



Medium Term Plan: Plants (Year A)

During this unit of work, children will look at trees and their basic features. They will look at the difference between deciduous and evergreen trees before looking at different leaves from trees. Children will plant seeds to grow fruit and/or vegetables and learn what conditions they need to stay healthy.

Key Stage One
(Year 1/2)

What trees will I find and how do seeds and bulbs grow into fruit and vegetables?

Scientific Knowledge and Conceptual Understanding*

biology	chemistry	physics
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Working Scientifically*

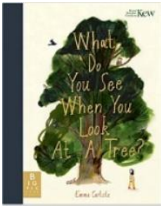
Asking simple questions and recognising that they can be answered in different ways	Observing closely, using simple equipment	Performing simple tests	Identifying and classifying	Using their observations and ideas to suggest answers to questions	Gathering and recording data to help in answering questions
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Key Stage 1 Scientific Knowledge and Conceptual Understanding Areas*

Plants	Animals, including humans	Everyday Materials	Seasonal Changes	Living Things and Their Habitat
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*Shaded boxes indicate coverage for this unit

Why has this science unit been chosen for pupils at Applegarth Primary School?	In this science unit, our Applegarth children will: use the local environment (field, wildlife and gardening area) to look at trees and their basic features. They will look at the difference between deciduous and evergreen trees before looking at different leaves from trees. They will learn the names of the different trees in their school grounds and will plant seeds to grow fruit/vegetables, keeping a plant diary to show how their plant grows and changes and investigate the conditions it needs to stay healthy. This will ensure that Applegarth children gain the skills and knowledge necessary for looking after their environment now and in the future.
What specifically do we want the children to know, understand and be able to do by the end of this unit?	Children will know that: Plants are living things. Trees are large woody plants, and are either evergreen or deciduous. Trees that lose their leaves in the Autumn are called deciduous trees. Examples include oak, beech and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen. Examples include holly and pine. The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk. Plants grow from seeds and bulbs. Seeds and bulbs need water, light and warmth to start growing (germinate) and stay healthy. Without any one of these things, they will die. As the plant grows bigger, it develops leaves and flowers. Children will be able to: Identify, compare, group and sort a variety of common deciduous and evergreen trees, based on observable features. They will be able to label and describe the basic structure of a variety of fruit/vegetable plants, describe how to care for plants and following observation, describe how plants change over time.

KS1 National Curriculum PoS	Knowledge Focus (from progression document)	Possible Misconceptions
<p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1)</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees (Y1)</p> <p>Observe and describe how seeds and bulbs grow into mature plants (Y2)</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2)</p> <p>For more details, working scientifically and non-statutory guidance, click this link.</p>	<p>Plants are living things. Trees are large woody plants, and are either evergreen or deciduous. Trees that lose their leaves in the Autumn are called deciduous trees.</p> <p>Examples include oak, beech and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen. Examples include holly and pine.</p> <p>The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk and branches.</p> <p>Plants grow from seeds and bulbs. Seeds and bulbs need water, light and warmth to start growing (germinate) and stay healthy. Without any one of these things, they will die. As the plant grows bigger, it develops leaves and flowers.</p>	<p>Plants are flowering plants grown in pots with coloured petals, leaves and a stem</p> <p>Trees are not plants</p> <p>All leaves are green</p> <p>All stems are green</p> <p>A trunk is not a stem</p> <p>Blossom is not a flower</p> <p>Plants are not alive as they cannot be seen to move</p> <p>Seeds are not alive</p> <p>All plants start out as seeds</p> <p>Seeds and bulbs need sunlight to germinate</p>
Prior Learning		Subsequent Learning
<p>In EYFS, children will have learned:</p> <p>To know what a plant is</p> <p>To know what a flower is</p> <p>To know where you see plants</p> <p>To describe different plants and flowers</p>		<p>Year 3 – Children will learn about the functions of the different parts of the plant, find out how flowers play a part in the life cycle of the plant and investigate how water is transported in plants.</p> <p>Year 5 - Children will look at the life cycle of a plant including the life process of reproduction.</p> <p>KS3 – Children will study plants in much closer detail, observing the cell structure and how plants create their own food through photosynthesis.</p> <p>Within each new unit children encounter, they will be challenged to think about their previous learning and make links and build upon its relevance.</p>
Exploring how scientific ideas have changed over time		Cross-curricular links
<p>In the 1500s, tobacco plants were grown in Britain for medicine. How have our ideas about these plants changed?</p>		<p>Geography</p> <p>Geography of school grounds – what plants/ living things/ habitats etc are in our immediate environment.</p> <p>When looking at continents/ oceans – look at habitats and what grows or lives there. Do we have the same plants growing in rivers as in the oceans?</p> <p>How are trees different around the world? Palm leaves and oak leaves – compare sizes etc.</p>
Local Context	Cultural Capital	
<p>We are lucky enough to have a field stocked with various trees, a fruit orchard, vegetable beds, wildlife area, poly tunnel and many established as well as newer trees. The local park next to the school also has very mature trees.</p>	<p>A visit to the local Community Garden and/or Secret Garden</p>	
Previously Learned Vocabulary	New Vocabulary	
<p>plant, tree, bush, flower, vegetable, herb, weed, names of plants they see</p>	<p>Leaf, blossom, petal, root, bud, trunk, branch, stem, evergreen, garden plant, deciduous, wild plants, seed, flower, fruit, berry, bark, stalk, light, shade, Sun, warm, cool, water, space, grow, healthy, bulb germinate, shoot, seedling</p>	
Significant People / Events		
<p>Under-represented groups</p> <p>Maria Sibylla Merian (German artist, scientific illustrator, and naturalist)</p>		
Recommended Reads (Reading for pleasure and writing opportunities)**	Recommended Reads – Curriculum Enhancement**	
<p>What Do You See When You Look At A Tree? Emma Carlisle</p> 	<p>The Things That I LOVE about TREES (Chris Butterworth)</p> <p>Harry's Hazelnut (Ruth Parsons)</p> <p>Jack and the Beanstalk (Richard Walker)</p> 