

# Science Progression - Lower KS2

	Working Scientifically	Plants	Living Things & their Habitats	Animals including Humans	Materials	Evolution & inheritance	Light	Forces & Magnets	Sound	Electricity
<b>Y 3</b>	<ul style="list-style-type: none"> <li>ask relevant questions and using different types of scientific enquiries to answer them</li> <li>set up simple practical enquiries, comparative and fair tests</li> <li>make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>gather, record, classify and present data in a variety of ways to help in answering questions</li> <li>record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> </ul>	<ul style="list-style-type: none"> <li>identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant</li> <li>investigate the way in which water is transported within plants</li> <li>explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal</li> </ul>		<ul style="list-style-type: none"> <li>identify that animals, including humans, need the right types/amount of nutrition, and can't make their own food; they get nutrition from what they eat</li> <li>identify that humans and some other animals have skeletons and muscles for support, protection and movement</li> </ul>			<ul style="list-style-type: none"> <li>recognise that light is needed to see things, and dark is the absence of light</li> <li>notice that light is reflected from surfaces</li> <li>recognise light from the sun can be dangerous, and we can protect our eyes</li> <li>recognise that shadows are formed when the light from a light source is blocked by an opaque object</li> <li>find patterns in the way that the size of shadows change.</li> </ul>	<ul style="list-style-type: none"> <li>compare how things move on different surfaces</li> <li>notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>observe how magnets attract or repel each other and attract some materials and not others</li> <li>compare &amp; group everyday materials that are attracted to a magnet, and identify some magnetic materials</li> <li>describe magnets as having two poles</li> <li>predict whether 2 magnets will attract or repel each other, depending on which poles are facing each other</li> </ul>	<ul style="list-style-type: none"> <li>identify how sounds are made, linking some of them with something vibrating</li> <li>recognise that vibrations from sounds travel through a medium to the ear</li> <li>find patterns between pitch and the features of the object that produced it</li> <li>find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>recognise that sounds get fainter as the distance from the sound source increases</li> </ul>	
<b>Y 4</b>	<ul style="list-style-type: none"> <li>report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> <li>identify differences, similarities or changes related to simple scientific ideas and processes</li> <li>use straightforward scientific evidence to answer questions or to support their findings</li> </ul>		<ul style="list-style-type: none"> <li>recognise living things can be grouped in different ways</li> <li>use classification keys to help group, identify and name living things in their local/wider environment</li> <li>recognise environments can change and that this can sometimes pose dangers to living things.</li> </ul>	<ul style="list-style-type: none"> <li>describe the simple functions of the digestive system in humans</li> <li>identify human teeth types and their simple functions</li> <li>construct and interpret a variety of food chains, identifying producers, predators and prey</li> </ul>	<ul style="list-style-type: none"> <li>compare and group materials according to whether they are solids, liquids or gases</li> <li>observe that some materials change state when they are heated or cooled, measure or research the temperature this happens in °C</li> <li>identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</li> </ul>	<ul style="list-style-type: none"> <li>compare and group different kinds of rocks by their appearance and simple physical properties</li> <li>describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>recognise that soils are made from rocks and organic matter.</li> </ul>				<ul style="list-style-type: none"> <li>identify common appliances that run on electricity</li> <li>construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>identify if a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</li> <li>recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul>