







Year 6 Science Long Term Plan

Year 6	Autumn 1 & Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Science Topic</b>	<b>Living Things and their Habitats –Evolution and Inheritance</b>	<b>Light</b>	<b>Electricity</b>	<b>Health – Exercise, Health and The Circulatory System</b>	<b>Living Things and their Habitats - Classification</b>
<b>Science Substantive Knowledge</b>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>Recognise that light appears to travel in straight lines.</p> <p>Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.</p> <p>Explain that we see things because the light that travels from light sources to our eyes or from light sources to objects and then to our eyes (and represent this in simple diagrammatic form).</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>	<p>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>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>Use recognised symbols (at least: cells, wires, switches, bulbs, buzzers and motors) when representing a simple circuit in a diagram.</p> <p>Use/interpret circuit diagrams to construct a variety of more complex circuits predicting whether they will ‘work’.</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (in the long term and short term).</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>	<p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>

Plan		Do			Review	
<b>Ask questions and plan an enquiry</b> 	<b>Set up an enquiry</b> 	<b>Observe and measure</b> 	<b>Record</b> 	<b>Interpret and report</b> 	<b>Evaluate</b> 	
Plan different types of scientific enquiries* to answer their own questions, including recognising and controlling variables where necessary.	Use test results to make predictions to set up further comparative and fair tests.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.	Report and present findings from enquiries, including conclusions and causal relationships, in oral and written forms such as displays and other presentations, using appropriate scientific language.	Explain degree of trust in results. Identify and evaluate scientific evidence (their own and others’) that has been used to support or refute ideas or arguments.	