

Science	Foundation stage	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
		<p><b>The 2014 Primary National Curriculum states:</b></p> <p>The principle focus...is to enable pupils to experience and observe phenomena, looking more closely at the...world around them. They should be encouraged to be curious and ask questions...They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including:</p> <ul style="list-style-type: none"> <li>• Observing changes over a period of time</li> <li>• Noticing patterns</li> <li>• Grouping and classifying</li> <li>• Carrying out simple comparative tests</li> <li>• Finding things out using secondary sources of information</li> </ul> <p>They should begin to use simple scientific language...and communicate their ideas to a range of audiences in a variety of ways. Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling level.</p>	<p><b>The 2014 Primary National Curriculum states:</b></p> <p>The principle focus...is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including:</p> <ul style="list-style-type: none"> <li>• Observing changes over a period of time</li> <li>• Noticing patterns</li> <li>• Grouping and classifying</li> <li>• Carrying out simple comparative and fair tests</li> <li>• Finding things out using secondary sources of information</li> </ul> <p>They should draw simple conclusions and use some scientific language, first, to talk about and, later, to</p>	<p><b>The 2014 Primary National Curriculum states:</b></p> <p>The principle focus...is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena and analysing functions, relationships and interactions more systematically. ...They should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should select the most appropriate ways to answer science questions using different types of scientific enquiry, including:</p> <ul style="list-style-type: none"> <li>• Observing changes over different periods of time</li> <li>• Noticing patterns</li> <li>• Grouping and classifying things</li> <li>• Carrying out comparative and fair tests</li> </ul>			

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		<p>Most of the learning about science should be done through...first hand, practical experiences, but there should also be some use of appropriate secondary sources...</p> <p><b>Working Scientifically</b> 'Working scientifically' must always be taught through and ...related to the teaching of...science content in the programme of study.</p> <p>During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> <li>□ asking simple questions and recognising that they can be answered in different ways</li> </ul>	<p>write about what they have found out. Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge.</p> <p><b>Working Scientifically</b> 'Working scientifically' must always be taught through and ...related to substantive science content in the programme of study.</p> <p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> <li>□ asking relevant questions and using different types of scientific enquiries to answer them</li> </ul>			<ul style="list-style-type: none"> <li>• Finding things out using a wide range of secondary sources of information</li> </ul> <p>They should draw conclusions based on their data and observations, use evidence to justify their ideas and use their scientific knowledge to and understanding to explain their findings.</p> <p>Pupils should read, spell and pronounce scientific vocabulary correctly.</p> <p><b>Working and Thinking Scientifically</b> 'Working scientifically' must always be taught through and ...related to substantive science content in the programme of study.</p> <p>During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> <li>□ planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary □ taking measurements,</li> </ul>	

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		<ul style="list-style-type: none"> <li>□ observing closely, using simple equipment</li> <li>□ performing simple tests</li> <li>□ identifying and classifying               <ul style="list-style-type: none"> <li>□ using their observations and ideas to suggest answers to questions</li> </ul> </li> <li>□ gathering and recording data to help in answering questions.</li> </ul>		<ul style="list-style-type: none"> <li>□ setting up simple practical enquiries, comparative and fair tests</li> <li>□ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>□ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>□ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>□ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>□ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> <li>□ identifying differences, similarities or changes related to simple scientific ideas and processes</li> </ul>			<ul style="list-style-type: none"> <li>using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>□ recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs               <ul style="list-style-type: none"> <li>□ using test results to make predictions to set up further comparative and fair tests</li> </ul> </li> <li>□ 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               <ul style="list-style-type: none"> <li>□ identifying scientific evidence that has been used to support or refute ideas or arguments.</li> </ul> </li> </ul>

