

Curriculum Overview

	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Year 1	The Human Body 1. Introduction to Our Body and Our Senses 2. Eyes and Sight 3. Ears and Hearing 4. Touch, taste and smell 5. Understanding Sensory Impairment <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>identifying and classifying</i> ask people questions and use simple secondary sources to find answers	Plants 1. What plants need 2. Parts of plants 3. Seeds 4. Deciduous and evergreen plants Plants we eat <i>asking simple questions and recognising that they can be answered in different ways</i> <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i> <i>use simple features to compare objects, materials and livingthings and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they shouldbegin to notice patterns and relationships.</i> <i>use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they</i>	Seasons and Weather 1. The four seasons 2. Tools to record the weather 3. Using a graph to show information about the weather 4. Clouds and what they tell us: cirrus, cumulus and stratus weather forecasting <i>asking simple questions and recognising that they can be answered in different ways</i> <i>observing closely, using simple equipment</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i> <i>use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific</i>	Taking Care of the Earth 1. Taking Care of the Earth 2. Earth's Natural Resources 3. Logging 4. Pollution 5. Recycling <i>identifying and classifying</i> <i>ask people questions and use simple secondary sources to find answers</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	Animals and their Needs 1. Amazing Animals (Introduction to Animals) 2. Grouping animals: Fish, amphibians, reptiles, birds and mammals 3. Grouping animals: carnivores, herbivores and omnivores 4. Animals as pets 5. Describing animals <i>identifying and classifying</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>use simple features to compare objects, materials and livingthings and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they shouldbegin to notice patterns and relationships</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	Materials and Magnets 1. Everyday Materials 2. Properties of Materials 3. Uses of Materials 4. Magnets 5. Investigation <i>asking simple questions and recognising that they can be answered in different ways</i> <i>identifying and classifying</i> <i>gathering and recording data to help in answering questions</i> <i>use simple features to compare objects, materials and livingthings and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they shouldbegin to notice patterns and relationships</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>

		<i>have found out and how they found it out</i>	<i>language (with help)</i>			
		<i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>				

	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Year 2	Electricity 1. Introduction to Electricity 2. Safety 3. Exploring Circuits (A) 4. Exploring Circuits (B) 5. Investigating conductive and non-conductive materials <i>identifying and classifying</i> <i>ask people questions and use simple secondary sources to find answers</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	Astronomy 1. Introduction to Astronomy 2. Model the Solar System 3. Orbit and Rotation 4. The Moon and its Phases 5. Constellations <i>asking simple questions and recognising that they can be answered in different ways</i> <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>identifying and classifying</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i> <i>use simple features to compare objects, materials and living things and, with help, decide how to sort and group them, observe changes over time, and, with guidance, they should begin to notice patterns and relationships</i> <i>use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out</i>	Materials and Matter 1. Materials and their uses 2. George de Mestral and Velcro 3. Matter under the microscope 4. Changing Solid Objects 5. Liquids and their properties <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i> <i>use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	The Human Body 1. Animals, including humans, survival and offspring 2. The Skeletal System, The Muscular System and Exercise 3. The Digestive system and Healthy Eating 4. The Circulatory system Germes, diseases and preventing illness <i>asking simple questions and recognising that they can be answered in different ways</i> <i>ask people questions and use simple secondary sources to find answers</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	Plants 1. Plants around us 2. Seeds and bulbs 3. Comparative test 1 4. Comparative Test 2 5. Food and Farming <i>asking simple questions and recognising that they can be answered in different ways</i> <i>observing closely, using simple equipment</i> <i>performing simple tests</i> <i>Using their observations and ideas to suggest answers to questions</i> <i>gathering and recording data to help in answering questions</i> <i>use simple measurements and equipment (for example, hand lenses, egg timers) to gather data, carry out simple tests, record simple data, and talk about what they have found out and how they found it out</i> <i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>	Living Things in their Environments 1. Dead or Alive 2. What is a habitat? 3. Rainforest and Desert habitats 4. Meadow habitats 5. Underground habitats <i>asking simple questions and recognising that they can be answered in different ways</i>

