

Year 2 – Plants	Main Outcomes: <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. 	Focus: Science - biology
------------------------	--	---------------------------------

What should I already know? <ul style="list-style-type: none"> That plants can grow The names of some common garden plants (e.g. poppy, rose) and the names of some common wild plants (e.g. daisy, dandelion, nettle) That deciduous trees lose their leaves in the autumn every year. That evergreen trees have green leaves all year round. The parts of a plant including petals, fruits, roots, bulbs, seeds, stem, trunks and branches
What I will do
<p>I will have weekly or blocked science lessons. In lessons, I will be taught a skill and I will gain knowledge and understanding through the process of scientific enquiry (observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources).</p> <p><u>Possible lines of enquiry</u></p> <ul style="list-style-type: none"> Use the local environment <u>throughout the year</u> to observe and record, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb. Observe similar plants at different stages of growth. Set up a comparative test to show that plants need light and water to stay healthy.

Vocabulary	Meaning
bulb	a root shaped like an onion that grows into a flower or plant
common	something that is found in large numbers or it happens often
crop	plants such as wheat and potatoes that are grown in large quantities for food
disperse	to spread widely or scatter
flower	the part of a plant which is often brightly coloured and grows at the end of a stem
flowering	trees or plants which produce flowers
fruit	something which grows on a tree or bush and which contains seeds or a stone covered by a substance that you can eat
garden	a piece of land, with flowers, vegetables, other plants and – often – grass
germination or sprouting	the beginning of growth, usually of a seed, spore or bud, in response to warmth, air and water
growth	a gradual increase in size
herb	A plant whose leaves are used in cooking to add flavour to food, or as a medicine
hydroponics	the growing plants
leaf/leaves	the parts of a tree or plant that are flat, thin, and usually green
moist	slightly wet; damp
nutrients	substances that help plants and animals to grow
plant	a living thing that grows in the earth and has a stem, leaves, and roots
pollination	the transfer of pollen from the male to the female part of the plant
reproduce	when an animal or plant produces one or more individuals similar to itself
roots	the parts of a plant that grow under the ground
seed	the small, hard part from which a new plant grows
stem	the thin, upright part of a plant on which the flowers and leaves grow
temperature	a measure of the warmth or coldness of an object or an environment (such as the air)
wind	when the weather blows the trees

Resources
<p>Hamilton Science planning: plants (all planning also saved on SharePoint). https://www.hamilton-trust.org.uk/science/year-2-science/plants-ready-steady-grow/</p>

Knowledge and Skills Map – Science at Estcots School

Knowledge to understand		Skills to learn	
<p>Plants are living things that require things to grow.</p>	<p>Plants grow from seeds or bulbs, which contain energy. When the conditions are right (warmth, water and air) they begin to grow (germinate or sprout). Plants require things such as water (through their roots), warmth, air, nutrients from soil, and light to grow bigger.</p> <p>If they do not have one or more of these things, they may stop growing.</p> <p>Plants can:</p> <ul style="list-style-type: none"> • move • grow • react to their surroundings (sense) • absorb nutrients • reproduce • get rid of waste • use oxygen to turn food into energy 	<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 ➤ drawing diagrams to explain something 	<p>Cross-curricular (maths)</p> <ul style="list-style-type: none"> ➤ comparing, describing and solving practical problems for lengths and heights ➤ measuring and beginning to record lengths and heights ➤ begin to construct simple pictograms, tally charts, block diagrams and tables
<p>Plants often have flowers.</p>	<p>Flowers attract insects which then spread pollen. The process of pollination helps to create new plants.</p>	Equipment to become familiar with	
		<p>Magnifying glasses</p> <p>Microscopes</p> <p>Rulers for measuring in cm and mm (with support)</p>	

Evidence of Learning	How will I know what I've learnt?
<p>Science books</p> <p>Photos</p> <p>Videos</p> <p>Pupil conferencing</p> <p>Teaching and learning observations</p> <p>Learning walks</p> <p>Data analysis</p>	<p>See KS1 teacher assessment exemplification for science</p> <p>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763062/2018_key_stage_1_teacher_assessment_exemplification_science.pdf</p> <p>See also Hamilton Science_Assessment_Y2 (saved in planning folder on Sharepoint).</p> <p>KS1 science quizzes:</p> <p>https://gcequiz.com/quiz/ks1-science-quizzes</p> <p>https://www.woodendprimaryschool.com/year-2/</p>