



## Understanding the World

In the Early Years children learn about science through the specific area of Understanding the World, their learning will also be underpinned by many other areas of the EYFS Curriculum. Communication and language development will constantly be part of the learning taking place as it is integral to the children's development. Other prime and specific areas will also be relevant and link closely at times when the children access physical, play based approaches and a range of first hand learning experiences

		3 & 4 year olds will be learning to:	Children in Reception will be learning to:	By the end of Reception – Early learning Goal.
Reception	<b>Understanding the World</b>	<ul style="list-style-type: none"> <li>• Use all their senses in hands-on exploration of natural materials.</li> <li>• Explore collections of materials with similar and/or different properties.</li> <li>• Talk about what they see, using a wide vocabulary.</li> <li>• Begin to make sense of their own life-story and family's history.</li> <li>• Explore how things work.</li> <li>• Plant seeds and care for growing plants.</li> <li>• Understand the key features of the life cycle of a plant and an animal.</li> <li>• Begin to understand the need to respect and care for the natural</li> </ul>	<ul style="list-style-type: none"> <li>• Explore the natural world around them.</li> <li>• Describe what they see, hear and feel whilst outside.</li> <li>• Recognise some environments that are different to the one in which they live.</li> <li>• Understand the effect of changing seasons on the natural world around them</li> </ul>	<ul style="list-style-type: none"> <li>• Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> <li>• Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.</li> <li>• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter</li> </ul>



	<p>environment and all living things.</p> <ul style="list-style-type: none"> <li>• Explore and talk about different forces they can feel.</li> <li>• Talk about the differences between materials and changes they notice</li> </ul>		
<b>Communication and language</b>	<ul style="list-style-type: none"> <li>• Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"</li> </ul>	<ul style="list-style-type: none"> <li>• Learn new vocabulary.</li> <li>• Ask questions to find out more and to check what has been said to them.</li> <li>• Use talk to work out problems and organise thinking and activities.</li> <li>• Explain how things work and why they might happen.</li> <li>• Use new vocabulary in different context</li> </ul>	<p><b>Listening Attention &amp; Understanding</b></p> <ul style="list-style-type: none"> <li>• Make comments about what they have heard and ask questions to clarify their understanding.</li> </ul>
<b>PSED</b>	<ul style="list-style-type: none"> <li>• Make healthy choices about food, drink, activity and toothbrushing</li> </ul>	<ul style="list-style-type: none"> <li>• Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of 'screen time', having a good sleep routine, being a safe pedestrian</li> </ul>	<p><b>PSED - Managing Self</b></p> <ul style="list-style-type: none"> <li>• Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices</li> </ul>
<b>Year 1 National Curriculum Objectives</b>			



### **Working Scientifically**

During year 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.

- Asking simple questions and recognising that they can be answered in different ways.
- Observing closely, using simple equipment.
- Performing simple tests.
- Identifying and classifying.
- Using their observations and ideas to suggest answers to questions.
- Gathering and recording data to help in answering questions.

### **Plants**

- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.
- Identify and describe the basic structure of a variety of common flowering plants, including trees.

### **Animals, Including Humans**

- Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of common animals (fish, amphibians, reptiles, birds and mammals, including pets.)
- Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

### **Everyday Materials**

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.

### **Seasonal Change**

- Observe changes across the four seasons.
- Observe and describe weather associated with the seasons and how day length varies



## Year 2 National Curriculum Objectives

### Working Scientifically

- During year 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.
- Asking simple questions and recognising that they can be answered in different ways.
- Observing closely, using simple equipment.
- Performing simple tests.
- Identifying and classifying.
- Using their observations and ideas to suggest answers to questions.
- Gathering and recording data to help in answering questions.

### Plants

- Observe and describe how seeds and bulbs grow into mature plants
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

### Living things and their habitats

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- Identify and name a variety of plants and animals in their habitats, including microhabitats
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

### Animals including Humans

- Notice that animals, including humans, have offspring which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

### Uses of everyday materials

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.



