

Year 2 Science Curriculum

Working scientifically links

Rubric/PCMD opp.

Key Vocabulary

Plants

What's the big picture? Recap the Knowledge Organiser from Year 1 to remind children of prior learning. Use this as a retrieval game to aid the working memory and then re teach specific vocabulary that has been forgotten

Prior learning:

Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants)

Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants)

National Curriculum Principles	Objectives	Knowledge and key Vocabulary	Reading opportunities	Technology
Pupils should be taught: Observe and describe how seeds and bulbs grow into mature plants	I know how seeds and bulbs grow into plants	<p>Children to know that plants may grow from seeds or bulbs. These germinate into seedlings and grow into mature plants. Research when different seeds and bulbs need to be planted. Know that seeds and bulbs germinate and grow at different rates.</p> <p>Soak a bean/pea seeds overnight. Compare dried and soaked, rub seed coat off and explain that the seed coat protects the seed. Ch cut open seed. Observe inside seed with magnifying glass. Draw inside of seed.</p> <p>Children to classify and sort bulbs and seeds into groups - what is the same? What is different? <i>I know how to identify and classify</i></p>	<p>The Tin Forest (Helen Ward)</p> <p>Jack and the Beanstalk (Richard Walker)</p> <p>Ten Seeds (Ruth Brown)</p> <p>A Seed Is Sleepy (Dianna Aston)</p>	<p>Use video to explain what has happened.</p> <p>Take photos and add to Seesaw - voice annotate to explain.</p> <p>Use keynote to show classification and sorting.</p>
Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	I know what plants need in order to grow and stay healthy	<p>Children to plant beans in plastic bags to observe germination and growth of roots and stem</p> <p>Conduct an investigation by planting seeds in different conditions to identify what is needed for germination and growth.</p> <ol style="list-style-type: none"> 1) make a prediction/ask questions 2) Measure height of stem/length of roots <i>Compare and carry out</i> 		<p>Use digital template to gather evidence throughout investigation.</p> <p>Use camera to</p>

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	(water, light and suitable temperature)	<p><i>simple tests</i></p> <p>3) Record in a simple table</p> <p>4) Draw conclusions/answer questions and present to others</p> <p>Look after plants as they grow - weeding, watering, repotting etc</p>		<p>capture changes. Discuss via Seesaw. Use time-lapse to capture growth/changes.</p> <p>Create a CLIPS to draw conclusions.</p>
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Famous Scientists

Captain Cook - Botany
 Agnes Arber - botanist

Common misconceptions

Some children may think:

- plants are not alive as they cannot be seen to move
- seeds are not alive
- all plants start out as seeds
- seeds and bulbs need sunlight to germinate.

Enquiry ideas

Comparative tests	Identify & Classify	Observation over time	Pattern Seeking	Research
Do cress seeds grow quicker inside or outside?	How can we identify the trees that we observed on our tree hunt?	What happens to my bean after I have planted it?	Do bigger seeds grow into bigger plants?	How does a cactus survive in a desert with no water?