



*'Inspiring Excellence for All'*

**Passion**

Excitement for learning  
–knowledge the children will acquire

**Urgency**

The learning journey through the topic

**Positivity**

Building the skills of collaboration, resilience and communication (both written and oral)

**Aspiration**

Cultural capital – experiences and trips the children will have

**Commitment**

Skills the children will acquire now or over time

**Progression of Skills  
In Science**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Planning and Predicting</b>	<p>Suggest what might happen and ways in which ideas can be tested</p> <p>Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement</p>	<p>Suggest what might happen and ways in which ideas can be tested</p> <p>Know that scientific enquiry involves asking questions, collecting evidence through observation and measurement</p>	<p>Be able to predict the outcome of investigations</p> <p>Be able to link evidence to broader scientific knowledge and understanding</p> <p>Be able to use evidence to draw conclusions</p> <p>Understand the</p>	<p>Be able to predict the outcome of investigations</p> <p>Be able to gather information from simple texts</p> <p>Understand the importance of collecting scientific evidence</p>	<p>Be able to gather evidence from a variety of sources</p> <p>Know that the study of science is concerned with investigating and understanding the animate and inanimate world around them</p> <p>Be able to gather evidence from a variety of sources</p> <p>Understand the importance of using evidence to</p>	<p>Know that the study of science is concerned with investigating and understanding the animate and inanimate world around them</p> <p>Be able to gather evidence from a variety of sources</p> <p>Understand the importance of using evidence to</p>

	<p>Be able to pose simple scientific questions</p> <p>Be able to identify ways of finding out about scientific issues</p>	<p>Be able to pose simple scientific questions</p> <p>Be able to identify ways of finding out about scientific issues</p>	<p>importance of collecting scientific evidence</p> <p>Understand some of the effects of what they learn on people's lives</p> <p>Be able to gather information from simple texts</p>		<p>world around them</p> <p>Be able to conduct scientific investigations posing scientific questions</p> <p>Be able to choose an appropriate way to investigate a scientific issue</p> <p>Understand the importance of using evidence to test scientific ideas</p>	<p>test scientific ideas</p> <p>Be able to gather evidence from a variety of sources</p> <p>Be able to conduct scientific investigations posing scientific questions</p> <p>Be able to choose an appropriate way to investigate a scientific issue</p>
<b>Investigating and observing</b>	<p>Observe what might happen using the senses</p> <p>Observing closely, using simple equipment and measurements</p>	<p>Observe closely using simple equipment and measurements</p> <p>Perform simple tests</p>	<p>Be able to carry out simple investigations</p> <p>Be able to prepare a simple investigation which is fair, with</p>	<p>Be able to carry out simple investigations</p> <p>Be able to prepare a simple investigation which is fair,</p>	<p>Be able to discriminate between evidence and opinion</p> <p>Be able to make systematic and</p>	<p>Be able to discriminate between evidence and opinion</p> <p>Be able to make systematic and accurate</p>

	<p>Make single comparisons and groupings</p> <p>Be able, with help, to conduct simple investigations</p> <p>Be able, with help, to gather information from simple texts</p>	<p>Make single comparisons and groupings</p> <p>Be able, with help, to conduct simple investigations</p> <p>Be able, with help, to gather information from simple texts</p>	<p>one changing factor</p> <p>Be able to predict the outcome of investigations</p> <p>Be able to use simple scientific equipment</p> <p>Be able to test ideas using evidence from observation and measurement</p>	<p>with one changing factor</p> <p>Be able to use simple scientific equipment</p> <p>Be able to test ideas using evidence from observation and measurement</p>	<p>accurate measurements from their observations</p> <p>Be able to explain and justify their predictions, investigations, findings and conclusions</p> <p>Be able to gather evidence from a variety of sources</p> <p>Be able to make systematic and accurate measurements from their observations</p>	<p>measurements from their observations</p> <p>Be able to explain and justify their predictions, investigations, findings and conclusions</p> <p>Be able to gather evidence from a variety of sources</p> <p>Be able to make systematic and accurate measurements from their observations</p>
<p><b>Recording, analysing and evaluating</b></p>	<p>Communicate findings in simple ways</p> <p>Use scientific language</p>	<p>Use scientific language</p> <p>Begin to notice patterns and relationships</p>	<p>Be able to use evidence to draw conclusions</p> <p>Understand some of the</p>	<p>Be able to use evidence to draw conclusions</p> <p>Understand some of the</p>	<p>Be able to record and communicate their findings accurately using the most appropriate</p>	<p>Be able to record and communicate their findings accurately using the most appropriate</p>

