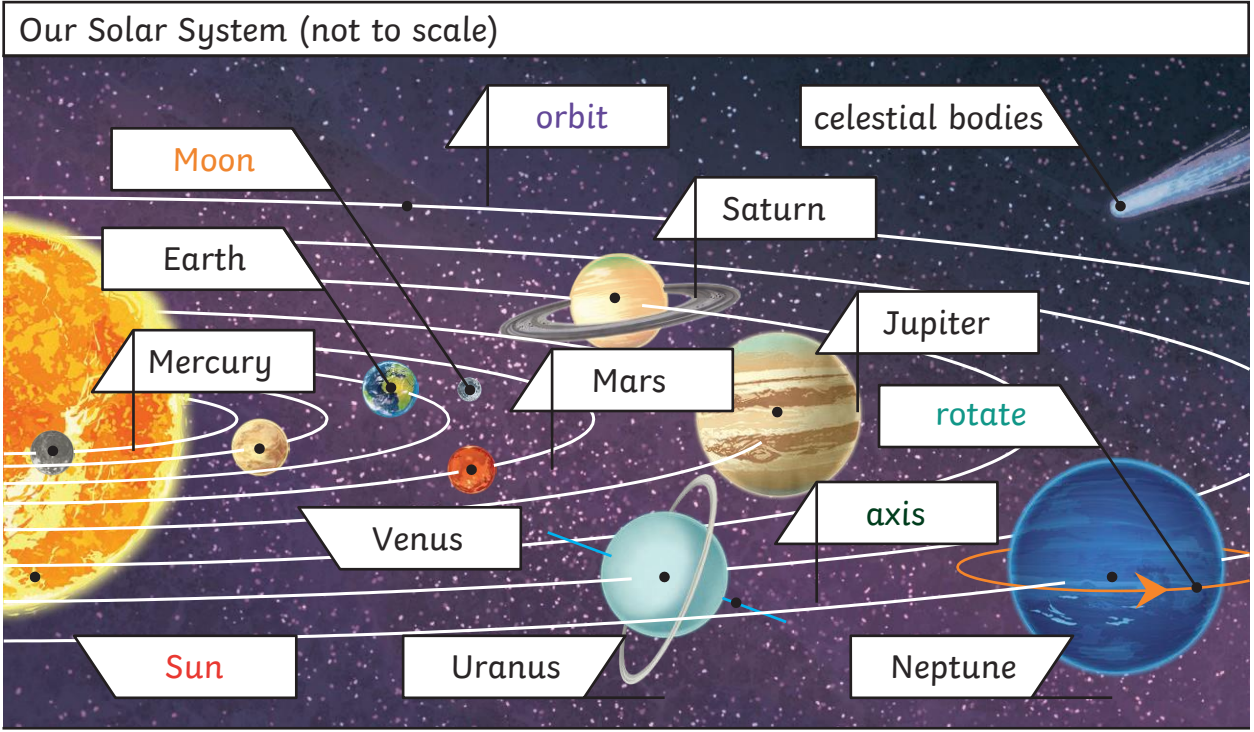


Key Vocabulary	
<b>Sun</b>	A huge star that Earth and the other <b>planets</b> in our solar system <b>orbit</b> around.
<b>star</b>	A giant ball of gas held together by its own gravity.
<b>moon</b>	A natural <b>satellite</b> which <b>orbits</b> Earth or other <b>planets</b> .
<b>planet</b>	A large object, round or nearly round, that <b>orbits</b> a <b>star</b> .
<b>sphere</b>	A round 3D shape in the shape of a ball.
<b>spherical bodies</b>	Astronomical objects shapes like <b>spheres</b> .
<b>satellite</b>	Any object or body in space that <b>orbits</b> something else, for example: the <b>Moon</b> is a <b>satellite</b> of Earth.

**Key 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.



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

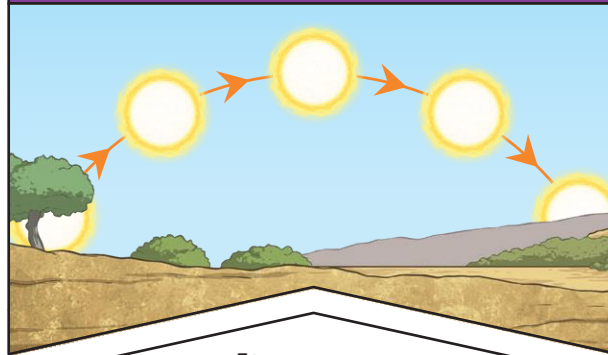
The image shows the New Horizons spacecraft in the foreground, flying past the dwarf planet Pluto. Pluto is depicted as a reddish, spherical body with a prominent white polar ice cap. The background is a dark space with stars.

The diagram shows the Earth with the Moon orbiting it in an elliptical path. The Moon is shown at different positions along its orbit, illustrating how its appearance changes as it moves.

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 Vocabulary	
<b>orbit</b>	To move in a regular, repeating curved path around another object.
<b>rotate</b>	To spin. E.g. Earth <b>rotates</b> on its own axis.
<b>axis</b>	An imaginary line that a body <b>rotates</b> around. E.g. Earth's <b>axis</b> (imaginary line) runs from the North Pole to the South Pole.
<b>geocentric model</b>	A belief people used to have that other <b>planets</b> and the <b>Sun</b> orbited around Earth.
<b>heliocentric model</b>	The structure of the Solar System where the <b>planets</b> orbit around the <b>Sun</b> .
<b>astronomer</b>	Someone who studies or is an expert in astronomy (space science).

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**.



**Geocentric model**  
Years ago people believed that **planets** moved around the Earth.

Nicolaus Copernicus

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**.