

Science Objectives

	Working Scientifically	All living things	Animals, including humans	Evolution and inheritance	Light	Electricity
Year 6	<p>I can recognise and control variables.</p> <p>I can measure using a range of scientific instruments with increased accuracy and precision.</p> <p>I can record data and results using a range of methods, including; scientific diagrams and labels, classification keys, tables and bar and line graphs.</p> <p>I can use test results to make predictions and set up further comparative and fair tests.</p> <p>I can use simple models to describe scientific ideas.</p> <p>I can report and present findings, including; explanations of results and causal relationships.</p> <p>I can identify evidence that can be used to support or refute ideas or arguments.</p>	<p>I can classify living things based on the way they look, their similarities or differences.</p> <p>I can explain how I have classified plants and animals.</p> <p>I can understand and discuss why a flower is important in reproduction.</p> <p>I can devise my own classification system and explain it.</p>	<p>I can name and explain the main parts of the human circulatory system.</p> <p>I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>I can describe the ways in which water and nutrients are transported within animals.</p>	<p>I can use information found out about fossils to explain how living things have changed over time.</p> <p>I can recognise that living things produce offspring of the same kind but not identical.</p> <p>I can identify and discuss how animals and plants are adapted to suit their environment.</p> <p>I can discuss how adaptation to suit environments may lead to evolution.</p> <p>I can analyse the advantages and disadvantages of specific adaptations.</p>	<p>I can understand and explain how light travels.</p> <p>I can use my understanding of how light travels to explain how objects are seen.</p> <p>I can use my understanding of how light travels to explain why shadows have the same shape as the object that cast them.</p> <p>I can predict and test the size of shadows when the position of the light source changes.</p>	<p>I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>I can compare and give reasons for variations in how components within a circuit function.</p> <p>I can use recognised symbols when representing a simple circuit in a diagram.</p>

Science Objectives

	Working Scientifically	All living things	Animals, including humans	Properties and changes of materials	Earth and space	Forces
Year 5	<p>I can plan different types of scientific enquiry to answer questions.</p> <p>I can take measurements using a range of scientific equipment.</p> <p>I can record data and results using a range of methods, including; scientific diagrams and labels, classification keys, tables and bar and line graphs.</p> <p>I can use test results to make predictions.</p> <p>I can use simple models to describe scientific ideas.</p> <p>I can report and present findings from scientific enquiries, including conclusions.</p> <p>I can identify scientific evidence that can be used to support ideas.</p>	<p>I can explain the life cycles of different animals.</p> <p>I can explain the differences in the life cycles of different animals.</p> <p>I can describe reproduction in plants.</p> <p>I can describe reproduction in animals.</p>	<p>I can show the changes and stages of human growth.</p> <p>I can compare the gestation periods of humans and animals.</p>	<p>I can compare and group materials based on their properties which are discovered via fair testing.</p> <p>I can explain that some materials will dissolve in liquid to form a solution.</p> <p>I can describe how to recover a substance from a solution.</p> <p>I can use my knowledge; of solids, liquids and gases to explain how mixtures might be separated.</p> <p>I can use evidence from my tests to give reasons for uses of everyday materials.</p> <p>I can explain that dissolving, mixing and changes of state are reversible changes.</p> <p>I can explain why some changes are irreversible.</p> <p>I can test materials and explain their 'conductivity' based on my results.</p> <p>I can research and discuss how chemical changes have an impact on our lives.</p>	<p>I can describe movement of the planets relative to the sun.</p> <p>I can describe the movement of the moon relative to the Earth.</p> <p>I can describe features of the Earth, moon and sun.</p> <p>I can explain day and night relative to the Earth's movement around the sun.</p>	<p>I can explain how gravity is a force that acts between the Earth and a falling object.</p> <p>I can identify the effects of air resistance, water resistance and friction between moving surfaces.</p> <p>I can explain how mechanical devices such as gears, pulleys, levers and springs work.</p>