

# Science Year 5

Earth and Space	Forces	Living things and their Habitats	Properties of Materials	Animals Including Humans
<p>Theme: Space: The Final Frontier</p> <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><b>Key Scientist: Nicolas Copernicus/ Stephen Hawking</b></p>	<p>Theme: Through the Ages</p> <ul style="list-style-type: none"> <li>explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object</li> <li>identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect</li> </ul> <p><b>Key Scientist: Sir Isaac Newton</b></p>	<p>Theme: Rivers and Lakes</p> <ul style="list-style-type: none"> <li>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> <li>describe the life process of reproduction in some plants and animals</li> </ul> <p><b>Key Scientist: Jane Goodall</b></p>	<p>Theme: Industrial Revolution</p> <ul style="list-style-type: none"> <li>compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets</li> <li>know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</li> <li>use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</li> <li>give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</li> <li>demonstrate that dissolving, mixing and changes of state are reversible changes</li> <li>explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda</li> </ul>	<p>Theme: Sustainability</p> <ul style="list-style-type: none"> <li>describe the changes as humans develop to old age</li> </ul>

**Skills: Children should select the most appropriate ways to answer science questions using different types of scientific enquiry (including observing changes over different periods of time; noticing patterns; grouping and classifying things; carrying out fair tests; finding things out using a wide range of secondary sources of information); use results to raise further questions; use test results to make predictions to set up further comparative and fair tests; recognise and control variables where necessary; take measurements, using a range of scientific equipment with increasing accuracy and precision; record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar and line graphs and models; report and present findings from enquiries, including conclusions, causal relationships and explanations of results in written forms; identify scientific evidence that has been used to support or refute ideas or arguments.**