

Years 1 and 2						
	Autumn A	Spring A	Summer A	Autumn B	Spring B	Summer B
Science Working scientifically objectives are ongoing throughout the year.	Working Scientifically Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions			Working Scientifically Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Identifying and classifying Using their observations and ideas to suggest answers to questions Gathering and recording data to help in answering questions		
	Human body Year 1 Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Name and talk about their members of immediate and extended family. Describe what is needed to healthy and clean. Use the senses to describe similarities and differences. Identify the parts of the body associated with the each of the senses. Year 2 Draw and label the main parts of the human body and link body parts to the associated senses. Find out about and describe the basic needs of animals including humans for survival (water, food and air). Describe the importance for humans of exercise, a balanced diet and hygiene, including how to look after teeth. Name and describe some simple solids and liquids.	Plants, Seasonal changes Year 1 Use senses to explore and talk about plants. Describe what a plant looks like. Identify, name and describe the basic structure of common plants, including garden plants and trees, both deciduous and evergreen. Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. Year 2 Observe and describe how seeds and bulbs grow into mature plants. Identify and describe the basic structure of a flowering plant including roots, stem/trunk, leaves and flowers. Find out about and describe what plants need to grow and stay healthy, including, water, light and temperature. Explore and compare the differences between things that are living, dead and things that have never been alive. Explore the habitats of living things, recognising the features of that habitat that meet the basic needs of the plants and animals that live there and how they depend on each other. Identify and name a variety of plants and animals in their habitats, including microhabitats.	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Science Key Vocabulary	Year 1 Carnivore, Classify, Deciduous, Herbivore, Identify, Omnivore Year 2 Absorbent, Habitat, Opaque, Transparent					
Years 3 and 4						
	Autumn A	Spring A	Summer A	Autumn B	Spring B	Summer B
Science Working scientifically objectives are ongoing throughout the year	Working Scientifically Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests Making systematic and careful observations and , where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Recording findings using simple scientific language, drawings, labelled diagrams, ,keys, bar charts, and tables Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings.			Working Scientifically Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests Making systematic and careful observations and , where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Recording findings using simple scientific language, drawings, labelled diagrams, ,keys, bar charts, and tables Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings.		
	Forces, Electricity Year 3 Compare how things move on different surfaces. Observe how magnets attract or repel each other and attract some materials and not others. Describe magnets as having two poles. Notice that some forces need contact	Light, Sound Year 3 Recognise that light is needed to see things and that dark is the absence of light. Recognise that shadows are formed when light from a light source is blocked by a solid object. Notice that light is reflected from surfaces. Recognise that light from the sun is	Forces, Electricity Year 3 Compare how things move on different surfaces. Observe how magnets attract or repel each other and attract some materials and not others. Describe magnets as having two poles. Notice that some forces need contact	Light, Sound Year 3 Recognise that light is needed to see things and that dark is the absence of light. Recognise that shadows are formed when light from a light source is blocked by a solid object. Notice that light is reflected from surfaces. Recognise that light from the sun is	Forces, Electricity Year 3 Compare how things move on different surfaces. Observe how magnets attract or repel each other and attract some materials and not others. Describe magnets as having two poles. Notice that some forces need contact	Light, Sound Year 3 Recognise that light is needed to see things and that dark is the absence of light. Recognise that shadows are formed when light from a light source is blocked by a solid object. Notice that light is reflected from surfaces. Recognise that light from the sun is

	between 2 objects, but magnetic forces can act at a distance. 