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					□ using straightforward scientific evidence to answer questions or to support their findings.		
<b>Autumn 1</b>	<p><b>Seasonal Change</b></p> <p><b>Nursery and Reception</b></p> <p>Throughout the year, children should experience seasonal change through play and exploring outside in all seasons and in different weather. They should observe living things throughout the year</p>	<p><b>Parts of Animals (Biology)</b></p> <p>□ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>□ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>WS Observing closely, using simple equipment</p> <p>WS Performing simple tests</p> <p>WS Identifying and classifying</p>	<p><b>Living Things (Biology)</b></p> <p>□ Explore and compare the differences between things that are living, dead, and things that have never been alive</p> <p>□ Notice that animals, including humans, have offspring which grow into adults</p> <p>WS Identifying and classifying</p> <p>WS Using their observations and ideas to suggest answers to questions</p> <p>WS Gathering and recording data to help in answering questions.</p> <p>WS Observing closely, using simple equipment</p>	<p><b>Movement and Feeding (Biology)</b></p> <p>□ 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</p> <p>□ Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>WS Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>WS Asking relevant questions and using different types of scientific enquiries to answer them</p>	<p><b>Electricity (Physics)</b></p> <p>□ Identify common appliances that run on electricity</p> <p>□ Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</p> <p>□ 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</p> <p>□ Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>□ Recognise that a switch opens and closes a circuit and associate this with</p>	<p><b>Earth And Space (Physics)</b></p> <p>□ Describe the Sun, Earth and Moon as approximately spherical bodies</p> <p>□ Describe the movement of the Earth, and other planets, relative to the Sun in the solar system</p> <p>□ Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> <p>□ Describe the movement of the Moon relative to the Earth</p> <p>WS Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> <p>WS Planning different types of scientific enquiries to answer</p>	<p><b>Our Bodies (Biology)</b></p> <p>□ Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>□ Describe the ways in which nutrients and water are transported within animals, including humans.</p> <p>□ Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>WS Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p>

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	<p><b>Ourselves and our homes</b></p> <p><b>Nursery and Reception</b> Learn about the lifecycle of humans. Learn how to take care of themselves. Learn about their senses. Identify electrical devices. Use battery powered devices. Talk about keeping safe around electricity.</p> <p><b>Reception</b> Describe people who are familiar to them. Learn about how to take care of themselves.</p>			<p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p><b>WS</b>Using straightforward scientific evidence to answer questions or to support their findings.</p>	<p>whether or not a lamp lights in a simple series circuit</p> <p><b>WS</b>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p><b>WS</b>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p><b>WS</b>Using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>WS</b>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p><b>WS</b>Identifying differences, similarities or changes related to simple scientific ideas and processes</p>	<p>questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p>	<p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>WS</b>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</p>

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<b>Autumn 2</b>	<p><b>Materials</b></p> <p><b>Nursery and Reception</b> Explore a range of materials, Shape and join materials, Combine and mix ingredients, Change materials by heating and cooling including cooking</p> <p><b>Reception</b> Explore a range of materials including natural materials, Make objects from different materials including natural materials, Observe measure and record how materials</p>	<p><b>Identifying Materials (Chemistry)</b></p> <p><b>K</b>Distinguish between an object and the material from which it is made</p> <p><b>K</b>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p><b>WS</b>Observing closely, using simple equipment</p> <p><b>WS</b>Identifying and classifying</p> <p><b>WS</b>Performing simple tests</p> <p><b>WS</b>Asking simple questions and recognising that they can be answered in different ways</p> <p><b>WS</b>Using their observations and ideas to suggest answers to questions</p> <p><b>WS</b>Gathering and recording data to</p>	<p><b>Uses of Materials (Chemistry)</b></p> <p><b>K</b>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</p> <p><b>WS</b>Identifying and classifying</p> <p><b>WS</b>Asking simple questions and recognising that they can be answered in different ways</p> <p><b>WS</b>Observing closely, using simple equipment</p> <p><b>WS</b>Performing simple tests</p> <p><b>WS</b>Using their observations and ideas to suggest answers to questions</p> <p><b>WS</b>Gathering and recording data to</p>	<p><b>Light and Shadows (Physics)</b></p> <p><b>K</b>Recognise that they need light in order to see things and that dark is the absence of light</p> <p><b>K</b>Notice that light is reflected from surfaces</p> <p><b>K</b>Recognise that shadows are formed when the light from a light source is blocked by a solid object</p> <p><b>K</b>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p><b>K</b>Find patterns in the way that the size of shadows change.</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Gathering, recording, classifying and</p>	<p><b>Dangers To Living Things (Biology)</b></p> <p><b>K</b>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p><b>K</b>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p><b>WS</b>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p><b>WS</b>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Using straightforward</p>	<p><b>Life Cycles (Biology)</b></p> <p><b>K</b>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p> <p><b>K</b>Describe the changes as humans develop to old age.</p> <p><b>K</b>Describe the life process of reproduction in some plants and animals.</p> <p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p>	<p><b>Light And Sight (Physics)</b></p> <p><b>K</b>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</p> <p><b>K</b>Recognise that light appears to travel in straight lines</p> <p><b>K</b>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</p> <p><b>K</b>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p><b>WS</b>Recording data and results of increasing complexity using</p>
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	change when heated and cooled, Compare how materials change over time and in different conditions.	help in answering questions.	help in answering questions.	<p>presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>	scientific evidence to answer questions or to support their findings.	<p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p> <p><b>WS</b>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</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p>

