



Lower Key Stage 2 Science

	Biology		Chemistry	Physics	
Year 3	Animals including Humans	Plants	Rocks	Light	Forces & Magnets
	<ul style="list-style-type: none"> Know 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. Know that a varied diet is beneficial to health (along with a good supply of air/ clean water). Know that exercise beneficial to health (focus on energy in versus energy out. Include information on making informed choices). 	<ul style="list-style-type: none"> Know the names and can locate and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Know what plants need for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Know how water is transported within plants. Know the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	<ul style="list-style-type: none"> Know how to group together different kinds of rocks on the basis of their appearance and simple physical properties. Know how fossils are formed when things that have lived are trapped within rock. Know that soils are made from rocks and organic matter. 	<ul style="list-style-type: none"> Know that they need light in order to see things and that dark is the absence of light. Know that light is reflected from surfaces. Know that light from the sun can be dangerous and that there are ways to protect their eyes. Know that shadows are formed when the light from a light source is blocked by a solid object. Know how to find patterns in the way that the size of shadows can change. 	<ul style="list-style-type: none"> Know some things move on different surfaces. Know that some forces need contact between two objects but magnetic forces can act at a distance. Know how magnets attract or repel each other and attract some materials and not others. Know how to group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. Know that magnets have two poles (like and unlike poles). Know how to make prediction whether two magnets will attract or repel each other, depending on which poles are facing.
Year 4	Animals including Humans	Living things and their habitats	States of matter	Sound	Electricity
	<ul style="list-style-type: none"> Know the functions of the basic parts of the digestive system in humans. Know the different types of teeth in humans and their simple functions. Know how to Construct and interpret a variety of food chains, identifying producers, predators and prey. 	<ul style="list-style-type: none"> Know that living things can be grouped in a variety of ways. Know how to use classification keys to help group, identify and name a variety of living things in their local and wider environment. Know that environments can change and that this can sometimes pose dangers to living things. 	<ul style="list-style-type: none"> Know how to group materials together, according to whether they are solids, liquids or gases. Know that materials change state when heated/cooled Know that evaporation and condensation play a part in the water cycle and associate the rate of evaporation with temperature. 	<ul style="list-style-type: none"> Know how sounds are made, associating some of them with something vibrating. Know that vibrations from sounds travel through a medium to the ear. Know how patterns between the volume of a sound and the strength of the vibrations that produced it. Know that sounds get fainter as the distance from the sound source increases. 	<ul style="list-style-type: none"> Know 10 common appliances that run on electricity. Know how to construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Know how to 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. Know that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple s circuit. Know some common conductors and insulators, and associate metals with being good conductors.
Working Scientifically					
<ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative 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. 					