	Begin to notice patterns and relationships	Use observations to suggest answers to questions	effects of what they learn on people's lives	effects of what they learn on people's lives  Be able to link evidence to broader scientific knowledge and understanding	medium and the appropriate scientific vocabulary and conventions  Understand some of the effects of what they learn on people's lives	medium and the appropriate scientific vocabulary and conventions  Understand some of the effects of what they learn on people's lives
<b>Living things, including plants</b>	Know the names of the parts of plants  Know that seeds grow into plants  Know that plants need light to grow  Know that plants need water to grow	Know about the basic conditions needed for living things to survive  Know about the differences between living things and things that have never been alive  Know that living things grow and reproduce  Know that the features of the school environment affect the types	Know about the effects that light, air, water and temperature have on plants  Know about the functions of leaves  Know about the life cycle of plants  Be able to classify plants according to their features  Know about the effects that light, air, water and	Know about ways in which animals and plants are suited to different environments	Know about the major classifications of living things  Be able to recognise and name the major plants and animals in the host country  Know that changes in the environment have effects on living things  Be able to recognise and name the major plants and	

		<p>of living things found there</p> <p>Be able to sort living things into simple groups</p> <p>Be able to recognise living things in the school environment</p> <p>Understand that different locations support different living things</p> <p>Know the names and characteristics of a range of animals</p> <p>Know the names of the parts of plants</p> <p>Know that seeds grow into plants</p>	<p>temperature have on plants</p> <p>Know about processes and conditions that have an effect on living things</p> <p>Know about the principles of nutrition, growth, movement and reproduction</p> <p>Know about the living things that are supported by different environments</p> <p>Know about ways in which animals and plants are suited to different environments</p> <p>Know about the frequently occurring animals and plants that are</p>		<p>animals in their home country</p> <p>Understand the relationship between living things and the environment in which they live</p> <p>Know about the functions of the major parts of a plant</p> <p>Know about factors that affect the growth of plants</p> <p>Know about the function of roots in anchoring and feeding plants</p> <p>Know about the conditions needed for germination</p>	
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		<p>Know that plants need light and water to grow</p>	<p>supported by the environment around the school</p> <p>Know about food chains in the local environment</p> <p>Know about the effects that light, air, water and temperature have on plants</p>			
<p><b>Animals, including humans</b></p>	<p>Know about the basic conditions needed for living things to survive</p> <p>Know about the differences between living things and things that have never been alive</p> <p>Know that living things grow and reproduce</p> <p>Know that the features of the</p>	<p>Know about the basic conditions needed for living things to survive</p> <p>Know that living things grow and reproduce</p> <p>Be able to sort living things into simple groups</p> <p>Know the names of the main external body</p>	<p>Know about processes and conditions that have an effect on living things</p> <p>Know about the principles of nutrition, growth, movement and reproduction</p> <p>Know about the function and care of teeth in humans and other animals</p>	<p>Know about the principles of nutrition, growth, movement and reproduction</p> <p>Know about the function and care of teeth in humans and other animals</p> <p>Know about the effect of exercise on the human body</p>	<p>Know about the structure of the human body</p> <p>Know the functions of the major internal and external parts of the human body</p> <p>Know about similarities and differences between humans and other creatures</p>	<p>Know about the structure of the human body</p> <p>Know the functions of the major internal and external parts of the human body</p> <p>Know about the structure of the human body</p> <p>Know about similarities and differences</p>

	<p>school environment affect the types of living things found there</p> <p>Be able to sort living things into simple groups</p> <p>Be able to recognise living things in the school environment</p> <p>Know the names of the main external body parts of humans and animals</p> <p>Know the names and characteristics of a range of animals</p> <p>Know about the importance of exercise and healthy eating</p>	<p>parts of humans and animals</p> <p>Know the names and characteristics of a range of animals</p> <p>Know about the importance of exercise and healthy eating</p> <p>Know about the role of drugs as medicines</p> <p>Know about the senses</p> <p>Be able to recognise similarities and differences between themselves and other people</p>	<p>Know about the function and actions of the heart in humans and other animals</p> <p>Know about the functions of skeletons and muscles in humans and some other animals</p> <p>Know about the main stages of the human life cycle</p> <p>Know about the effect of exercise on the human body</p> <p>Know about the effects that tobacco and alcohol have on the human body</p>	<p>Know about the effect of diet on the human body</p> <p>Know about the function and actions of the heart in humans and other animals</p> <p>Know about the functions of skeletons and muscles in humans and some other animals</p> <p>Know about the main stages of the human life cycle</p> <p>Know about the effects that tobacco and alcohol have on the human body</p>		<p>between humans and other creatures</p> <p>Know about the ways in which humans and other animals reproduce</p> <p>Know that some characteristics of humans and other animals are inherited from their parents</p>
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	<p>Know about the senses</p> <p>Be able to recognise similarities and differences between themselves and other people</p> <p>Understand how to treat animals with care and sensitivity</p> <p>Know the names of the main external body parts of humans and animals</p>		<p>Know about the effect of diet on the human body</p>			
<b>Everyday materials</b>	<p>Know the names and properties of a range of materials</p> <p>Know about the uses of different materials</p> <p>Know what happens when various materials</p>	<p>Know about the uses of different materials</p> <p>Be able to describe similarities and differences between materials</p>	<p>Be able to compare common materials and objects according to their properties</p> <p>Understand that different materials are suited for</p>	<p>Be able to compare common materials and objects according to their properties</p> <p>Understand that different materials are suited for</p>	<p>Know the distinctive properties of different materials</p> <p>Know about the principles of materials acting as thermal insulators</p>	

