
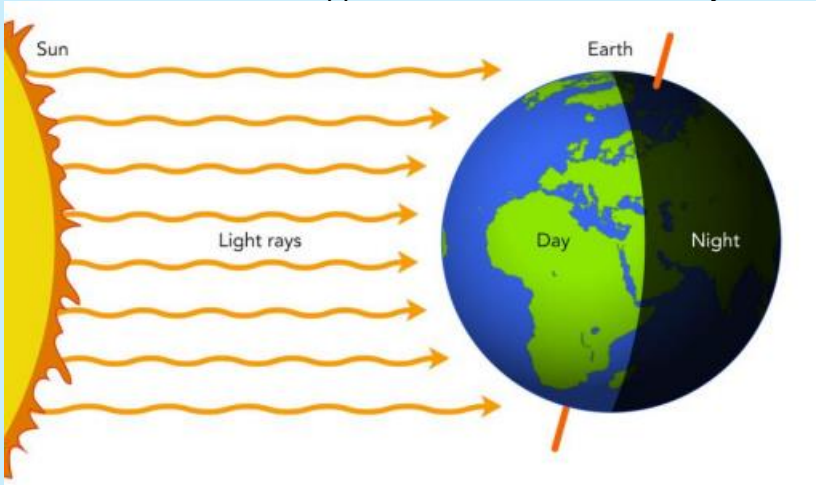


## Earth and Space – Year 5 & 6 – Autumn 1 Term 2024

National Curriculum Science - Knowledge	Key Learning	Vocabulary
<ul style="list-style-type: none"> <li>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>Describe the movement of the Moon relative to the Earth.</li> <li>Describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>	<p>The Sun is a star. It is at the centre of our solar system. There are 8 planets in our solar system which travel around the Sun in fixed orbits. The Earth takes 365¼ days to complete its orbit around the Sun.</p> 	<p><b>Earth:</b> the planet on which we live.  <b>Moon:</b> the natural satellite of the earth, visible at night by reflected light from the sun.  <b>Sun:</b> the star at the centre of our Solar System around which the earth orbits.  <b>Evidence:</b> the available facts or information indicating whether an idea is true or valid.  <b>Spherical:</b> shaped like a sphere.  <b>Planet:</b> a celestial body moving in an elliptical orbit round a star.</p>
<p><b>National Curriculum – Working Scientifically</b></p>	<p>The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (here it is day) and half is facing away from the Sun (night). As the Earth rotates the Sun appears to move across the sky.</p>	
<ul style="list-style-type: none"> <li>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</li> <li>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> <li>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li> </ul>	 <p>The Moon orbits the Earth. It takes about 28 days to complete its orbit (a lunar month). The moon does not emit its own light; instead, it is illuminated by the reflection of the Sun's light off its surface. This causes</p>	<p><b>Celestial:</b> positioned in or relating to the sky, or outer space.  <b>Solar System:</b> the collection of eight planets and their moons in orbit round the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets.  <b>Orbit:</b> the curved path of a celestial object or spacecraft round a star, planet, or moon.  <b>Rotate:</b> to move in a circle round an axis or centre.  <b>Axis:</b> an imaginary line</p>

- Using test results to make predictions to set up further comparative and fair tests.
- Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.
- Identifying scientific evidence that has been used to support or refute ideas or arguments.

us to view differing shapes of the Moon at different times of the month depending on the Moon's position relative to the Earth.



The Sun, Earth and Moon are approximately spherical. Ideas have changed over time from a flat Earth view to a spherical Earth view. Scientific evidence has been used to both support and refute these ideas.

about which a body rotates.  
**Phase:** a distinct period or stage in a series of events or process.  
**Waxing:** the moon stages at any time after a new moon and before a full moon, so called because its illuminated area is increasing.  
**Waning:** the moon stages at any time after a full moon and before a new moon, so called because its illuminated area is decreasing.  
**Dwarf planet:** a celestial body resembling a small planet but lacking certain technical criteria that are required for it to be classed as such.

Key Learning	
1	<b>How do we know the Sun, Earth and Moon are spherical?</b> Look at the evidence showing the Sun, Earth and Moon are spherical and explain the flat Earth theory.
2	<b>What are the planets in the solar system?</b> Name and describe the features of the planets in our solar system.
3	<b>How do the planets move in relation to the Sun?</b> Examine the geocentric and heliocentric theories.
4	<b>How does Earth move?</b> Identify the seasons and why we have them. Look at how Earth rotates on its axis and orbits the Sun.
5	<b>Why do we have night and day?</b> Write an explanation of why we have night and day. Create a sundial to show how the sun moves throughout the day.
6	<b>How does the Moon move in relation to the Earth?</b> Look at the size and position of the Moon in relation to Earth. Identify the phases of the moon and explain what waxing and waning mean.