

Year 4 Progression Document (Knowledge and Working Scientifically)

Year 4		
Autumn 1	Spring 1	Summer 1
Physics – Electricity <ul style="list-style-type: none"> To identify common appliances that run on electricity. To identify and name the basic parts of an electrical circuit (buzzers, switches, wires, cells and bulbs) To construct a simple electrical circuit. To investigate how and why a lamp will turn on in a simple circuit (based on whether the lamp is part of a complete loop with a battery) To investigate how switches can affect a circuit. To recognise common conductors and insulators and associate metals with being good conductors. 	Physics – Sound <ul style="list-style-type: none"> To identify how sounds are made (associating some of them with something vibrating) To recognise how sound travels to the ear. To find patterns between the pitch of a sound and features of the object that produced it. To find patterns between the volume of sound and the strength of the vibrations that produced it. To investigate how distance affects sound. (2 lessons) 	Chemistry – States of Matter <ul style="list-style-type: none"> To develop simple descriptions of the states of matter (solids, liquids and gases) To compare and group together materials according to whether they are solids, liquids or gasses. To observe that some materials change state when they are heated or cooled. To measure and research the temperature at which states change. To understand the water cycle and the part evaporation and condensation plays. To record and observe evaporation over time (2 lessons)
Autumn 2	Spring 2	Summer 2
Time available for Christmas Production Rehearsal	Biology – Living Things and Habitat <ul style="list-style-type: none"> To recognise that living things can be grouped in a variety of ways (fish, mammals, birds, fish, amphibians, reptiles) To recognise that living things can be grouped in a variety of ways (flowering and non-flowering plants) To explore and use classification keys to help group, identify and name a variety of living things in their local environment To explore and use classification keys to help group, identify and name a variety of living things in the wider environment To recognise the human impact on an environment. To recognise that environments can change and that this can sometimes pose dangers to living things. 	Biology – Animals including Humans <ul style="list-style-type: none"> To identify the basic parts of the digestive system. To describe the simple functions of the basic parts of the digestive system in humans To identify the different types of teeth in humans (including carnivores and herbivores) To identify the functions of human teeth. To investigate the impact diet has on your teeth To identify producers, predators and prey. To construct and interpret a variety of food chains including producers, predators and prey.

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LKS2 Working Scientifically						
N.C Objective	Year 3			Year 4		
	Autumn	Spring	Summer	Autumn	Spring	Summer
<i>asking relevant questions and using different types of scientific enquiries to answer them</i>	<ul style="list-style-type: none"> • Rocks • Animals including Humans 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>setting up simple practical enquiries, comparative and fair tests</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i>		<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 			<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 		<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter
<i>using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans
<i>identifying differences, similarities or changes related to simple scientific ideas and processes</i>	<ul style="list-style-type: none"> • Rocks • Animals including Humans 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 		<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • States of Matter
<i>using straightforward scientific evidence to answer questions or to support their findings.</i>	<ul style="list-style-type: none"> • Rocks 	<ul style="list-style-type: none"> • Light 	<ul style="list-style-type: none"> • Plants • Forces and Magnets 	<ul style="list-style-type: none"> • Electricity 	<ul style="list-style-type: none"> • Sound 	<ul style="list-style-type: none"> • Animals including Humans • States of Matter

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	<ul style="list-style-type: none">Animals including Humans					
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