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Spring 1	<p><b>Light and Shadow</b></p> <p><b>Nursery and reception</b> Explore light sources, Shine light on or through different materials</p> <p><b>Reception</b> Explore shadows, explore rainbows</p>	<p><b>Comparing Materials (Chemistry)</b></p> <p><b>K</b> Describe the simple physical properties of a variety of everyday materials</p> <p><b>K</b> Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p><b>WS</b> Observing closely, using simple equipment</p> <p><b>WS</b> Identifying and classifying</p> <p><b>WS</b> Asking simple questions and recognising that they can be answered in different ways</p> <p><b>WS</b> Using their observations and ideas to suggest answers to questions</p> <p><b>WS</b> Gathering and recording data to help in answering questions.</p>	<p><b>Changing Shape (Chemistry)</b></p> <p><b>K</b> Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p><b>WS</b> Identifying and classifying</p> <p><b>WS</b> Asking simple questions and recognising that they can be answered in different ways</p> <p><b>WS</b> Observing closely, using simple equipment</p> <p><b>WS</b> Performing simple tests</p> <p><b>WS</b> Gathering and recording data to help in answering questions.</p>	<p><b>Magnets and Forces (Physics)</b></p> <p><b>K</b> Compare how things move on different surfaces</p> <p><b>K</b> Notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p><b>K</b> Describe magnets as having two poles</p> <p><b>K</b> Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p><b>K</b> Observe how magnets attract or repel each other and attract some materials and not others</p> <p><b>K</b> Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and</p>	<p><b>Human Nutrition (Biology)</b></p> <p><b>K</b> Describe the simple functions of the basic parts of the digestive system in humans</p> <p><b>K</b> Identify the different types of teeth in humans and their simple functions</p> <p><b>WS</b> Asking relevant questions and using different types of scientific enquiries to answer them</p> <p><b>WS</b> Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p><b>WS</b> Using results to draw simple</p>	<p><b>Separating Mixtures (Chemistry)</b></p> <p><b>K</b> Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating</p> <p><b>K</b> Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p><b>WS</b> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b> Recording data and results of increasing complexity using scientific diagrams and labels, classification keys,</p>	<p><b>Classifying Living Things (Biology)</b></p> <p><b>K</b> 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</p> <p><b>K</b> Give reasons for classifying plants and animals based on specific characteristics.</p> <p><b>WS</b> Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> <p><b>WS</b> Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking</p>

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	<p><b>How Things Work</b></p> <p><b>Nursery and Reception</b> Feel forces, Explore how things work, Explore how objects and materials are affected by forces.</p> <p><b>Reception</b> Explore how to change how things work, Explore how the wind can move objects, Explore how objects move in water (floating, sinking, gliding ....)</p>	<p><b>WS</b>Performing simple tests</p>		<p>identify some magnetic materials</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p><b>WS</b>Using straightforward scientific evidence</p>	<p>conclusions, make predictions for new values, suggest improvements and raise further questions</p>	<p>tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>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</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p> <p><b>WS</b>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>repeat readings when appropriate</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>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</p> <p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Using test results to make predictions to set up further</p>

