

KS1 National Curriculum		Year 1	Year 2
Working scientifically	Planning Asking simple questions and recognising that they can be answered in different ways	Term 4 What grows near me? (Lead state) Term 5 Who helps who? (State to enhance)	Term 1 How can we lead a healthier life? (Supporting state) Term 6 What is home? (Lead state)
	Testing Observing closely, using simple equipment	Term 1 What are we? (Lead state) Ongoing How does Greentrees change? (Lead state) Term 4 What grows near me? (Lead state)	Term 4 How do plants grow near me? (Lead state)
	Testing Performing simple tests	Term 3 What are buildings made of near me? (Lead state)	Term 1 How can we lead a healthier life? (Supporting state) Term 4 How do plants grow near me? (Lead state)
	Testing Identifying and classifying	Term 1 What are we? (Lead state) Term 3 What are buildings made of near me? (Lead state) Term 6 What might I do in the future? (Supporting state)	Term 3 How do engineers build strong structures? (Supporting state)
	Answering and concluding Using observations and ideas to suggest answers to questions	Term 1 What are we? (Lead state)	Term 4 How do plants grow near me? (Lead state)

		Term 3 What are buildings made of near me? (Lead state)	Term 5 What did the Titanic teach us about ships? (State to enhance) Term 6 What is home? (Lead state)
	Answering and concluding Gathering and recording data to help in answering questions	Ongoing How does Greentrees change? (Lead state) Term 6 What might I do in the future? (Supporting state)	Term 3 How do engineers build strong structures? (Supporting state) Term 6 What is home? (Lead state)
	KS1 National Curriculum	Year 1	
Plants	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees	Term 4 What grows near me? (Lead state)	
	Identify and describe the basic structure of a variety of common flowering plants, including trees	Term 4 What grows near me? (Lead state)	
Animals, including humans	Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals	Term 1 What are we? (Lead state)	
	Identify and name a variety of common animals that are carnivores, herbivores and omnivores	Term 1 What are we? (Lead state)	
	Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	Term 1 What are we? (Lead state)	
	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Term 1 What are we? (Lead state)	
Everyday materials	Distinguish between an object and the material from which it is made	Term 3 What are buildings made of near me? (Lead state)	
	Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock	Term 3 What are buildings made of near me? (Lead state)	
	Describe the simple physical properties of a variety of everyday materials	Term 3 What are buildings made of near me?	

		(Lead state)
	Compare and group together a variety of everyday materials on the basis of their simple physical properties	Term 3 What are buildings made of near me? (Lead state)
Seasonal change	Observe changes across the four seasons	Ongoing How does Greentrees change? (Lead state)
	Observe and describe weather associated with the seasons and how day length varies	Ongoing How does Greentrees change? (Lead state)
KS1 National Curriculum		Year 2
Living things and their habitats	Explore and compare the differences between things that are living, dead and things that have never been alive	Term 6 What is home? (Lead state)
	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	Term 6 What is home? (Lead state)
	Identify and name a variety of plants and animals in their habitats, including microhabitats	Term 6 What is home? (Lead state)
	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	Term 1 How can we lead a healthier life? (Supporting state)
Plants	Observe and describe how seeds and bulbs grow into mature plants	Term 4 How do plants grow near me? (Lead state)
	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Term 4 How do plants grow near me? (Lead state)
Animals, including humans	Notice that animals, including humans, have offspring which grow into adults	Term 6 What is home? (Lead state)
	Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Term 1 How can we lead a healthier life? (Supporting state)
	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Term 1 How can we lead a healthier life? (Supporting state)

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	Term 3 How do engineers build strong structures? (Supporting state)
	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Term 3 How do engineers build strong structures? (Supporting state)

KS2 National Curriculum		Year 3	Year 4
Working scientifically LKS2	Planning Asking relevant questions and using different types of scientific enquiries to answer them	Term 2 How does the UK use the water we have? (State to enhance)	Term 1 What choices do people make? (Lead state) Term 6 How can we switch off? (Lead state)
	Testing Setting up simple practical enquiries, comparative and fair tests	Term 1 Why are plants important to humans? (Lead state)	Term 1 What choices do people make? (Lead state) Term 6 How can we switch off? (Lead state)
	Testing Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Term 1 Why are plants important to humans? (Lead state)	Term 2 Where does our water come from? (Lead state) Term 5 What is sound? (Lead state)
	Testing Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions	Term 1 Where does the darkness come from? (Lead state)	Term 4 What eats what? (Lead state) Term 5 What is sound? (Lead state)
	Testing	Term 3 What do buildings tell us about how people used to live?	Term 4 What eats what? (Lead state)

