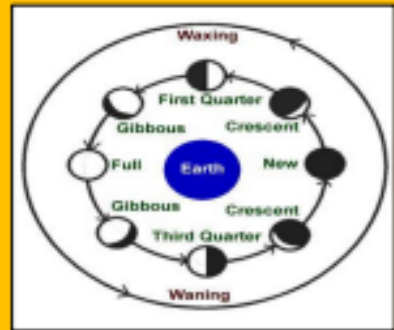
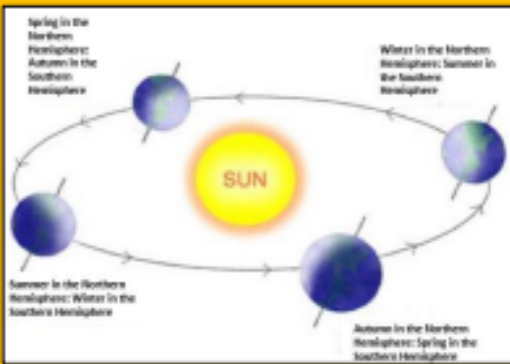


The Sun and The Solar System	
What is the Sun?	The sun is a star at the centre of our solar system.
What is the solar system?	The solar system is the collection of eight planets and their moons that orbit round the sun (which is actually a star).
<b>WARNING!</b>	<b>NEVER LOOK DIRECTLY AT THE SUN EVEN WHEN WEARING SUNGLASSES!</b>

The Earth - Year Length and Seasons
The Earth takes 365 and a quarter days to orbit (go around) the Sun. Due to the extra quarter day it takes to orbit the Sun, every four years on Earth is a leap year! The Earth is held in its orbit round the Sun by the Sun's gravitational pull. It is the Earth's tilt that causes the seasons.

The Moon
A moon is a celestial body that orbits a planet. The Earth has one moon; Jupiter has four large moons and numerous small ones. The Moon orbits the Earth anticlockwise and takes approximately 28 days. The Moon spins once on its axis every time it orbits Earth. This means that we only see one side of the Moon. The Moon has different phases depending on where it is in its orbit. The Moon's gravity causes high and low tides.

Day and Night	
How else does the Earth move?	The Earth spins on its own axis. The Earth takes 24 hours (1 day) to completely rotate on its axis.
What causes day and night?	The Earth spins once in a day. The side of the Earth facing the Sun is in daytime; the other side of the Earth facing away from the Sun is in night time.
What causes Sunrise and Sunset?	The Sun doesn't move - it is the Earth that moves. Due to the Earth is rotating, the Sun appears to move across the sky as the day goes on.



Other Planets in the Solar System	
The other planet in the Solar System are Mercury, Venus, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a dwarf planet in 2006). Each planet has their own orbit around the sun that differs from that of Earth.	
Earth has one moon; Jupiter has 4 large moons and numerous smaller moons	
<b>WARNING!</b>	<b>NEVER LOOK DIRECTLY AT THE SUN EVEN WHEN WEARING SUNGLASSES!</b>

Key Vocabulary and Phrases	
axis	An imaginary line through the middle of something
orbit	The curved path in space that is followed by an object going round and round a planet, moon, or star
planet	A large, round object in space that moves around a star
Spherical body	An object that is in the shape of a sphere. The Sun, the Earth and the Moon are approximately spherical bodies, meaning they are almost the shape of a sphere.

Key Vocabulary and Phrases

ask questions	Use the question words <b>What, where, when why, how</b>
compare and contrast	Look at two or more objects and describe similarities (what is the same) and differences (what is different)
classify, sort and group	Organise objects by their features (e.g colour, size, shape).
diagram	A labelled picture
record data	Drawings, scientific diagrams, photos, classification keys, tables, bar graphs and line graph, writing and numbers are ways to show what I have found out.
reporting and presenting findings	Giving reasons, explaining causes and relationships, explaining results and trusting its accuracy

How I could record my findings

Pictures  
For EXPLORING



Use this if you want to tell the story of what you did or what you observed, e.g. bread going mouldy

Pie Chart  
For SURVEYING



Use this to show how objects there are as part of a whole, e.g. numbers of pupils with blue eyes, green eyes, brown eyes etc.

Carroll Diagram  
For CLASSIFYING/GROUPING

For CLASSIFYING/GROUPING

	Red	Blue
Square		
Triangle		

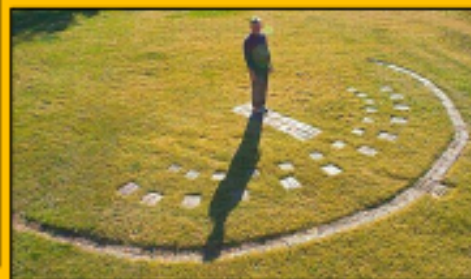
Use this when you want to put objects into categories for having a property or not, e.g. prime/not prime numbers against even/not even (odd) numbers

What I could investigate

Describe and compare the movement of Earth and other planets relative to the sun



Are shadows the same size throughout the day?  
Create a shadow clock



Equipment I could use

Sun dials for observing and tracking the position of the sun.



Plasticine for creating models of the solar system.



Chalk for measuring the size and shape of shadows.



Chromebooks for researching

