



**Long Term Planning**  
**Science**  
**Year One**

Our children work scientifically by: - investigating - enquiring - experimenting	We map the National Curriculum content onto each half term and deliver Science lessons though our own pathway. Science lessons are practical and relatable to real-life.
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1</b>	Seasonal changes  Animals, including humans	Seasonal changes  Everyday materials	Animals, including humans	Seasonal changes  Plants	Seasonal changes  Everyday materials	Animals, including humans
<b>Overview</b>	<p>Pupils should have plenty of opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes.</p> <p>Pupils should observe and talk about changes in the weather and the seasons.</p>	<p>Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.</p> <p>Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil.</p> <p>Pupils should observe and talk about changes in the weather and the seasons.</p>	<p>Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat.</p> <p>They should understand how to take care of animals taken from their local environment and the need to return them safely after study.</p> <p>Pupils should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets</p>	<p>Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat.</p> <p>Where possible, they should observe the growth of flowers and vegetables that they have planted.</p> <p>They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem).</p>	<p>Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent.</p> <p>Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil.</p> <p>Pupils should observe and talk about changes in the weather and the seasons.</p>	<p>Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat.</p> <p>They should understand how to take care of animals taken from their local environment and the need to return them safely after study.</p> <p>Pupils should become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets.</p>

<p><b>Knowledge</b></p>	<p><b>(PZAZ Y1.11)</b> To identify, name, draw and label the basic parts of the human body. <b>neck elbows eyebrows earlobes forehead lips tongue cheeks wrist hips thighs</b></p> <p>To know which part of the body is associated with each sense. <b>(PZAZ1.12 &amp; 1.13)</b></p> <p>To know how to describe textures, sounds and smells using your senses. <b>(PZAZ1.12 &amp; 1.13)</b></p> <p>To know and observe changes across the four seasons <b>(PZAZ 1.1 &amp; 1.2)</b></p> <p>To know, observe and describe weather associated with the seasons and how day length varies.</p>	<p>To know and distinguish between an object and the material from which it is made. <b>Vocabulary: wood, plastic, glass, metal, water, and rock, fabric, rough/smooth, flat/bumpy, sharp/blunt</b></p> <p><b>(PZAZ 1.4)</b> To know, identify and name a variety of everyday materials. Children given chance to handle and discuss a variety of objects, and begin to group. To know and describe the simple physical properties of a variety of everyday materials. <b>Shiny, dull, hard, soft, rough, smooth stretchy, Stiff, bendy water- proof transparent, absorbent</b> <b>(PZAZ 1.5)</b></p> <p>To make suggestions for materials to make objects based on properties. <b>Children test materials to see which are absorbent or waterproof</b> <b>(PZAZ 1.6)</b></p> <p><b>Children discuss stretchy and bouncy materials.</b></p> <p>To know and observe changes across the four seasons.</p> <p>To know, observe and describe weather associated with the seasons and how day length varies. <b>Daily recording of the weather (symbols)</b></p>	<p><b>(PZAZ 1.8)</b> To know, identify and name a variety of common animals. <b>fish, birds and mammals, including pets</b></p> <p>To know, describe and compare the structure of a variety of common animals. <b>fish, birds and mammals, including pets</b></p>	<p><b>(PZAZ 1.14)</b> To know, identify and name a variety of common wild and garden plants, including deciduous and evergreen trees <b>Go on a walk to identify different trees and plants. Collect leaves. Children label 3 parts of a tree</b></p> <p>To know, identify and describe the basic structure of a variety of common flowering plants, including trees. <b>leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem</b></p>	<p>To know, identify and name a variety of everyday materials. <b>wood, plastic, glass, metal, water, and rock</b></p> <p>To know and describe the simple physical properties of a variety of everyday materials. <b>Previous vocabulary + flexible not-flexible see-through not-see-through</b></p> <p>To know, compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>To know and observe changes across the four seasons</p> <p>To know, observe and describe weather associated with the seasons and how day length varies.</p>	<p><b>(PZAZ 1.9)</b> To know, identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>To know, describe and compare the structure of a variety of common animals. <b>fish, amphibians, reptiles, birds and mammals, including pets.</b></p>
<p><b>Skills</b></p> <p>Pupils work scientifically by:</p>	<p>Using their senses to compare different textures, sounds and smells.</p> <p>Making tables and charts about the weather</p> <p>Making displays of what happens in the world around them, including day length, as the seasons change</p>	<p>Performing simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?'</p> <p>Making tables and charts about the weather</p> <p>Making displays of what happens in the world around them, including day length, as the seasons change</p>	<p>Using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them</p> <p>Using their senses to compare different textures, sounds and smells.</p>	<p>Observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants;</p> <p>Describing how they were able to identify and group them</p> <p>Drawing diagrams showing the parts of different plants including trees.</p>	<p>Making tables and charts about the weather</p> <p>Making displays of what happens in the world around them, including day length, as the seasons change</p>	<p>Using their observations to compare and contrast animals at first hand or through videos and photographs, describing how they identify and group them</p> <p>Using their senses to compare different textures, sounds and smells.</p>

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<b>Prior Learning</b>						