

Science Scheme of Work

Year 2 – Growing Plants (Plants)												
Links made with other subjects	Instruction writing – how to plant a seed/ grow a plant English Leaf – text											
The BIG Question	How do you plants grow?											
The BIG Outcome	Short explanation answering the question											
Science objectives (link to NC)	- 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											
Prior knowledge What prior knowledge is needed for children to be successful in this unit?	<i>Children already know:</i> EYFS – Understanding the world - Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. Yr 1 - Plants (Plants)											
Future learning Consider the conceptual knowledge within a subject that pupils need for future learning not just the recall of facts but the importance of concepts	This unit gives prior knowledge to: Yr 3 - What plants need and parts of plants (Plants)											
Science strands	<table><tr><td>Related Enquiry Questions</td></tr><tr><td>Classifying</td></tr><tr><td>Based on the children’s own criteria: - classify seeds -classify bulbs.</td></tr><tr><td>Observing over time</td></tr><tr><td>- Plant seeds and bulbs and observe how they grow.</td></tr><tr><td>Pattern Seeking</td></tr><tr><td>Children generate questions for investigation such as: - Do big seeds germinate more quickly? - Does it matter which way round you plant a bulb or seed? - Which comes first, the root or the shoot?</td></tr><tr><td>Comparative testing</td></tr><tr><td>Not relevant</td></tr><tr><td>Researching</td></tr><tr><td>- Look at packets to decide how to plant and care for seeds e.g. How much water do they need? Do they need shade/full sun?</td></tr></table>	Related Enquiry Questions	Classifying	Based on the children’s own criteria: - classify seeds -classify bulbs.	Observing over time	- Plant seeds and bulbs and observe how they grow.	Pattern Seeking	Children generate questions for investigation such as: - Do big seeds germinate more quickly? - Does it matter which way round you plant a bulb or seed? - Which comes first, the root or the shoot?	Comparative testing	Not relevant	Researching	- Look at packets to decide how to plant and care for seeds e.g. How much water do they need? Do they need shade/full sun?
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Vocabulary/ Glossary	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud. Evergreen & deciduous light, shade, sun, warm, cool, water, grow, healthy Germinate											
Knowledge (see italics for knowledge to remember)	<i>The knowledge that children will learn and remember:</i> 1. <i>Plants may grow from either seeds or bulbs.</i> 2. <i>These then germinate and grow into seedlings which then continue to grow into mature plants.</i> 3. <i>These mature plants may have flowers which then develop into seeds, berries, fruits etc.</i> 4. <i>Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates.</i>											

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	<ol style="list-style-type: none"> 5. <i>Some plants are better suited to growing in full sun and some grow better in partial or full shade.</i> 6. <i>Plants also need different amounts of water and space to grow well and stay healthy</i>
SEND expectations	<ol style="list-style-type: none"> 1. <i>Plants may grow from either seeds or bulbs.</i> 2. <i>These then germinate and grow into seedlings which then continue to grow into mature plants.</i> 3. <i>These mature plants may have flowers which then develop into seeds, berries, fruits etc.</i> 4. <i>Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates.</i>
Common misconceptions	<p>Some children may think:</p> <ul style="list-style-type: none"> - 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.