

SCIENCE	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Note: students are not expected to cover each aspect for every area of study						
Working scientifically						
Questioning	ask simple questions	ask simple questions	ask relevant questions	ask relevant questions	ask questions which can be investigated	ask questions which can be investigated
Observing & recording	observe closely, use to answer questions	observe closely, use to answer questions, record simple data	make measurements	analyse data	take measurements with increasing accuracy	take measurements with increasing accuracy
Equipment	simple (hand lenses, egg timers)	simple (hand lenses, egg timers)	measuring devices, thermometers	measuring devices, thermometers	a range of scientific equipment -stopwatch, scales, spring balance	a range of scientific equipment - ph meter, scales, spring balance
Testing	do simple tests	do simple tests	design simple tests	design simple tests	plan enquiries, recognise and control variables	plan enquiries, recognise and control variables
Categorising	identify and classify	identify and classify	identify differences and similarities	identify differences and similarities	classification tables	classification tables
Reporting			oral and written explanations, displays and presentations	oral and written explanations, displays and presentations	oral and written reports, tables, diagrams with labels, bar and line graphs, models	oral and written reports, tables, diagrams with labels, bar and line graphs, models
Draw conclusions			suggest improvements, predict further tests	suggest improvements, predict further tests	explain causal relationships	explain causal relationships
Use evidence			to answer questions, support findings	to answer questions, support findings	make predictions and set up further fair tests	make predictions and set up further fair tests
Earth & Space						
Sun	observe the sun's apparent movement, be aware of seasons				use Earth's rotation to describe day and night, describe Earth's orbit in relation to the Sun	
Moon					describe the Moon's orbit	
Living things						
Plants	Identify & name plants & parts	how seeds grow, what plants need for life	function of roots, stem, leaves and flowers, requirements for life and growth, plant life cycle	identify, classify into groups (trees, grasses, flowers, mosses) then give reasons why	describe life cycles, growth, reproduction and death	describe life processes
Animals	Identify & name, describe & compare	offspring, basic needs for survival	nutrition, how nutrients are transported, skeletons and muscles	identify, classify into groups (e.g. fish, amphibians, reptiles, birds, mammals) then give reasons why	describe life cycles, birth, growth, development, reproduction, death	describe life processes
Humans	Identify, name, draw & label body parts	Exercise, healthy eating and hygiene	nutrition, how nutrients are transported, skeletons and muscles	body parts, digestive system, types of teeth	describe life cycles, circulatory system, function of heart, blood vessels and blood	describe changes in humans through the life cycle, recognise the impact of diet, exercise, drugs and lifestyle
Habitats		how habitats provide for needs of animals and depend on them		recognise changing environments and dangers to habitats (e.g. deforestation)		
Food chains		simple food chain		food webs		
Rocks			compare and group rocks, properties & formation, fossils			
Inheritance				identify how living things resemble their parents in many features		recognise that offspring normally vary and are not identical to their parents
Evolution				recognise that fossils provide information about living things		recognise how and why the human skeleton has changed since we separated from other primates
Adaptation				identify how living things are suited to and adapt to their environment		describe how adaptation leads to evolution
Everyday materials						
Materials	identify, describe & compare - wood, plastic, glass, metal, water, rock	identify & compare uses of materials			give reasons, based on evidence, for the uses of materials	
Solids, liquids & gases	change solids by squashing, bending, twisting			group solids, liquids and gases,	compare and group based on evidence of properties - conductivity, hardness, solubility	
Changing states of matter				evaporation and condensation	decide how mixtures might be separated - filtering, sieving and evaporating	
Reversible and irreversible changes					demonstrate that dissolving, mixing and changes of state are reversible	explain that some changes form new materials - burning, oxidising, action of acid
Light & sound						
Light sources & properties			observe and name			recognise that travels in straight lines, reflection
Shadows			observe and investigate how shadows change shape & size			predict size and shape of shadows when position changes
How sounds are made				notice vibrations, name sources of sounds		
Pitch				find patterns in changing pitch		
Volume				find patters, recognise the sounds get fainter as the distance from source increases		
Forces & electricity						
Movement		observe movement - rolling, falling, flying, walking, running, use words like faster and slower				explain gravity, air resistance, water resistance, friction, how force is transferred through gears, levels, pulleys, springs
Magnets			notice forces, strength of magnets, attract and repel, classify magnetism of objects		know that magnets have two poles, predict if magnets will attract/repel	
Circuits				construct series circuit, identify whether bulbs will work or not, use switches		identify and name - cells, wires, bulbs, switches, buzzers, how voltage affects bulbs/buzzers, how switches work
Conductors & insulators				recognise some common materials for each, associate metal with conduction		