	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables	(Supporting state)	Term 6 How can we switch off? (Lead state)
	Answering and concluding Reporting on findings from enquiries, including oral and written explanations, displays or presentation of results and conclusions	Term 1 Where does the darkness come from? (Lead state) Term 3 What do buildings tell us about how people used to live? (Supporting state)	Term 5 What is sound? (Lead state) Term 6 How can we switch off? (Lead state)
	Answering and concluding Identifying differences, similarities or changes related to simple scientific ideas and processes	Term 4 What is the difference between surviving and being healthy? (Supporting state)	Term 1 What choices do people make? (Lead state) Term 4 What eats what? (Lead state)
	Answering and concluding Using straightforward scientific evidence to answer questions or to support findings	Term 1 Why are plants important to humans? (Lead state)	Term 2 Where does our water come from? (Lead state) Term 5 What is sound? (Lead state)
	Evaluating Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Term 4 What is the difference between surviving and being healthy? (Supporting state)	Term 2 Where does our water come from? (Lead state)
	KS2 National Curriculum	Year 5	Year 6
Working scientifically UKS2	Planning Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	Term 1 What do forces actually do? (Lead state) Term 3 How can science help the 'vulnerable'? (Lead state)	XX
	Testing Taking measurements, using a range of scientific equipment, with increasing accuracy and	Term 1 What do forces actually do? (Lead state)	Term 1 What have we learnt from the ancient Greeks? (Lead state)

	precision, taking repeat readings when appropriate	Term 3 How can science help the 'vulnerable'? (Lead state)	XX
	Testing Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Term 1 What does space tell us about life on earth? (Lead state) Term 2 What is the impact of too little water? (State to enhance)	Term 1 What have we learnt from the ancient Greeks? (Lead state) XX
	Answering and concluding 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	Term 1 What does space tell us about life on earth? (Lead state) Term 2 What is the impact of too little water? (State to enhance)	XX Term 2 Is too much water a problem for all? (State to enhance)
	Answering and concluding Identifying scientific evidence that has been used to support or refute ideas or arguments	Term 1 What does space tell us about life on earth? (Lead state)	Term 1 What have we learnt from the ancient Greeks? (Lead state) Term 6 How are we connected? (Lead state)
	Evaluating Using test results to make predictions to set up further comparative and fair tests	Term 3 How can science help the 'vulnerable'? (Lead state)	Term 1 What have we learnt from the ancient Greeks? (Lead state)
KS2 National Curriculum		Year 3	
Plants	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers	Term 1 Why are plants important to humans? (Lead state)	
	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	Term 1 Why are plants important to humans? (Lead state)	
	Investigate the way in which water is transported within plants	Term 1 Why are plants important to humans? (Lead state)	
	Explore the part that flowers play in the life cycle of flowering plants including pollination, seed formation and seed dispersal	Term 1 Why are plants important to humans? (Lead state)	

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	Term 4 What is the difference between surviving and being healthy? (Supporting state)
	Identify that humans and some other animals have skeletons and muscles for support, protection and movement	Term 4 What is the difference between surviving and being healthy? (Supporting state)
Rocks	Compare and group together different kinds of rocks on the basis of their appearance	Term 3 What do buildings tell us about how people used to live? (Supporting state)
	Describe in simple terms how fossils are formed when things that have lived are trapped within rock	Term 3 What do buildings tell us about how people used to live? (Supporting state)
	Recognise that soils are made from rocks and organic matter	Term 3 What do buildings tell us about how people used to live? (Supporting state)
Light	Recognise that they need light in order to see things and that dark is the absence of light	Term 1 Where does the darkness come from? (Lead state)
	Notice that light is reflected from surfaces	Term 1 Where does the darkness come from? (Lead state)
	Recognise that light from the sun can be dangerous and that there are ways to protect their eyes	Term 1 Where does the darkness come from? (Lead state)
	Recognise that shadows are formed when the light from a light source is blocked by an opaque object	Term 1 Where does the darkness come from? (Lead state)
	Find patterns in the way that the size of shadows change	Term 1 Where does the darkness come from? (Lead state)
Forces and magnets	Compare how things move on different surfaces	Term 6 How can science improve our lives? (Lead state)
	Notice that some forces need contact between two objects, but magnetic forces can act at a distance	Term 6 How can science improve our lives? (Lead state)
	Observe how magnets attract or repel each other and attract some materials and not others	Term 6 How can science improve our lives? (Lead state)
	Compare and group together a variety of everyday materials on the basis of whether they	Term 6 How can science improve our lives?