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. Predict whether 2 magnets will attract or repel each other, depending on which poles are facing. Recognise that batteries are a source of electricity. Make circuits with more one than 1 bulb. Explain simply how the number of batteries affects the amount of electricity. Talk about the effect of making or breaking contacts in a circuit. Recognise common conductors and insulators. Year 4 Recognise that pushes and pulls will bring an object to rest more quickly. Describe situations where friction is helpful and where it is not. Identify the effects of friction acting between moving surfaces Predict whether two magnets will attract or repel each other, depending on which poles are facing. Describe situations where there is more than one force acting on an object. Compare and group everyday materials that are magnetic and identify magnetic materials. Identify factors than increase resistance. Describe why a bulb won’t light and identify the problem within the circuit. Construct and record a simple series circuit, and name its basic parts, including cells, wires, bulbs, switches and buzzers. Know that a bulb lights up when there is an effective conducting material in the circuit and is part of a complete circuit. Describe what happens when making and breaking a circuit, recognise that a switch opens and closes a circuit and link to the lighting of a bulb. Identify common appliances that run on electricity. Recognise common conductors and insulators and associate metals with being good conductors	dangerous and that there are ways to protect the eyes. Talk about how sound travels. Use the term vibration, when describing sounds and recognise that vibrations from sounds travel through a medium to the ear. Recognise that sounds get fainter as the distance from the sound source increases. Year 4 Describe what happens to a light source in the dark. Find patterns that determine the size of shadows. Describe the way in which light is reflected from surfaces. Describe in simple terms how light travels and what happens. Describe in detail how sound travels and how it can be changed. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produce it.	between 2 objects, but magnetic forces can act at a distance. 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. Predict whether 2 magnets will attract or repel each other, depending on which poles are facing. Recognise that batteries are a source of electricity. Make circuits with more one than 1 bulb. 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Science Key Vocabulary	Year 3 Absorbent, Attract, Dispersal, Friction, Nutrition. Pollination, Reflective, Repel, Reproduction, Transportation Year 4 Amphibians, Circuit , Condensation, Conductors, Evaporation, Insulators, Invertebrates, Oesophagus, Particles, Pitch, Series, Tone, Vertebrates, Vibration, Volume, Wave					
Years 5 and 6						
	Autumn A	Spring A	Summer A	Autumn B	Spring B	Summer B
Science	Working Scientifically Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs, Using test results to make predictions to set up further comparative and fair tests			Working Scientifically Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs, Using test results to make predictions to set up further comparative and fair tests		
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	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations results, explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Identifying scientific evidence that has been used to support or refute ideas or arguments.			Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations results, explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Identifying scientific evidence that has been used to support or refute ideas or arguments.		
	Materials Year 5 Identify and give reasons why materials are used for a specific task or purpose. Compare and group everyday materials based on evidence from comparative and fair tests, based on hardness, solubility, transparency, conductivity (electrical and thermal) and response to magnets. Demonstrate that dissolving, mixing and changes of state are reversible changes. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes. 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 vinegar (acid) on bicarbonate of soda. Describe in detail the properties of liquids, solids and gases. Year 6 Explain how the differences between the properties of different materials can be used to classify substances. Recognise that living things have changed over time and that fossils provide information about living things that inhabited the earth millions of years ago. Describe evaporation and condensation in the water cycle making the link between the rates of evaporation with temperature. Use developing knowledge of solids, liquids and gases to describe how mixtures might be separated, including through filtering, sieving and evaporating.	Plants, Electricity Year 5 Describe using scientific vocabulary the key functions of a plant, including reproduction. Explain scientifically what happens if you change the number of bulbs. Record and construct a series electrical circuit, identifying and naming its basic parts. Identify whether or not a bulb will light in a simple series circuit based on whether or not the bulb is part of a complete loop with a battery. Explain how to/what happens when you connect more than 1 battery. Describe the use of conductors & insulators in wires. Year 6 Describe the features and function of the stigma, root and leaf. Describe the process of photosynthesis. Record and construct a parallel and series electrical circuit, identifying and naming its basic parts. Explain the link between the brightness of a bulb or volume of a buzzer with the number and voltage of cells used in the circuit. 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. Use recognised symbols when representing a simple circuit diagram. Identify whether or not a bulb will light in a simple parallel or series circuit based on whether or not the bulb is part of a complete loop with a battery. 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Science Key Vocabulary	Year 5 Amphibian, Conductivity, Constellation, Embryo, Foetus, Gestation, Reproduction, Resistance, Rotation, Solubility, , Transparency Year 6 Amps, Arteries, Cell, Circulatory, Conductors , Deoxygenated, Insulators , Oxygenated, Refraction, Respiration, Spectrum , Vessels , Veins, Volts, Valve					