## Plants

To comment and ask questions about aspects of their familiar world, such as the place where they live or the natural world.

To talk about some of the things they have observed such as plants, animals, natural and found objects.

To develop an understanding of growth, decay and changes over time.

To show care and concern for living things and the environment.

To look closely at similarities, differences, patterns and change.

Make observations of animals and plants and explain why some things occur, and talk about changes.

To identify and name a variety of common and wild and garden plants, including deciduous and evergreen trees.

To identify and describe the basic structure of a variety of common flowering plants, including trees.

To observe and describe how seeds and bulbs grow into mature plants.

To find out and describe how plants need water, light and suitable temperature to grow and stay healthy.

## Animals Including Humans



	<p>To comment and ask questions about aspects of their familiar world, such as the place where they live or the natural world.</p> <p>To talk about some of the things they have observed such as plants, animals, natural and found objects.</p> <p>To develop an understanding of growth, decay and changes over time.</p> <p>To show care and concern for living things and the environment.</p> <p>To look closely at similarities, differences, patterns and change.</p> <p>Make observations of animals and plants and explain why some things occur, and talk about changes.</p>	<p>To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>To identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets).</p> <p>To identify, name, draw, and label the basic parts of the human body and say which part is associated with each sense.</p>	<p>To notice that animals, including humans have offspring which grow into adults.</p> <p>To find out about and describe the basic needs of animals, including humans, for survival (water, food, air).</p> <p>To describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p>
<b>Everyday Materials</b>			
		<p>To distinguish an object and the material from which it is made.</p> <p>To identify and name a variety of everyday materials, including wood, plastic, glass metal, water and rock.</p> <p>To describe the physical properties of a variety of everyday materials.</p> <p>To compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>To identify and compare the suitability of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>
	<b>Seasonal Changes</b>		<b>Living Things and Their Habitats</b>



<p>To begin to be interested and describe the texture of things.</p>	<p>To observe changes across the four seasons.</p> <p>To describe and observe weather associated with the seasons and how day length varies.</p>	<p>To explore and compare the differences between things that are living, dead and never been alive.</p> <p>To identify most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>To identify and name a variety of plants and animals in their habitats, including micro-habitats.</p> <p>To describe how animals obtain their food from plants, and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>
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Vocabulary Progression (red are new words introduced)

<p>Environment Seasons Day Night Weather Hot Cold Rain Sun Snow Wind Healthy Hard Soft Leaf Root Flower Stem Seed</p>	<p>Environment Seasons Day Night Weather Hot Cold Rain Sun Snow Wind Healthy Hard Soft Leaf Root Flower Stem Seed</p>	<p>Environment Seasons Day Night Weather Hot Cold Rain Sun Snow Wind Healthy Hard Soft Leaf Root Flower Stem Seed</p>
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	<p>Fish Amphibians Reptiles Birds Mammals Taste Smell Touch See Hear Omnivores Herbivores Carnivores Wood Plastic Glass Metal Brick Paper Fabric Stretchy Stiff Shiny Dull Bendy Waterproof Warm Strong Wild Garden Deciduous Evergreen Summer Winter Autumn Spring</p>	<p>Fish Amphibians Reptiles Birds Mammals Taste Smell Touch See Hear Omnivores Herbivores Carnivores Wood Plastic Glass Metal Brick Paper Fabric Stretchy Stiff Shiny Dull Bendy Waterproof Warm Strong Wild Garden Deciduous Evergreen Summer Winter Autumn Spring</p>
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Hail  
Sleet  
Fog

Hail  
Sleet  
Fog  
Exercise  
Nutrition  
Reproduction  
Growth  
Tadpoles  
Froglet  
Spawn  
Adult  
Food Store  
Life Cycle  
Fruit  
Bulb  
Trunk  
Branches  
Conditions  
Alive  
Living  
Dead  
Habitat  
Microhabitat  
Food Chain  
Producers  
Consumers  
Predator  
Prey  
Squash  
Flexible  
Light  
Hard-wearing  
Suitability  
Recycle