

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
WS i) asking simple ?s & recognising they can be answered in different ways	WS i) asking simple ?s & recognising they can be answered in different ways	WS i) asking relevant questions & using different types of scientific enquiries to answer them	WS i) asking relevant questions & using different types of scientific enquiries to answer them	WS i) plan diff types of scientific enquiries to answer questions, including recognising & controlling variables	WS i) plan diff types of scientific enquiries to answer questions, including recognising & controlling variables
WS ii) observing closely, using simple equipment	WS ii) observing closely, using simple equipment	WS ii) set up practical enquiries, comparative & fair tests	WS ii) set up practical enquiries, comparative & fair tests	WS ii) take measurements with accuracy & precision, taking repeat readings when appropriate	WS ii) take measurements with accuracy & precision, taking repeat readings when appropriate
WS iii) performing simple tests	WS iii) performing simple tests	WS iii) systematic observation & accurate measurement using standard units, using a range of equipment	WS iii) systematic observation & accurate measurement using standard units, using a range of equipment	WS iii) record data & results of increasing complexity using scientific diagrams & labels, classification keys, tables, scatter graphs, bar & line graphs	WS iii) record data & results of increasing complexity using scientific diagrams & labels, classification keys, tables, scatter graphs, bar & line graphs
WS iv) identifying & classifying	WS iv) identifying & classifying	WS iv) gathering, recording, classifying & presenting data in a variety of ways to help in answering questions	WS iv) gathering, recording, classifying & presenting data in a variety of ways to help in answering questions	WS iv) use test results to make predictions to set up further comparative & fair tests	WS iv) use test results to make predictions to set up further comparative & fair tests
WS v) using observations & ideas to suggest answers to questions	WS v) using their observations & ideas to suggest answers to questions	WS v) record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts & tables	WS v) record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, & tables	WS v) report & present enquiry findings, including conclusions, causal relationships & explanations of & degree of trust in results in oral & written forms	WS v) report & present enquiry findings, including conclusions, causal relationships & explanations of degree of trust in results in oral & written forms
WS vi) gathering & recording data to help in answering questions	WS vi) gathering & recording data to help in answering questions	WS vi) reporting on findings from enquiries	WS vi) reporting on findings from enquiries	WS v) report & present enquiry findings, including conclusions, causal relationships & explanations of & degree of trust in results in oral & written forms	WS v) report & present enquiry findings, including conclusions, causal relationships & explanations of degree of trust in results in oral & written forms
Pi) identify & name a variety of common wild & garden plants, including deciduous & evergreen trees	LvH i) explore & compare the differences between things that are living, dead, & things that have never been alive	WS vii) using results to draw conclusions, make predictions for new values, suggest improvements & raise further ?s	WS vii) using results to draw conclusions, make predictions for new values, suggest improvements & raise further ?s	WS vi) identify scientific evidence that has been used to support or refute ideas or arguments	WS vi) identify scientific evidence that has been used to support or refute ideas or arguments
P ii) identify & describe the basic structure of a variety of common flowering plants, including trees	LvH ii) identify that living things live in habitats & describe how diff habitats provide needs of diff kinds of animals & plants & how they depend on each other	WS viii) identifying differences, similarities or changes related to simple scientific ideas & processes	WS viii) identifying differences, similarities or changes related to simple scientific ideas & processes	LvH i) describe differences in the life cycles of a mammal, an amphibian, an insect & a bird	LvH i) describe how micro-organisms, plants & animals are classified into groups. according to observable characteristics & based on similarities & differences
AH i) identify & name variety of common animals including fish, reptiles amphibians, birds & mammals	LvH iii) identify & name a variety of plants & animals in their habitats, including micro-habitats	WS ix) use evidence to answer ?s or support findings	WS ix) use evidence to answer ?s or support findings	LvH ii) describe reproduction process in plants & animals	LvH ii) give reasons for classifying plants & animals based on specific characteristics
AH ii) identify & name a variety of carnivores, herbivores & omnivores	LvH iv) describe how animals obtain food from plants & other animals, using the idea of a simple food chain, & identify & name diff. sources of food	P i) identify & describe functions of different parts of flowering plants: roots, stem/trunk, leaves, & flowers	LvH i) recognise living things can be grouped variously	AH i) describe changes as humans develop to old age	AH i) identify & name main pts of circulatory system & describe functions of heart, blood vessels & blood
AH iii) describe & compare structure of common animals including pets	P i) observe and describe how seeds & bulbs grow into mature plants	P ii) explore the requirements of plants for life & growth & how they vary from plant to plant	LvH ii) explore & use classification keys to group, identify & name living things in their local & wider environment	PCM i) compare & group together materials based on properties, including hardness, solubility, transparency, conductivity (electrical & thermal) & response to magnets	AH ii) recognise the impact of diet, exercise, drugs & lifestyle on the way their bodies function
AH iv) identify, name, draw & label parts of human body & say which part of body is associated with each sense	P ii) describe how plants need water, light & suitable temps to grow & stay healthy	P iii) investigate way water is transported within plants	LvH iii) recognise environments can change & that this can sometimes pose dangers to living things	PCM ii) know some materials will dissolve in liquid to form solution & describe how to recover a substance from a solution	AH iii) describe the ways in which nutrients & water are transported within animals, including humans