	<p>are squashed, bent, twisted, stretched, heated or cooled</p> <p>Be able to describe similarities and differences between materials</p> <p>Be able to sort materials into groups according to their properties</p> <p>Understand that the uses to which materials are put depend on their properties</p>	<p>Be able to sort materials into groups according to their properties</p> <p>Understand that the uses to which materials are put depend on their properties</p> <p>Know the names and properties of a range of materials</p> <p>Know about the uses of different materials</p> <p>Understand that the uses to which materials are put depend on their properties</p>	<p>different purposes</p> <p>Know about the principles of magnets and magnetic and non-magnetic materials</p>	<p>different purposes</p> <p>Know that some materials conduct electricity</p> <p>Know that some materials conduct heat more effectively than others</p> <p>Know that temperature is a measure of heat</p> <p>Be able to distinguish between solids, liquids and gases</p> <p>Know that some changes in materials are reversible and others are irreversible</p>	<p>Know what happens when materials are heated and cooled</p> <p>Know about the principles of condensation and evaporation</p> <p>Know about differences between metals and other materials</p> <p>Know that matter is made up of particles</p> <p>Know about the different arrangements of particles in solids, liquids and gases</p> <p>Be able to group and classify materials</p>	
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<b>Light</b>		<p>Know that darkness is the absence of light</p> <p>Understand that sound and light come from a</p>	<p>Know that light travels from a source</p> <p>Know that objects form shadows when they block the</p>	<p>Know that light travels from a source</p> <p>Know that objects form shadows when they block the</p>	<p>Know that light travels in a straight line until it strikes an object</p> <p>Know that light travels through some materials</p>	

		<p>variety of sources</p> <p>Be able to describe the actions that result in changes in light, sound or movement</p>	<p>passage of light from a source</p>	<p>passage of light from a source</p>	<p>and not through others</p>	
<p><b>Forces and Magnets</b></p>		<p>Know how a range of forces, including pushes and pulls, can move object</p>	<p>Know that forces can have direction</p> <p>Know that forces differ in size</p>	<p>Know that forces can have direction</p> <p>Know that forces differ in size</p> <p>Know about the effects of friction</p> <p>Know about the principles of magnets and magnetic and non-magnetic materials</p>	<p>Know about the nature and effect of gravitational force</p> <p>Be able to identify the effects of physical forces</p> <p>Be able to measure forces</p> <p>Be able to identify the direction of forces</p> <p>Know how energy sources are obtained</p>	

					<p>Know how energy sources are used</p> <p>Know the basic principles of renewable and sustainable energy</p>	
<b>Electricity</b>		<p>Know about everyday appliances that use electricity</p> <p>Know how simple electrical circuits operate and the effects they have on different devices</p> <p>Know the function of a switch in an electrical circuit</p>		<p>Be able to construct electrical circuits to make devices work</p> <p>Be able to change the type or number of components in a circuit to have a different effect</p>	<p>Be able to represent electrical circuits in drawings using conventional symbols</p> <p>Be able to vary an electrical circuit to change its effect</p>	
<b>Sound</b>		<p>Understand that sound and light come from a variety of sources</p> <p>Be able to describe the</p>	<p>Know that sounds are made when objects vibrate</p>	<p>Know that sounds are made when objects vibrate</p> <p>Be able to create sounds</p>		

		<p>actions that result in changes in light, sound or movement</p> <p>Know that sounds travel from sources</p> <p>Know that sounds are heard when they enter the ear</p>		<p>with a variety of objects</p> <p>Be able to change sounds by altering variables</p>		
<b>Earth and Space</b>			<p>Know that the sun, earth and moon are approximately spherical</p> <p>Know that the position of the sun appears to change during the course of a day and that shadows change as a result</p>		<p>Know about the relationship between the Earth and the rest of the solar system</p> <p>Know that day and night are related to the Earth spinning on its axis</p> <p>Know about the time taken for the Earth to orbit the Sun and for the Moon to orbit the Earth</p>	

					<p>Know about the effects caused by the Earth moving</p> <p>Know about the major sources of energy</p> <p>Know how energy sources occur</p>	
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