Name: ..... **Date:** .....

L.O: I can explain key facts about the Sun, Earth and Moon

Below are a selection of facts about the Sun, Earth and Moon. In your book create a simple table with three headings; **Sun**, **Earth** and **Moon**. Cut out the facts and stick them under the correct heading.

- More than 100 times the size of the Earth.
- A ball of rock that orbits the Earth.
- Roughly a quarter of the size of Earth.
- Roughly spherical and is over 15 million degrees at its core.
- Largely made of gas.
- Orbits the Earth at about 3,000km an hour.
- Over 40,000km at its circumference.
- Travels at 100,000km through space.

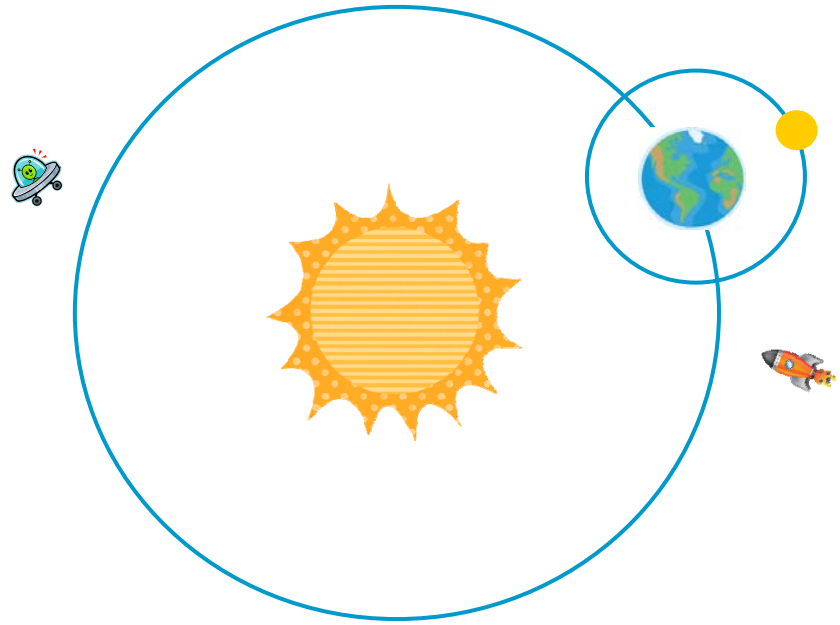
Use the internet and/or information books to find out about the Earth, Sun and Moon and their position in relationship to each other. Use your research to help you write definitions for the following words:

		Definition
 **Sun**	**solar flare**	
	sunspot	
	corona	
 **Earth**	**atmosphere**	
	land	
	ocean	
 **Moon**	**mountains**	
	plains	
	crater	

L.O: I can explain the relationships between the Sun, Earth and Moon

Copy this simple diagram into your book- use a whole page. **Note the diagram is NOT to scale**. Use the words below to help you **label** the diagram. Cut out the captions below and stick them around your diagram.

Sun	**solar flare**	**sunspot**	**corona**	**orbit**	**Moon**
Earth	**atmosphere**	**land**	**ocean**	**plains**	**mountains**



The moon orbits the Earth once every 28 days.	The Earth spins on its axis once every 24 hours. As we turn away from the Sun, we enter night.	The Earth orbits the Sun once every 365 ¼ days.	The Sun is a star at the centre of our Solar System.
The Moon doesn't change shape; it is the Sun's light that makes it appear to wax and wane.	The Earth's tilt on its axis is what causes our seasons.	The Moon is about 320,000 km away from the Earth.	The Moon is only held in place by the gravitational pull of the Earth.
The Moon doesn't shine. It reflects the Sun's light.	The corona of the Sun is made from helium and hydrogen.	Water covers 70% of the Earth, the other 30% is covered by land.	The Sun is 15 million degrees hot at its centre.

L.O: I can describe how the position of the Sun appears to change during the day, and how shadows change as this happens.

You are going to investigate how the Sun's light affects the Earth. You will place a stick outside in the Sun, and will measure its shadow at intervals during the day. You will need to decide how often to measure the shadows.

Equipment *Write a list of the equipment you think we will need*

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Results

Time	Length of shadow (cm)	Diagram of position of stick and record of shadows (use same drawing and mark shadow each time)

Conclusion and Explanation

Using what you know about how the Earth orbits the Sun, **explain** what has happened to your shadow. Why would some people think it is the Sun that moves in the sky?

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