



	Year 1	Year 2
Working scientifically	<ul style="list-style-type: none">• WS1 Ask simple questions and recognise that they can be answered in different ways (Year 1 focus)• WS2 Use simple equipment to observe closely (Year 1 focus)• WS3 Perform simple tests (Year 1 focus)• WS4 Identify and classify (Year 1 focus)• WS5 Use his/her observations and ideas to suggest answers to questions (Year 1 focus)• WS6 Gather and record data to help in answering questions (Year 1 focus)	<ul style="list-style-type: none">• WS1 Ask simple questions and recognise that they can be answered in different ways including use of scientific language from the national curriculum (Year 2 focus)• WS2 Use simple equipment to observe closely including changes over time (Year 2 focus)• WS3 Perform simple comparative tests (Year 2 focus)• WS4 Identify, group and classify (Year 2 focus)• WS5 Use his/her observations and ideas to suggest answers to questions noticing similarities, differences and patterns (Year 2 focus)• WS6 Gather and record data to help in answering questions including from secondary sources of information (Year 2 focus)
Animals including humans	<ul style="list-style-type: none">• AIH1 Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals• AIH2 Identify and name a variety of common animals that are carnivores, herbivores and omnivores• AIH3 Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)• AIH4 Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	<ul style="list-style-type: none">• AIH1 Understand that animals, including humans, have offspring which grow into adults• AIH2 Describe the basic needs of animals, including humans, for survival (water, food and air)• AIH3 Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene



<p>Living things and their habitats</p>		<ul style="list-style-type: none"> • LTH1 Explore and compare the differences between things that are living, dead, and things that have never been alive • LTH2 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 • LTH3 Identify and name a variety of plants and animals in their habitats, including micro-habitats • LTH4 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
<p>Materials</p>	<ul style="list-style-type: none"> • M1 Distinguish between an object and the material from which it is made • M2 Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock • M3 Describe the simple physical properties of a variety of everyday materials • M4 Compare and group together a variety of everyday materials on the basis of their simple physical properties 	<ul style="list-style-type: none"> • M1 Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • M2 Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
<p>Plants</p>	<ul style="list-style-type: none"> • P1 Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees • P2 Identify and describe the basic structure of a variety of common flowering plants, including trees 	<ul style="list-style-type: none"> • P1 Observe and describe how seeds and bulbs grow into mature plants • P2 Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy
<p>Seasonal Changes</p>	<ul style="list-style-type: none"> • SC1 Observe changes across the four seasons • SC2 Observe and describe weather associated with the seasons and how day length varies 	



	Year 3	Year 4
Working scientifically	<ul style="list-style-type: none">• WS1 Ask relevant questions and use different types of scientific enquiries to answer them (Year 3 focus)• WS2 Set up simple practical enquiries, comparative and fair tests (Year 3 focus)• WS3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 3 focus)• WS4 Gather, record, classify and present data in a variety of ways to help in answering questions (Year 3 focus)• WS5 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 3 focus)• WS6 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions (Year 3 focus)• WS7 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 3 focus)• WS8 Identify differences, similarities or changes related to simple scientific ideas and processes (Year 3 focus)• WS9 Use straightforward scientific evidence to answer questions or to support his/her findings (Year 3 focus)	<ul style="list-style-type: none">• WS1 Ask relevant questions and use different types of scientific enquiries to answer them (Year 4 focus)• WS2 Set up simple practical enquiries, comparative and fair tests (Year 4 focus)• WS3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers (Year 4 focus)• WS4 Gather, record, classify and present data in a variety of ways to help in answering questions (Year 4 focus)• WS5 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables (Year 4 focus)• WS6 Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions (Year 4 focus)• WS7 Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions (Year 4 focus)• WS8 Identify differences, similarities or changes related to simple scientific ideas and processes (Year 4 focus)• WS9 Use straightforward scientific evidence to answer questions or to support his/her findings (Year 4 focus)



Animals including humans	<ul style="list-style-type: none">• AIH1 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• AIH2 Identify that humans and some other animals have skeletons and muscles for support, protection and movement	<ul style="list-style-type: none">• AIH1 Describe the simple functions of the basic parts of the digestive system in humans• AIH2 Identify the different types of teeth in humans and their simple functions• AIH3 Construct and interpret a variety of food chains, identifying producers, predators and prey
Living things and their habitats		<ul style="list-style-type: none">• LTH1 Recognise that living things can be grouped in a variety of ways• LTH2 Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment• LTH3 Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things
Electricity		<ul style="list-style-type: none">• E1 Identify common appliances that run on electricity• E2 Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers 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• E3 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit• E4 Recognise some common conductors and insulators, and associate metals with being good conductors