EM i) distinguish between object & the material from which it is made	AH i) notice that animals incl humans have offspring which grow into adults	P iv) explore the part flowers play in the life cycle of plants	AH i) describe functions of human digestive system	PCM iii) use knowledge of solids, liquids & gases to decide how mixtures might be separated, including through filtering, sieving & evaporating	Ei i) recognise that living things have changed over time & that fossils provide information about living things that inhabited the Earth millions of years ago
EM ii) identify & name a variety of everyday materials, including wood, plastic, glass, metal, water & rock	AH ii) describe basic needs of animals incl humans for survival (water, food & air)	AH i) identify that animals need right types & amount of nutrition, & that they get nutrition from what they eat	AH ii) identify diff types of human teeth & their functions	PCM iv) give reasons, based on evidence from comparative & fair tests, for the particular uses of everyday materials, including metals, wood & plastic	Ei ii) recognise living things produce offspring of the same kind, but offspring are not identical to their parents
EM iii) describe simple physical properties of everyday materials	AH iii) describe importance for humans of exercise, eating the right amounts of different types of food, & hygiene	AH ii) identify that humans & some other animals have skeletons & muscles for support, protection & movement	AH iii) construct & interpret a variety of food chains, identifying producers, predators & prey	PCM v) demonstrate that dissolving, mixing & changes of state are reversible changes	Ei iii) identify how animals & plants are adapted to suit their environment in different ways & that adaptation may lead to evolution
EM iv) compare & group everyday materials on the basis of their simple physical properties	EM i) compare suitability of wood, metal, plastic, glass, brick, rock, paper & cardboard for particular uses	R i) compare & group together diff kinds of rocks on the basis of their appearance & simple physical properties	SM i) compare & group materials together, according to whether they are solids, liquids or gases	PCM vi) explain some changes form new materials & are not usually reversible, including changes associated with burning & the action of acid on bicarb of soda	L i) recognise that light appears to travel in straight lines
SC i) observe changes across seasons	EM ii) know that shapes of some solid objects can be changed by squashing, bending, twisting & stretching	R ii) describe simply how fossils are formed when things that have lived are trapped within rock	SM ii) observe that materials change state when heated or cooled & measure or research temperature at which this happens in degrees Celsius (C)	ES i) describe movement of Earth, & other planets, relative to Sun in solar system	L ii) use L i) to explain that objects are seen because they give out or reflect light into the eye
SC ii) describe weather associated with seasons & how day length varies		R iii) recognise soils are rocks & organic matter	SM iii) identify evaporation & condensation in water cycle & associate the rate of evaporation with temperature	ES ii) describe movement of the Moon relative to Earth	L iii) explain that we see things because light travels from light sources to our eyes or from light sources to objects & then to our eyes
		L i) recognise that they need light in order to see things and that dark is the absence of light	S i) identify how sounds are made, associating some of them with something vibrating	ES iii) describe Sun, Earth & Moon as approximately spherical bodies	L iv) use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
		L ii) notice light is reflected from surfaces	S ii) recognise that vibrations from sounds travel through a medium to the ear	ES iv) use idea of Earth' s rotation to explain day & night & the apparent movement of sun in sky	E i) associate brightness of a lamp or volume of a buzzer with the number & voltage of cells used in the circuit
		L iii) recognise that light from the sun can be dangerous & that there are ways to protect their eyes	S iii) find patterns between the pitch of a sound & features of the object that produced it	F i) explain that unsupported objects fall towards Earth due to the force of gravity acting between them & Earth	E ii) compare & give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers & the on/off position of switches
		L iv) recognise shadows are formed when the light from a light source is blocked by an opaque object	S iv) find patterns between the volume of a sound & the strength of the vibrations that produced it	F ii) identify effects of air resist., water resist. & friction, that act between moving surfaces	E iii) use recognised symbols to represent circuit in a diagram
		L v) find patterns in way that the size of shadows change	S v) recognise that distance increases faintness of sound	F iii) recognise some mechanisms, includ levers, pulleys & gears, allow a smaller force to have a greater effect	
		FM i) compare how things move on different surfaces	E i) identify common appliances that run on electricity		
		FM ii) notice some forces need contact between two objects, but magnetic forces can act at a distance	E ii) construct a simple series electrical circuit, identifying & naming its basic parts		
		FM iii) observe how magnets attract or repel each other & attract some materials & not others	E iii) identify if a lamp will light in a series circuit, based on whether it is part of a complete loop with a battery		
		FM iv) compare & group variety of materials on basis of attraction to a magnet & identify magnetic materials	E iv) recognise that a switch opens & closes a circuit & associate this with a lamp lighting in a series circuit		
		FM v) describe magnets as having two poles	E v) recognise some common conductors & insulators, & associate metals with being good conductors		
		FM vi) predict if two magnets will attract or repel each other, depending on which poles are facing			

Year 1	WS = Working scientifically; P = Plants; AH = Animals including humans; EM = Everyday materials; SC = Seasonal changes
Year 2	WS = Working scientifically; LvH = Living things and their habitats; P = Plants; AH = Animals including humans; EM = Everyday materials
Year 3	WS = Working scientifically; P = Plants; AH = Animals including humans; R = Rocks; L = Light; FM = Forces and magnets
Year 4	WS = Working scientifically; LvH = Living things and their habitats; AH = Animals including humans; SM = States of matter; S = Sound; E = Electricity
Year 5	WS = Working scientifically; LvH = Living things and their habitats ; AH = Animals including humans; PCM = Properties and changes of materials; ES = Earth and space; F = Forces
Year 6	WS = Working scientifically; LvH = Living things and their habitats ; AH = Animals including humans; EI = Evolution and inheritance; L = Light; E = electricity