Key Stage | Science



		Chemistry	Physics							
	Living things and their habitat	Plants	Animals including humans	Uses of everyday materials						
Year 2	 Know the differences between things that are living, dead, and things that have never been alive. Know that most living things live in habitats to which they are suited Know the name of a variety of plants and animals in their habitats, including micro-habitats. Know a basic food cycle 	 Know how seeds and bulbs grow into mature plants. Know that plants need water, light and a suitable temperature to grow and stay healthy (and how changing these affects the plant). 	 Know that animals, have offspring which grow into adults Know the basic needs of animals, including humans, for survival (water, food and air) Know the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. 	 Know why a variety of everyday materials, including wood, metal, plastic, glass, brick, water, rock, paper and cardboard are used for a particular use. Know how solid objects made from some materials can be changed by squashing, bending, twisting and stretching (applying a force). 						
Year 2 Vocab	 Living, dead, 'never been alive', habitats, micro-habitats, food cycle, predator, prey, plant, animal, depend, artic, desert, sea, rainforest, shelter 	 Seeds, bulbs, mature, water, light, temperature, shoot, sprout, germination, seed dispersal, sunlight, nutrition 	 Offspring, adult, child, 'basic needs', survival, water, food, air, exercise, eating, food, hygiene, younger, older, baby, reproduce, heart, muscles, lungs, breathing, stronger, life-cycle 	 Metal, plastic, wood, glass, brick, water, rock, paper, cardboard, use, solid, squash, bend, twist, stretching, build, make, transparent, iron, steel 						
Working Scientifically										
 asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions. 										
KSI W	 Question, aim, hypothesis, equipment, method, results, conclusion, evaluation, answer, observe, identify, sort, group, compare, differences, similarities, describe, measurement, test, source(s), record, diagram, chart, graph, classify, gather, record, data 									

Lower Key Stage 2 Science



	Biology		Chemistry	Physics	
Year 3	Animals including Humans	Plants	Rocks	Light	Forces & Magnets
	 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). 	 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 ned 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. 	 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. 	 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. 	 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 3 Vocab	 Skeleton, muscles, diet, nutrition, balanced, nutrients, food groups, skull, spine, joint, eat, health, drink, choices, 	 Plants, roots, stem, flower, seed dispersal, fertilisation, pollination, stamen, carpel, germination, trunk, air, light, water, nutrients, soil, room, grow, 	 Sedimentary rock, Igneous rock, Metamorphic, magma, Iava, sediment, permeable, impermeable, fossilisation, palaeontology, fossils 	 Light, dark, reflection, sun, light source, shadows, reflect, opaque, translucent, transparent, straight line 	 Force, magnet, attract, repel, friction, gravity, magnetic field, non-magnetic, resistance, surface, north, south, push, pull



Working Scientifically 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. Question, aim, hypothesis, equipment, method, results, conclusion, evaluation, oral and written explanations, criteria, Lower KS2 Working changes, contrast, evidence, improve, secondary sources, guides, keys, construct, interpret, diagrams, bar charts, Scientifically Vocab tables, fair test, accurate