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				<p>to answer questions or to support their findings.</p> <p><b>WS</b>Identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p><b>WS</b>Asking relevant questions and using different types of scientific enquiries to answer them</p>			comparative and fair tests
<b>Spring 2</b>	<p><b>Sound</b></p> <p><b>Nursery and Reception</b> Listen to sounds, Make sounds</p> <p><b>Reception</b> Listen to sounds outside and identify the source, Make sounds</p>	<p><b>Changing Seasons (Biology / Physics)</b></p> <p><b>K</b>Observe changes across the four seasons</p> <p><b>K</b>Observe and describe weather associated with the seasons and how day length varies.</p> <p><b>WS</b>Observing closely, using simple equipment</p> <p><b>WS</b>Using their observations and ideas to suggest</p>	<p><b>Feeding and Exercise (Biology)</b></p> <p><b>K</b>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p><b>K</b>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name</p>	<p><b>Rocks and Soils (Chemistry)</b></p> <p><b>K</b>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p><b>K</b>Describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p><b>K</b>Recognise that soils are made</p>	<p><b>Sound (Physics)</b></p> <p><b>K</b>Identify how sounds are made, associating some of them with something vibrating</p> <p><b>K</b>Recognise that vibrations from sounds travel through a medium to the ear</p> <p><b>K</b>Find patterns between the pitch of a sound and features of the object that produced it</p>	<p><b>Types of Change (Chemistry)</b></p> <p><b>K</b>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p><b>K</b>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</p>	<p><b>Changing Circuits (Physics)</b></p> <p><b>K</b>Use recognised symbols when representing a simple circuit in a diagram.</p> <p><b>K</b>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</p> <p><b>K</b>Compare and give reasons for variations in how components</p>

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	<p><b>Earth and Space</b></p> <p><b>Reception</b> Learn about the Earth, Sun, Moon, Planets and stars, Learn about space travel.</p>	<p>answers to questions</p> <p><b>WS</b>Gathering and recording data to help in answering questions.</p> <p><b>WS</b>Asking simple questions and recognising that they can be answered in different way</p>	<p>different sources of food.</p> <p><b>K</b>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><b>WS</b>Identifying and classifying</p> <p><b>WS</b>Performing simple tests</p> <p><b>WS</b>Gathering and recording data to help in answering questions.</p>	<p>from rocks and organic matter.</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p>	<p><b>K</b>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p><b>K</b>Recognise that sounds get fainter as the distance from the sound source increases.</p> <p><b>WS</b>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Identifying differences, similarities or changes related to simple scientific ideas and processes</p>	<p>action of acid on bicarbonate of soda.</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>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</p> <p><b>WS</b>Identifying scientific evidence that has been used</p>	<p>function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> <p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p>

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						<p>to support or refute ideas or arguments.</p> <p><b>WS</b> Using test results to make predictions to set up further comparative and fair tests</p> <p><b>WS</b> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p>	<p><b>WS</b> 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</p> <p><b>WS</b> Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p>
<b>Summer 1</b>	<p><b>Living Things – animals excluding humans</b></p> <p><b>Nursery and Reception</b> Learn about the life cycles of animals,</p>	<p><b>Plants (Biology)</b></p> <p><b>K</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p><b>K</b> Identify and describe the basic structure of a variety of common</p>	<p><b>Growing Plants (Biology)</b></p> <p><b>K</b> Observe and describe how seeds and bulbs grow into mature plants</p> <p><b>K</b> Find out and describe how plants need water, light and a suitable temperature to</p>	<p><b>What Plants Need (Biology)</b></p> <p><b>K</b> 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</p>	<p><b>Grouping Living Things (Biology)</b></p> <p><b>K</b> Recognise that living things can be grouped in a variety of ways</p> <p><b>K</b> Explore and use classification keys to help group, identify and name a variety of living things in their local</p>	<p><b>Materials (Chemistry)</b></p> <p><b>K</b> Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and</p>	<p><b>Evolution And Inheritance (Biology)</b></p> <p><b>K</b> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth</p>

