

Science Unit: Plants	
Early Learning Goals (Year R)	<p><u>Early Learning Goal: The Natural World</u> Children at the expected level of development will:</p> <ul style="list-style-type: none"> - Explore the natural world around them, making observations and drawing pictures of animals and plants; - 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; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
Key Stage 1	<p>The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.</p> <p>‘Working scientifically’ is described separately in the programme of study, but must always be taught through and clearly related to the teaching of substantive science content in the programme of study. Throughout the notes and guidance, examples show how scientific methods and skills might be linked to specific elements of the content.</p> <p>Pupils should read and spell scientific vocabulary at a level consistent with their increasing word-reading and spelling knowledge at key stage 1.</p>
Working scientifically	<p>During years 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"> • 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

	Links to learning in Year R	Year 1	Year 2
Key knowledge	<ul style="list-style-type: none"> 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, or found objects. 	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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 <p>Taught in: Spring 2</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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 <p>Taught in: Spring 1</p>
Key Skills	<ul style="list-style-type: none"> To have an understanding of growth, decay and changes over time. To show care and concern for living things and the environment. To know about similarities and differences in relation to places, objects, materials and living things. They talk about features of their own immediate environment and how environments might vary from one to another. 	<ul style="list-style-type: none"> Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted. Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example, the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants. 	<ul style="list-style-type: none"> Pupils should use the local environment throughout the year to observe how plants grow. They should be introduced to the requirements of plants for germination, growth and survival, as well as the processes of reproduction and growth in plants. Note: seeds and bulbs need water to grow but most do not need light; seeds and bulbs have a store of food inside them. Pupils might work scientifically by: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.
Key Vocabulary		<ul style="list-style-type: none"> common names of flowers, daisy, buttercup, sunflower, daffodil, snowdrop, bluebell, rose, tulip deciduous trees: oak, alder, beech, birch, sycamore, ash, (alder, elder, rowan, hazel, field maple, hawthorn, rowan) evergreen trees: holly tree, pine tree(s) plant and tree structures including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem 	<ul style="list-style-type: none"> Review of year 1 vocabulary – perhaps through lesson starters, or during other opportunities during the day (e.g. guided reading / register) Extend to teach new vocabulary – naming plants and trees

Theme/ Enrichment	Enrichment: Forest School –	All about Me – Autumn term London and Beyond (The Great fire of London) Children will extend their learning to understand that we live in Surrey, England. What plants live in England? What plants won't we find in England? Or are we less likely to find naturally? –Spring 2 Enrichment: Forest School –	Splash – Autumn term Why is water needed for with plants? Magic, MasterChef Mayhem! – Spring 1 Enrichment: Forest School –
Links to other subjects	Science – learning about Seasons through the year	Science – learning about Seasons through the year Geography - links to learning about different countries – what plants would we expect to find there – Autumn 1 Art: Flower painting by Marianne North –Summer 1	DT: Mini beast models –Summer 1 Geography - links to learning about different countries – what plants would we expect to find there? – Summer 1 and 2