



Science is all about observing changes, in EYFS this is kept close to the heart of our curriculum by carrying out a longitudinal study. Throughout the year the children are taught how to identify and use their senses and then they use these to explore the seasonal changes that take place around them throughout the year. They observe how seasonal changes affect trees, animals and clothes we wear. This study is rediscovered each year and the children progress their knowledge, for example in Nursery class the children talk about the different types of clothing used for each season, but when rediscovered in Reception class the children take a closer look at the types of materials used by the clothes worn in the different seasons.

Children are natural explorers so they rarely need help in developing enthusiasm for exploring through science, however to help steer the learning to cover all the relevant topics reading books are used to help hook the children's interests as well as real life experiences, such as hatching their own chickens, hand on floating and sinking experiments, growing their own bean and many more.

|             |                            |                      |  |                |             |          |                         |                 |
|-------------|----------------------------|----------------------|--|----------------|-------------|----------|-------------------------|-----------------|
| Prime areas | Communication and Language | Physical development | Personal, Social and Emotional Development | Specific areas | Mathematics | Literacy | Understanding the World | Expressive Arts |
|-------------|----------------------------|----------------------|--|----------------|-------------|----------|-------------------------|-----------------|

| 0-3 years | 3 - 4 years  | Reception   | At the end of Reception |
|-----------|--|---|-------------------------|
|           | <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>Articulate their ideas and thoughts in well-formed sentences.</li> <li>Describe events in some detail.</li> <li>Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen.</li> <li>Use new vocabulary in different contexts.</li> </ul> |                         |
|           | <ul style="list-style-type: none"> <li>Make healthy choices about food, drink, activity and toothbrushing</li> </ul>               |   |                         |



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|--|---|--|---|
| <ul style="list-style-type: none"><li>• Repeat actions that have an effect.</li><li>• Explore materials with different properties.</li><li>• Explore natural materials, indoors and outside.</li><li>• Explore and respond to different natural phenomena in their setting and on trips.</li></ul> | <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>• 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 environment and all living things.</li><li>• Explore and talk about different forces they can feel.</li><li>• Talk about the differences between materials and changes they notice.</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> |
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Godshill

Primary School

Science

Early Years Foundation Stage

CHALLENGE ACHIEVE RESPECT ENJOY

The progression of our science curriculum is planned out through our arrangement of the curriculum. The children start the year exploring the seasons and materials so they are armed with the correct knowledge and vocabulary to carry out their longitudinal studies. As the year progresses the children use the time of the year and what it offers us to explore, to help inspire the next stage in their progression through the curriculum. With their knowledge of animals and plants tying together at the end of the year by linking all their acquired knowledge and skills to explore their animals' environments both locally and in other places in the world.

|   |                   |        |                   |                          |          |
|---|-------------------|--------|-------------------|--------------------------|----------|
| <u>What happens to all the animals in winter?</u>   |                   |        |                   |                          |          |
| Using their senses to explore the seasonal changes that take place around them throughout the year.<br>Observing how these changes affect trees, some animals and the clothes that they need to wear. |                   |        |                   |                          |          |
| Seasons<br>Materials<br>Properties of water   | Rocks - materials | Plants | Plants<br>Animals | Life cycles<br>Electrics | Habitats |



| Relevant Early Learning Goals   | Year 1 National Curriculum Objective   |
|---|--|
| <p><b>Understanding the World: The Natural World</b></p> <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><b>Working Scientifically</b></p> <p>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.</p> <ul style="list-style-type: none"> <li>● Asking simple questions and recognising that they can be answered in different ways.</li> <li>● Observing closely, using simple equipment.</li> <li>● Performing simple tests.</li> <li>● Identifying and classifying.</li> <li>● Using their observations and ideas to suggest answers to questions.</li> <li>● Gathering and recording data to help in answering questions.</li> </ul> <p><b>Plants</b></p> <ul style="list-style-type: none"> <li>● Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>● Identify and describe the basic structure of a variety of common flowering plants, including trees.</li> </ul> <p><b>Animals, Including Humans</b></p> <ul style="list-style-type: none"> <li>● Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.</li> <li>● Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>● Describe and compare the structure of common animals (fish, amphibians, reptiles, birds and mammals, including pets.)</li> <li>● Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</li> </ul> <p><b>Everyday Materials</b></p> <ul style="list-style-type: none"> <li>● Distinguish between an object and the material from which it is made.</li> <li>● Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</li> </ul> |



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**CHALLENGE** **ACHIEVE** **RESPECT** **ENJOY**