

Year 1 - Plants

Expected	Do not need to report GD at KS2 but these are some ideas for extending children's understanding.
<ul style="list-style-type: none"> recognises and names a variety of plants (specific to the local environment) from the following examples (one of the plants named MUST be a deciduous or evergreen tree): wild plants <i>e.g. grass, dandelion, daisy, buttercup, nettle, dock, clover, thistle, poppy, bluebell</i> garden plants <i>e.g. grass, rose, daffodil, sunflower, tulip, snowdrop, crocus, carrot, potato, radish, leek, tomato, onion, beetroot</i> herbs <i>e.g. mint, lavender, rosemary, thyme, chive, basil</i> trees <i>e.g. oak, ash, pine, horse chestnut, yew, sycamore, beech</i> hedgerows/bushes <i>e.g. elderflower, holly, hawthorn, laurel, bramble</i> knows that trees can be deciduous or evergreen (children do not need to remember the terms deciduous and evergreen but must be made aware of the terms) names(or labels a picture of) the following parts of a real plant: stem, flower, leaf, root without a real plant or a picture of a plant in front of them, says what the stem (and flower, leaf, root) looks like and where this would be in relation to the rest of the plant knows which part of the plant is usually in the soil 	<ul style="list-style-type: none"> identifies a large variety of common wild and garden plants including deciduous and evergreen trees explains the difference between a deciduous and an evergreen tree (i.e. states that the leaves fall from a deciduous tree in autumn) sorts and/or groups common plants and trees and can justify their groupings matches flowers or fruits to plants or trees, <i>e.g. conker to horse chestnut, dandelion flower to dandelion plant, blackberry to bramble</i> explains in simple terms what each part of the plant does names other parts of a plant, <i>e.g. seeds, stones, stamens, petals, stigma</i> knows that some plants bear fruit names a variety of plants/fruits that we can eat, <i>e.g. celery, orange, carrot, cabbage</i> researches where on a plant its edible part grows, <i>e.g. cabbages, apples, carrots, potatoes, strawberries, bananas, pineapples, coconuts</i>

Enquiry Opportunities	
<p>These are suggestions for enquiry activities. Please ensure that you are covering all types over the year. Focus on one scientific skill per enquiry.</p>	<p>Year 1 Working Scientifically Statements From Insights</p> <ul style="list-style-type: none"> Observes changes over time.

Children do not need to write up each stage of the investigation. Focus on just the skill being taught.			<ul style="list-style-type: none"> • Observes changes and patterns. • Identifies and classifies items related to their science learning. • Performs simple tests. • Performs a fair test with adult support. 		
Identifying and Classifying	Comparative Testing	Fair Testing	Pattern Seeking	Research	Observation Over Time
Children classify leaves, flowers and seeds according to their own criteria. How can we sort the leaves that we collected on our walk?	Which type of compost grows the tallest sunflower? Which tree has the biggest leaves?		Based on observations, children identify patterns e.g. after comparing the size of leaves on different plants, children may suggest 'bigger plants have bigger leaves'. Do trees with bigger leaves lose their leaves first in autumn? Is there a pattern in where we find moss growing in the school grounds?	Use secondary sources to name plants (including trees) based on observations of leaves, seeds, flowers, buds and bark. What are the most common British plants and where can we find them? How did Beatrix Potter help our understanding of mushrooms and toadstools?	Observe a plant/ tree throughout the year and note changes. How does my sunflower change each week? In the 1500s, tobacco plants were grown in Britain for medicine. How have our ideas about these plants changed?

Prior Knowledge	Previous Lesson Topics	
<p>Early Learning Goals:</p> <ul style="list-style-type: none"> • Children 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 another 	n/a	
	Year 1 National Curriculum Statements	Future Learning
	<ul style="list-style-type: none"> • Identify & name a variety of common wild & garden plants, including deciduous & evergreen trees. 	<p>In Year 2 pupils will be taught to:</p> <ul style="list-style-type: none"> • Observe and describe how seeds and bulbs grow into mature plants

<ul style="list-style-type: none"> • They make observations of animals and plants and explain why some things occur and talk about changes 	<ul style="list-style-type: none"> • Identify and describe the basic structure of a variety of common flowering plants, including trees. 	<ul style="list-style-type: none"> • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy <p>In Year 3 pupils will be taught to:</p> <ul style="list-style-type: none"> • Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers • Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant • Investigate the way in which water is transported within plants • Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal <p>In Year 5 pupils will be taught to:</p> <ul style="list-style-type: none"> • To describe the life process of reproduction in some plants <p>In Year 6 pupils will be taught:</p> <ul style="list-style-type: none"> • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics • Identify how animals and plants are adapted to suit their environment and that adaptations lead to evolution 	
Common Misconceptions	Competitions	Scientists	Books
<p>Some children may think:</p> <ul style="list-style-type: none"> • plants are flowering plants grown in pots with colored petals and leaves and a stem • trees are not plants • all leaves are green • all stems are green • a trunk is not a stem 	<p>DSWF - Theme Forests of Land and Sea theme https://davidshepherd.org/events/enter-global-canvas-2022/ Farmvention https://www.farmvention.com/ RHS Photography https://www.rhs.org.uk/promotions/rhs-photo-competition</p>	<p>Required: Suzanne Simard—professor of forest ecology</p> <p>Suggested: Alan Mitchell—british forester who recorded tree growth Beatrix Potter - author and botanist</p>	<p>A Little Guide to Wildflowers (Charlotte Voake) The Things That I LOVE about TREES (Chris Butterworth) Harry’s Hazelnut (Ruth Parsons) Tree: Seasons Come, Seasons Go (Patricia Hegarty and Britta Teckentrup)</p>

<ul style="list-style-type: none"> • blossom is not a flower 		<p>Carl Linnaeus - created the modern way of naming organisms David Bellamy - botanist, tv presenter, environmentalist</p>	
<p>Scientific Vocabulary</p>		<p>School Resources</p>	<p>Cross-curricular Links</p>
<p>Year 1: wild plant, garden plant, leaf, leaves, flower, blossom, petal, fruit, berry, root, bulb, seed, trunk, branch, stem, bark, stalk, vegetable, names of local garden and wild plants and trees Adults Use Language: deciduous, evergreen</p>		<p>Biodome, Wildlife Areas, planting bed, shovels, seeds, compost etc.</p> <hr/> <p>Outdoor Learning and Resources</p> <hr/> <p>Wildlife Areas Biodome</p>	<ul style="list-style-type: none"> • Compare, sort and group by leaf shape, flower, size, etc. using a Venn diagram. • Compare and describe lengths and heights of different plants using blocks etc. • Order plants / leaves of different lengths.