	are attracted to a magnet, and identify some magnetic materials	(Lead state)
	Describe magnets as having two poles	Term 6 How can science improve our lives? (Lead state)
	Predict whether two magnets will attract or repel each other, depending on which poles are facing	Term 6 How can science improve our lives? (Lead state)
KS2 National Curriculum		Year 4
Living things and their habitats	Recognise that living things can be grouped in a variety of ways	Term 4 What eats what? (Lead state)
	Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment	Term 4 What eats what? (Lead state)
	Recognise that environments can change and that this can sometimes pose dangers to living things	Term 4 What eats what? (Lead state)
Animals, including humans	Describe the simple functions of the basic parts of the digestive system in humans	Term 1 What choices do people make? (Lead state)
	Identify the different types of teeth in humans and their simple functions	Term 1 What choices do people make? (Lead state)
	Construct and interpret a variety of food chains, identifying producers, predators and prey	Term 4 What eats what? (Lead state)
States of matter	Compare and group materials together, according to whether they are solids, liquids or gases	Term 2 Where does our water come from? (Lead state)
	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)	Term 2 Where does our water come from? (Lead state)
	Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Term 2 Where does our water come from? (Lead state)
Sound	Identify how sounds are made, associating some of them with something vibrating	Term 5 What is sound? (Lead state)
	Recognise that vibrations from sounds travel through a medium to the ear	Term 5 What is sound?

		(Lead state)
	Find patterns between the pitch of a sound and features of the object that produced it	Term 5 What is sound? (Lead state)
	Find patterns between the volume of a sound and the strength of the vibrations that produced it	Term 5 What is sound? (Lead state)
	Recognise that sounds get fainter as the distance from the sound source increases	Term 5 What is sound? (Lead state)
Electricity	Identify common appliances that run on electricity	Flexible term How can we switch off? (Lead state)
	Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers	Flexible term How can we switch off? (Lead state)
	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	Flexible term How can we switch off? (Lead state)
	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	Flexible term How can we switch off? (Lead state)
	Recognise some common conductors and insulators, and associate metals with being good conductors	Flexible term How can we switch off? (Lead state)
KS2 National Curriculum		Year 5
Living things and their habitats	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird	Term 5 How are you helping to save the planet? (Supporting state)
	Describe the life process of reproduction in some plants and animals	Term 5 How are you helping to save the planet? (Supporting state)
Animals, including humans	Describe the changes as humans develop to old age	Taught as a standalone objective through PSHE
Properties and changing 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	Term 3 How can science help the vulnerable? (Lead state)

	Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	Term 3 How can science help the vulnerable? (Lead state)
	Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Term 3 How can science help the vulnerable? (Lead state)
	Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	Term 3 How can science help the vulnerable? (Lead state)
	Demonstrate that dissolving, mixing and changes of state are reversible changes	Term 3 How can science help the vulnerable? (Lead state)
	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	Term 3 How can science help the vulnerable? (Lead state)
Earth and space	Describe the movement of the Earth, and other planets, relative to the Sun in the solar system	Term 1 What does space tell us about life on earth? (Lead state)
	Describe the movement of the Moon relative to the Earth	Term 1 What does space tell us about life on earth? (Lead state)
	Describe the Sun, Earth and Moon as approximately spherical bodies	Term 1 What does space tell us about life on earth? (Lead state)
	Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	Term 1 What does space tell us about life on earth? (Lead state)
Forces	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object	Term 1 What do forces actually do? (Lead state)
	Identify the effects of air resistance, water resistance and friction that act between moving surfaces	Term 1 What do forces actually do? (Lead state)
	Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	Term 1 What do forces actually do? (Lead state)
KS2 National Curriculum		Year 6

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 microorganisms, plants and animals	Term 6 How are we all connected? (Lead state)
	Give reasons for classifying plants and animals based on specific characteristics	Term 6 How are we all connected? (Lead state)
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	Term 1 What have we learnt from the Ancient Greeks? (Lead state)
	Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function	Term 1 What have we learnt from the Ancient Greeks? (Lead state)
	Describe the ways in which nutrients and water are transported within animals, including humans	Term 1 What have we learnt from the Ancient Greeks? (Lead state)
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	Term 6 How are we all connected? (Lead state)
	Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	Term 6 How are we all connected? (Lead state)
	Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	Term 6 How are we all connected? (Lead state)
Light	Recognise that light appears to travel in straight lines	Term 4 Light mini skills and knowledge enquiry (Lead state)
	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	Term 4 Light mini skills and knowledge enquiry (Lead state)
	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	Term 4 Light mini skills and knowledge enquiry (Lead state)
	Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them	Term 4 Light mini skills and knowledge enquiry (Lead state)
Electricity	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit	Term 3 Electricity mini skills and knowledge enquiry (Lead state)

	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	Term 3 Electricity mini skills and knowledge enquiry (Lead state)
	Use recognised symbols when representing a simple circuit in a diagram	Term 3 Electricity mini skills and knowledge enquiry (Lead state)