

Year 5 Progression Document (Knowledge and Working Scientifically)

Year 5		
Autumn 1	Spring 1	Summer 1
<p>Chemistry – Materials</p> <ul style="list-style-type: none"> To compare and group together everyday materials on the basis of their hardness, solubility and transparency. To compare and group together everyday materials on the basis of their conductivity (electrical and thermal). To compare and group together everyday materials on their response to magnets. To investigate how some materials will dissolve in a liquid to form a solution and recover a substance from a solution. To explore how mixtures might be separated. To demonstrate that dissolving, mixing and changes of states are reversible changes. To explore how some changes are irreversible. 	<p>Physics – Earth and Space</p> <ul style="list-style-type: none"> To understand the solar system. To describe the movement of the Earth, and other planets, relative to the Sun in the solar system To describe the movement of the Moon relative to the Earth To describe the Sun, Earth and Moon as spherical bodies. To explain night and day and the movement of sun across the sky. 	<p>Biology – Living Things and Habitat</p> <ul style="list-style-type: none"> To compare life cycles of plants and animals. To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird To describe the life process of reproduction in some animals. To describe the life process of reproduction in some plants To observe the lifecycle of a plant. (Multiple lessons)
Autumn 2	Spring 2	Summer 2
<p>Physics – Forces</p> <ul style="list-style-type: none"> To explain why objects fall towards the Earth. To investigate the effects of air resistance, To investigate the effects of water resistance To investigate the effects of friction. To recognise how levers, pulley and gears affect force. 	<p>Physics – Light</p> <ul style="list-style-type: none"> To recognise the direction that light travels (in straight lines) To understand how we see To use knowledge of reflection to be able to look around corners. To investigate the shape and size of shadows. 	<p>Biology – Animals including Humans</p> <ul style="list-style-type: none"> To identify the stages in the growth and development of humans. To understand changes during puberty. To compare the gestation periods between animals and humans. To understand the stages of which a baby grows.

UKS2 Working Scientifically		
N.C Objective	Year 5	Year 6

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	Autumn	Spring	Summer	Autumn	Spring	Summer
<i>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</i>	<ul style="list-style-type: none"> • Materials • Forces 	<ul style="list-style-type: none"> • Light 		<ul style="list-style-type: none"> • Animals including Humans 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Living Things and Habitats
<i>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i>	<ul style="list-style-type: none"> • Forces 		<ul style="list-style-type: none"> • Living Things and Habitats 	<ul style="list-style-type: none"> • Animals Including Humans 	<ul style="list-style-type: none"> • Electricity 	
<i>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</i>	<ul style="list-style-type: none"> • Materials 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Living Things and Habitats 	<ul style="list-style-type: none"> • Animals including Humans 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Living Things and Habitats
<i>using test results to make predictions to set up further comparative and fair tests</i>	<ul style="list-style-type: none"> • Materials • Forces 	<ul style="list-style-type: none"> • Light 			<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Living Things and Habitats
<i>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</i>	<ul style="list-style-type: none"> • Materials • Forces 	<ul style="list-style-type: none"> • Light 		<ul style="list-style-type: none"> • Animals including Humans 		<ul style="list-style-type: none"> • Living Things and Habitats
<i>identifying scientific evidence that has been used to support or refute ideas or arguments.</i>	<ul style="list-style-type: none"> • Materials • Forces 	<ul style="list-style-type: none"> • Earth and Space 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Evolution and Inheritance 		