		<i>Record and communicate their findings in a range of ways and begin to use simple scientific language (with help)</i>				
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	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Year 3	The Human Body 1. The Muscular System 2. The Skeletal System 3. The Nervous System 4. Preparing to Eat 5. The Digestive System <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>record findings using simple scientific language, drawings, labelled diagrams, keys bar charts and tables</i> <i>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i> <i>identifying differences, similarities or changes related to simple scientific ideas and processes</i> <i>talk about criteria for grouping, sorting and classifying; and use simple keys</i> <i>make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used</i>	Rocks 1. Sorting rocks 2. How Rocks are Formed 3. Permeability 4. Fossils 6. Soil <i>Asking relevant questions and using different types of scientific enquiries to answer them.</i> <i>setting up simple practical enquiries, comparative and fair tests</i> <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>scientific language, drawings, labelled diagrams, keys bar charts and tables</i> <i>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i> <i>identifying differences, similarities or changes related to simple scientific ideas and processes</i> <i>using straightforward scientific evidence to answer questions or to support their findings</i> <i>recognise when a simple fair test is necessary and help to decide how</i>	Light 1. Light and Dark 2. Transparent and opaque surfaces 3. Mirrors and reflection 4. Shadows 5. Finding patterns in changing shadows <i>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</i> <i>identifying differences, similarities or changes related to simple scientific ideas and processes</i>	Plants 1. Botany and Flowering Plants 2. Requirements for life and growth 3. Water transportation in plants 4. Pollination in Flowering Plants 5. Seed Dispersal <i>Asking relevant questions and using different types of scientific enquiries to answer them.</i> <i>setting up simple practical enquiries, comparative and fair tests</i> <i>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</i> <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>scientific language, drawings, labelled diagrams, keys bar charts and tables</i> <i>g results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i> <i>identifying differences, similarities</i>	Cycles in Nature 1 The Four Seasons (prior learning) 2 Seasonal Cycles in Plants 3 Life Cycle of a Plant 4 Animal Migration 5 Life Cycle of a Frog <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>scientific language, drawings, labelled diagrams, keys bar charts and tables</i> <i>identifying differences, similarities or changes related to simple scientific ideas and processes</i> <i>how to use new equipment, including thermometers and data loggers</i> <i>look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions</i> <i>use relevant scientific language to discuss their ideas and communicate their findings</i>	Forces and Magnets 1. Forces (Gravity) 2. Friction 3. Magnet 4. Magnetic Poles and Fields 5. Investigating the strength of magnets <i>Asking relevant questions and using different types of scientific enquiries to answer them.</i> <i>setting up simple practical enquiries, comparative and fair tests</i> <i>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</i> <i>gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</i> <i>scientific language, drawings, labelled diagrams, keys bar charts and tables</i> <i>reporting on findings from enquiries, including oral and written explanations, displays or presentations of results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</i> <i>identifying differences, similarities or changes related to simple scientific</i>