Science	Foundation stage	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	<p>Compare adult animals to their babies, Observe how baby animals change over time.</p> <p><b>Reception</b> Name and describe animals that live in different habitats, Describe different habitats.</p>	<p>flowering plants, including trees.</p> <p><b>WS</b> Observing closely, using simple equipment</p> <p><b>WS</b> Identifying and classifying</p> <p><b>WS</b> Gathering and recording data to help in answering questions.</p>	<p>grow and stay healthy.</p> <p><b>WS</b> Observing closely, using simple equipment</p> <p><b>WS</b> Asking simple questions and recognising that they can be answered in different ways</p> <p><b>WS</b> Performing simple tests</p> <p><b>WS</b> Using their observations and ideas to suggest answers to questions</p>	<p><b>WS</b> Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b> Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p><b>WS</b> Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b> Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p><b>WS</b> Identifying differences, similarities or</p>	<p>and wider environment</p> <p><b>WS</b> Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p><b>WS</b> Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b> Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p><b>WS</b> Reporting on findings from enquiries, including oral and written explanations, displays or presentations of</p>	<p>response to magnets</p> <p><b>K</b> Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p><b>WS</b> Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p><b>WS</b> 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</p> <p><b>WS</b> Identifying scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>millions of years ago</p> <p><b>K</b> Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p><b>K</b> Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p> <p><b>WS</b> Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> <p><b>WS</b> Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b> Reporting and presenting findings from enquiries, including conclusions, causal</p>

Science	Foundation stage	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
				<p>changes related to simple scientific ideas and processes</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Using straightforward scientific evidence to answer questions or to support their findings.</p> <p><b>WS</b>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p>	<p>results and conclusions</p> <p><b>WS</b>Using straightforward scientific evidence to answer questions or to support their findings.</p>	<p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p>	<p>relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</p>
<b>Summer 2</b>	<p><b>Living Things and their habitats</b></p> <p><b>Nursery and Reception</b></p>	<p><b>Types of Animals (Biology)</b></p> <p><b>K</b>Identify and name a variety of common animals including fish, amphibians,</p>	<p><b>Habitats (Biology)</b></p> <p><b>K</b>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of</p>	<p><b>Parts of Plants (Biology)</b></p> <p><b>K</b>Identify and describe the functions of different parts of flowering plants:</p>	<p><b>Changes of State (Chemistry)</b></p> <p><b>K</b>Compare and group materials together, according to whether they are solids, liquids or gases</p>	<p><b>Forces (Physics)</b></p> <p><b>K</b>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth</p>	<p><b>Review, consolidate and assess</b></p> <p><b>WS</b>Identifying scientific evidence that has been used to support or refute</p>

Science	Foundation stage	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	<p>Explore the surrounding natural environment, Explore natural objects from the surrounding environment.</p> <p><b>Reception</b></p> <p>Explore the plants in the surrounding natural environment, Explore the animals in the surrounding natural environment, Explore plants and animals in a contrasting natural environment, Grow plants.</p>	<p>reptiles, birds and mammals</p> <p><b>K</b>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p><b>WS</b>Observing closely, using simple equipment</p> <p><b>WS</b>Identifying and classifying</p> <p><b>WS</b>Gathering and recording data to help in answering questions.</p>	<p>different kinds of animals and plants, and how they depend on each other</p> <p><b>K</b>Identify and name a variety of plants and animals in their habitats, including micro-habitats</p> <p><b>WS</b>Identifying and classifying</p> <p><b>WS</b>Gathering and recording data to help in answering questions.</p> <p><b>WS</b>Observing closely, using simple equipment</p> <p><b>WS</b>Asking simple questions and recognising that they can be answered in different ways</p>	<p>roots, stem/trunk, leaves and flowers</p> <p><b>K</b>Investigate the way in which water is transported within plants</p> <p><b>K</b>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p><b>WS</b>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Gathering, recording, classifying and presenting data in a variety of ways to</p>	<p><b>K</b>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)</p> <p><b>K</b>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p><b>WS</b>Identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p><b>WS</b>Setting up simple practical enquiries, comparative and fair tests</p> <p><b>WS</b>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard</p>	<p>and the falling object</p> <p><b>K</b>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</p> <p><b>K</b>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p> <p><b>WS</b>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p> <p><b>WS</b>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><b>WS</b>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and</p>	<p>ideas or arguments.</p>

Science	Foundation stage	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
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				<p>help in answering questions</p> <p><b>WS</b>Using straightforward scientific evidence to answer questions or to support their findings.</p>	<p>units, using a range of equipment, including thermometers and data loggers</p> <p><b>WS</b>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p>	<p>degree of trust in results, in oral and written forms such as displays and other presentations</p> <p><b>WS</b>Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p><b>WS</b>Using test results to make predictions to set up further comparative and fair tests</p> <p><b>WS</b>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>	
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