



Key Stage 1

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 1	Page reference
Working scientifically	asking simple questions and recognising that they can be answered in different ways	Covered across the book
	observing closely, using simple equipment	4
	performing simple tests	4
	identifying and classifying	Covered across the book
	using their observations and ideas to suggest answers to questions	Covered across the book
	gathering and recording data to help in answering questions	4

Year 1 programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 1	Page reference
Plants	identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	12–13
	identify and describe the basic structure of a variety of common flowering plants, including trees	11
Animals, including humans	identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	21–22
	identify and name a variety of common animals that are carnivores, herbivores and omnivores	23
	describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	22
	identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	28–29
Everyday materials	distinguish between an object and the material from which it is made	36–37
	identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock	36–37
	describe the simple physical properties of a variety of everyday materials	38–39
	compare and group together a variety of everyday materials on the basis of their simple physical properties	40–41



Year 2 Science programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 1	Page reference
Seasonal changes	observe changes across the four seasons	34–35
	observe and describe weather associated with the seasons and how day length varies	34–35
Living things and their habitats	explore and compare the differences between things that are living, dead, and things that have never been alive	5
	identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other	6–7, 8
	identify and name a variety of plants and animals in their habitats, including micro-habitats	6–7
	describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food	9
Plants	observe and describe how seeds and bulbs grow into mature plants	14–17
	find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	18–19
Animals, including humans	notice that animals, including humans, have offspring which grow into adults	20, 24–27, 30–31
	find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	32
	describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	32–33
Uses of everyday materials	identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	40–44
	find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	44



Lower Key Stage 2

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Working scientifically	asking relevant questions and using different types of scientific enquiries to answer them	Covered across the book
	setting up simple practical enquiries, comparative and fair tests	85
	making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	86
	gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	87–89
	recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	87–89
	reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	90
	using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	90
	identifying differences, similarities or changes related to simple scientific ideas and processes	Covered across the book
	using straightforward scientific evidence to answer questions or to support their findings	Covered across the book



Year 3 programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Plants	identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	4
	explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant	5
	investigate the way in which water is transported within plants	4
	explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	6
Animals, including humans	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	20–21
	identify that humans and some other animals have skeletons and muscles for support, protection and movement	22–23
Rocks	compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	58–59
	describe in simple terms how fossils are formed when things that have lived are trapped within rock	61
	recognise that soils are made from rocks and organic matter	60
Light	recognise that they need light in order to see things and that dark is the absence of light	62
	notice that light is reflected from surfaces	65
	recognise that light from the sun can be dangerous and that there are ways to protect their eyes	62
	recognise that shadows are formed when the light from a light source is blocked by a solid object	62–63, 64
	find patterns in the way that the size of shadows change	62–63
Forces and magnets	compare how things move on different surfaces	74–75
	notice that some forces need contact between two objects, but magnetic forces can act at a distance	74
	observe how magnets attract or repel each other and attract some materials and not others	78
	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	78
	describe magnets as having two poles	78
	predict whether two magnets will attract or repel each other, depending on which poles are facing	78



Year 4 programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Living things and their habitats	recognise that living things can be grouped in a variety of ways	10–11
	explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	10–13
	recognise that environments can change and that this can sometimes pose dangers to living things	14–15
Animals, including humans	describe the simple functions of the basic parts of the digestive system in humans	24
	identify the different types of teeth in humans and their simple functions	25
	construct and interpret a variety of food chains, identifying producers, predators and prey	31
States of matter	compare and group materials together, according to whether they are solids, liquids or gases	42–43
	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 (°C)	44–47
	identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	45–46, 48–49
Sound	identify how sounds are made, associating some of them with something vibrating	66
	recognise that vibrations from sounds travel through a medium to the ear	66–67
	find patterns between the pitch of a sound and features of the object that produced it	68–69
	recognise that sounds get fainter as the distance from the sound source increases	67
Electricity	identify common appliances that run on electricity	79
	construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers	80–81
	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	80–81

**Year 4 programme of study**

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Electricity <i>(continued)</i>	recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	80–81
	recognise some common conductors and insulators, and associate metals with being good conductors	41



Upper Key Stage 2

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Working scientifically	planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	38, 85
	taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	86
	recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	87–89
	using test results to make predictions to set up further comparative and fair tests	85
	reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	90
	identifying scientific evidence that has been used to support or refute ideas or arguments	85, 90



Year 5 programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Living things and their habitats	describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	16–17
	describe the life process of reproduction in some plants and animals	18–19
Animals, including humans	describe the changes as humans develop to old age	28–29
Properties and changes of materials	compare and group together everyday materials on the basis of their properties, including their: hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	
	● hardness	42–43
	● solubility	51–53
	● transparency	62
	● conductivity (electrical and thermal)	40–41
	● response to magnets	78
	know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	50–54
	use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	42–43, 54
	give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	36–38
	demonstrate that dissolving, mixing and changes of state are reversible changes	50–55
explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda	55–57	
Earth and space	describe the movement of the Earth, and other planets, relative to the Sun in the solar system	72–73
	describe the movement of the Moon relative to the Earth	72
	describe the Sun, Earth and Moon as approximately spherical bodies	70
	use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	71

**Year 5 programme of study**

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Forces	explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	76
	identify the effects of air resistance, water resistance and friction, that act between moving surfaces	74–75
	recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	76–77



Year 6 programme of study

Topic	Curriculum requirements covered in Science Revision Guide Key Stage 2	Page reference
Living things and their habitats	describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals	10–13
	give reasons for classifying plants and animals based on specific characteristics	10–13
Animals, including humans	identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood	26–27
	recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function	30
	describe the ways in which nutrients and water are transported within animals, including humans	24, 31
Evolution and inheritance	recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago	32
	recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	33
	identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	34–35
Light	recognise that light appears to travel in straight lines	64
	use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye	65
	explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes	64–65
	use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them	64
Electricity	associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit	82
	compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches	80–82
	use recognised symbols when representing a simple circuit in a diagram	84