

Y3 & 4	SCIENCE coverage in Years 1 & 2: <i>Biology:</i> Plants (1,2), Animals, including humans (1,2), Living things and habitats (2); <i>Chemistry:</i> Everyday materials (2); <i>Physics:</i> Seasonal changes (1)		
	SCIENCE coverage in Years 3 & 4: <i>Biology:</i> Plants (3), Animals, including humans (3,4), Living things and habitats (4); <i>Chemistry:</i> rocks (3), states of matter (4); <i>Physics:</i> light (3), forces and magnets (3), Sound (4), Electricity (4)		
	SCIENCE coverage in Years 5 & 6: <i>Biology:</i> Animals, including humans (5,6), Living things and habitats (5,6), evolution & inheritance (6); <i>chemistry:</i> properties & changes of materials (5); <i>physics:</i> forces & magnets (5), earth & space (5), electricity (6)		
	What the National Curriculum requires in SCIENCE at Lower KS2: <i>working scientifically:</i> asking relevant questions and using different types of scientific enquiries to answer them; setting up simple practical enquiries, comparatives and fair tests; making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables; reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions; identifying differences, similarities or changes related to simple scientific ideas and processes; using straightforward scientific evidence to answer questions or to support their findings.		
	BIOLOGY	CHEMISTRY	PHYSICS
Y3	<u>PLANTS:</u> - Identify and describe the functions of different parts of flowering plants: roots, stem / trunk, leaves and flowers. - Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from pant to plant. - Investigate the way in which water is transported within plants. - Explore the part that flowers play in the life cycle. <u>ANIMALS, INCLUDING HUMANS:</u> - Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. - Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	<u>ROCKS:</u> - Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - Describe in simple terms how fossils are formed when things that have lived are trapped within rock. - Recognise that soils are made from rocks and organic matter.	<u>LIGHT:</u> - Recognise that they need light in order to see things and that dark is the absence of light. - Notice that light is reflected from surfaces. - Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. - Recognise that shadows are formed when the light from a light source is blocked by a solid object. - Find patterns in the way that the size of shadows change. <u>FORCES AND MAGNETS:</u> - Compare how things move on different surfaces. - Notice that some forces need contact between two objects, but magnetic forces can act at a distance. - Observe how magnets attract or repel each other and attract some materials and not others. - Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. - Describe magnets as having two poles. - Predict whether two magnets will attract or repel each other, depending on which poles are facing.
Y4	<u>LIVING THINGS AND THEIR HABITATS:</u> - Recognise that living things can be grouped in a variety of ways. - Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. - Recognise the environments can change and that this can sometimes pose dangers to living things. <u>ANIMALS, INCLUDING HUMANS:</u> - Describe the simple functions of the basic parts of the digestive system in humans. - Identify the different types of teeth in humans and their simple functions. - Construct and interpret a variety of food chains, identifying producers, predators and prey.	<u>STATES OF MATTER:</u> - Compare and group materials together, according to whether they are solids, liquids or gases. - Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius. - Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	<u>SOUND:</u> - Identify how sounds are made, associating some of them with something vibrating. - Recognise that vibrations from sounds travel through a medium to the ear. - Find patterns between the pitch of a sound and features of the object that produced it. - Find patterns between the volume of a sound and the strength of the vibrations that produced it. - Recognise that sounds get fainter as the distance from the sound source increases. <u>ELECTRICITY:</u> - Identify common appliances that run on electricity. - Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. - Identify whether or not 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. - Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. - Recognise some common conductors and insulators, and associate metals with being good conductors.