		to set it up talk about criteria for grouping, sorting and classifying; and use simple keys talk about criteria for grouping, sorting and classifying; and use simple keys make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions		or changes related to simple scientific ideas and processes talk about criteria for grouping, sorting and classifying; and use simple keys collect data from their own observations and measurements, using notes, simple tables and standard units and help to make decisions about how to record and analyse this data		ideas and processes using straightforward scientific evidence to answer questions or to support their findings recognise when a simple fair test is necessary and help to decide how to set it up make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used how to use new equipment, including thermometers and data loggers collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done
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	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Year 4	The Human Body - Cells and Nutrients - Teeth and Senses - Digestion - A Healthy Diet - Vitamins and Minerals scientific language, drawings, labelled diagrams, keys bar charts and tables identifying differences, similarities or changes related to simple scientific ideas and processes talk about criteria for grouping, sorting and classifying; and use simple keys	Classification of Plants and Animals - Introduction to classification - Classes of vertebrates: Fish and Amphibians - Classes of vertebrates: Reptiles, Birds and Mammals - Classes of invertebrates: Insects, Arachnids and Molluscs - Classification of Plants 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 scientific language, drawings, labelled diagrams, keys bar charts and tables 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	Electricity - Electrical Safety - Parts of a circuit - Switches - Thomas Edison and Lewis Latimer - Investigating conductive and non-conductive materials setting up simple practical enquiries, comparative and fair tests scientific language, drawings, labelled diagrams, keys bar charts and tables using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions recognise when a simple fair test is necessary and help to decide how to set it up how to use new equipment, including thermometers and data loggers look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions making predictions for new values within or beyond the data they have collected and finding ways of	Ecology - Living things and Habitats - Natural Cycles - Web of Living Things - Human Threats to the Environment Ecology in our Local Area Asking relevant questions and using different types of scientific enquiries to answer them. setting up simple practical enquiries, comparative and fair tests gathering, recording, classifying and presenting data in a variety of ways to help in answering questions 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 talk about criteria for grouping, sorting and classifying; and use simple keys make decisions about what observations to make, how long to make them for and the type of simple equipment that might be	Sound - What is sound? - Speed of sound - Qualities of sound – Pitch and Volume - Human Voice - Ears- how we hear Asking relevant questions and using different types of scientific enquiries to answer them. setting up simple practical enquiries, comparative and fair tests gathering, recording, classifying and presenting data in a variety of ways to help in answering questions scientific language, drawings, labelled diagrams, keys bar charts and tables 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 recognise when a simple fair test is necessary and help to decide how to set it up make decisions about what observations to make, how long to	The Water Cycle - States of Matter - Evaporation - Condensation - Precipitation - The Water Cycle setting up simple practical enquiries, comparative and fair tests scientific language, drawings, labelled diagrams, keys bar charts and tables identifying differences, similarities or changes related to simple scientific ideas and processes recognise when a simple fair test is necessary and help to decide how to set it up make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used how to use new equipment, including thermometers and data loggers look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done

		<i>scientific ideas and processes</i> <i>look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions</i> <i>making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done</i>	<i>improving what they have already done</i>	<i>used</i> <i>look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions</i> <i>making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done</i>	<i>make them for and the type of simple equipment that might be used</i> <i>look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions</i> <i>making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done</i> <i>making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done</i>	
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Year 5	Materials - Properties of materials - Which material is best? - Solubility- which materials are most soluble/what solubility means - Separating mixtures- sieving, filtering, evaporating - Reversible changes- dissolving, mixing, change of state <i>Planning different types of scientific enquiries to answer questions, including recognizing and controlling variables</i> <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Using test results to make predictions and set up further comparative and fair tests</i> <i>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms</i>	Forces - Forces including gravity - Air resistance, water resistance and friction - Guided investigation: Paper Drop - Guided investigation: Paper Drop - Pulleys, gears and levers <i>Planning different types of scientific enquiries to answer questions, including recognizing and controlling variables</i> <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs bar and line graphs</i> <i>Using test results to make predictions and set up further comparative and fair tests</i> <i>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and</i>	Meteorology - Meteorology and the Atmosphere - The Ozone Layer - Air Movement - Cold and Warm Fronts - Thunder and Lightning <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs bar and line graphs</i> <i>Choose the most appropriate equipment to make measurements and explain how to use it accurately</i>	Astronomy - The Big Bang and the expanding universe - Gravity - Our Solar System - The Moon - Our Galactic neighbourhood <i>Identifying scientific evidence that has been used to support or refute arguments</i> <i>Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them</i> <i>Look for different causal relationships in their data and identify evidence that refutes or supports their ideas</i> <i>Talk about how scientific ideas have developed over time</i>	Living Things - Life cycles of plants and animals in our local area - Reproduction in Plants - Life cycles of Mammals and Amphibians - Life cycles of insects and birds - The work of David Attenborough and Jane Goodall <i>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</i> <i>Identifying scientific evidence that has been used to support or refute arguments</i> <i>Plan the most appropriate type of scientific enquiry to use and to answer scientific questions</i> <i>Use and develop keys and other information records to identify, classify and describe living things and</i>	The Human Body: - Human Growth Stages - Adolescence and Puberty - Slowing Down - Growth in Humans and Animals - Preparation for Assessment (research and scientific drawing) <i>Planning different types of scientific enquiries to answer questions, including recognizing and controlling variables</i> <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs bar and line graphs</i> <i>Using test results to make predictions and set up further comparative and fair tests</i> <i>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</i>