Forces and magnets	<ul style="list-style-type: none">• FM1 Compare how things move on different surfaces• FM2 Notice that some forces need contact between two objects, but magnetic forces can act at a distance• FM3 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• FM4 Describe magnets as having two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing	
Light	<ul style="list-style-type: none">• L1 Recognise that he/she needs light in order to see things and that dark is the absence of light• L2 Notice that light is reflected from surfaces• L3 Recognise that light from the sun can be dangerous and that there are ways to protect eyes• L4 Recognise that light from the sun can be dangerous and that there are ways to protect eyes• L5 Find patterns in the way that the size of shadows change	
Light		<ul style="list-style-type: none">• L1 Identify how sounds are made, associating some of them with something vibrating• L2 Recognise that vibrations from sounds travel through a medium to the ear• L3 Find patterns between the pitch of a sound and features of the object that produced it• L4 Find patterns between the volume of a sound and the strength of the vibrations that produced it• L5 Recognise that sounds get fainter as the distance from the sound source increases



Plants	<ul style="list-style-type: none">• P1 Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers• P2 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• P3 Investigate the way in which water is transported within plants• P4 Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	
Rocks	<ul style="list-style-type: none">• R1 Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties• R2 Describe in simple terms how fossils are formed when things that have lived are trapped within rock• R3 Recognise that soils are made from rocks and organic matter	
States of Matter		<ul style="list-style-type: none">• SOM1 Compare and group materials together, according to whether they are solids, liquids or gases• SOM2 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)• SOM3 Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature



	Year 5	Year 6
Working scientifically	<ul style="list-style-type: none"> • WS1 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary (Year 5 focus) • WS2 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 5 focus) • WS3 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 5 focus) • WS4 Use test results to make predictions to set up further comparative and fair tests (Year 5 focus) • WS5 Report and present 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 (Year 5 focus) • WS6 Identify scientific evidence that has been used to support or refute ideas or arguments (Year 5 focus) 	<ul style="list-style-type: none"> • WS1 Plan different types of scientific enquiries to answer their own or others' questions, including recognising and controlling variables where necessary (Year 6 focus) • WS2 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate (Year 6 focus) • WS3 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs (Year 6 focus) • WS4 Use test results to make predictions to set up further comparative and fair tests (Year 6 focus) • WS5 Report and present 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 (Year 6 focus) • WS6 Report and present 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 (Year 6 focus) • WS7 Describe and evaluate their own and other people's scientific ideas related to topics in the national curriculum (including ideas that have changed over time), using evidence from a range of sources • WS8 Group and classify things and recognise patterns
Animals including humans	<ul style="list-style-type: none"> • AIH1 Describe the changes as humans develop to old age 	<ul style="list-style-type: none"> • AIH1 Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • AIH2 Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • AIH3 Describe the ways in which nutrients and water are transported within animals, including humans



Electricity		<ul style="list-style-type: none">• E1 Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit• E2 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• E3 Use recognised symbols when representing a simple circuit in a diagram
Earth and Space	<ul style="list-style-type: none">• ES1 Describe the movement of the Earth, and other planets, relative to the Sun in the solar system• ES2 Describe the movement of the Moon relative to the Earth• ES3 Describe the Sun, Earth and Moon as approximately spherical bodies• ES4 Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky	
Forces and Magnets	<ul style="list-style-type: none">• FM1 Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object• FM2 Identify the effects of air resistance, water resistance and friction, that act between moving surfaces• FM3 Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect• FM4 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird• FM5 Describe the life process of reproduction in some plants and animals	



Living Things and their habitats	<ul style="list-style-type: none">• LTH1 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird• LTH2 Describe the life process of reproduction in some plants and animals	<ul style="list-style-type: none">• LTH1 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• LTH2 Give reasons for classifying plants and animals based on specific characteristics
Materials	<ul style="list-style-type: none">• M1 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• M2 Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution• M3 Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating• M4 Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic• M5 Demonstrate that dissolving, mixing and changes of state are reversible changes• M6 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	



Evolution and Inheritance		<ul style="list-style-type: none">• E11 Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago• E12 Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents• E13 identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
Light		<ul style="list-style-type: none">• L1 Recognise that light appears to travel in straight lines• L2 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• L3 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• L4 Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them