such as displays and other presentations <i>Identifying scientific evidence that has been used to support or refute arguments</i> Plan the most appropriate type of scientific enquiry to use and to answer scientific questions Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why Use and develop keys and other information records to identify, classify and describe living things and materials Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them Choose the most appropriate equipment to make measurements and explain how to use it accurately Decide how to record data from a choice of familiar approaches Look for different causal relationships in their data and identify evidence that refutes or	degree of trust in results, in oral and written forms such as displays and other presentations <i>Identifying scientific evidence that has been used to support or refute arguments</i> Plan the most appropriate type of scientific enquiry to use and to answer scientific questions Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them Decide how to record data from a choice of familiar approaches Look for different causal relationships in their data and identify evidence that refutes or supports their ideas Use their results to identify when further tests and observations might be needed			materials	displays and other presentations <i>Identifying scientific evidence that has been used to support or refute arguments</i> Plan the most appropriate type of scientific enquiry to use and to answer scientific questions Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them Look for different causal relationships in their data and identify evidence that refutes or supports their ideas Use their results to identify when further tests and observations might be needed Talk about how scientific ideas have developed over time
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	<i>supports their ideas</i>					
	<i>Use their results to identify when further tests and observations might be needed</i>					

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Year 6	The Human Body 1. The Heart: Circulation of the Blood 2. Blood Vessels and Transport 3. Components of Human Blood 4. Blood Pressure and Heart Rate 5. Heart Rate- an Investigation <i>Plan the most appropriate type of scientific enquiry to use and to answer scientific questions</i> <i>Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them</i> <i>Choose the most appropriate equipment to make measurements and explain how to use it accurately</i> <i>Use their results to identify when further tests and observations might be needed</i>	Evolution 1. Fossils and Evolution 2. Inheritance 3. Adaptation 4. Charles Darwin 5. Alfred Wallace <i>Use and develop keys and other information records to identify, classify and describe living things and materials</i>	Classification of Living Things 1. Classifying organisms 2. Cells: Plant and Animal cells 3. Taxonomy 4. Vertebrates Invertebrates <i>Use and develop keys and other information records to identify, classify and describe living things and materials</i>	Electricity 1. Simple Series Circuits 2. Parallel Circuits 3. Switches 4. Planning an investigation <i>Planning different types of scientific enquiries to answer questions, including recognizing and controlling variables</i> <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs bar and line graphs</i> <i>Using test results to make predictions and set up further comparative and fair tests</i> <i>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms</i>	Light 1. How light travels 2. How we see 3. Shadows and their shapes 4. The Colour of Light Making a periscope <i>Planning different types of scientific enquiries to answer questions, including recognizing and controlling variables</i> <i>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</i> <i>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs bar and line graphs</i> <i>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</i> <i>Identifying scientific evidence that has been used to support or refute</i>	Reproduction 1. Asexual reproduction 2. Sexual reproduction in non-flowering plants 3. Sexual reproduction in flowering plants 4. Reproduction in animals 5. Growth stages <i>Use and develop keys and other information records to identify, classify and describe living things and materials</i>

				such as displays and other presentations <i>Identifying scientific evidence that has been used to support or refute arguments</i> <i>Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why</i> <i>Make their own decisions about what observations to make, what measurements to use and how long to make them for, and whether to repeat them</i> <i>Choose the most appropriate equipment to make measurements and explain how to use it accurately</i> <i>Look for different causal relationships in their data and identify evidence that refutes or supports their ideas</i> <i>Use their results to identify when further tests and observations might be needed</i>	<i>arguments</i> <i>Use and develop keys and other information records to identify, classify and describe living things and materials</i> <i>Talk about how scientific ideas have developed over time</i>	
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Key:

Black non-italic – topic headings

Coloured italic phrases – statutory guidance that show progression

Black italic – notes and guidance to support