

Year 3 – Parts of Plants (Plants)												
Links made with other subjects	Instruction writing – how to plant a seed/ grow a plant											
The BIG Question	How do you plants grow? (same as what plants need)											
The BIG Outcome	Short explanation answering the question											
Science objectives (link to NC)	- identify and describe the functions of different parts of flowering plants: roots, stem/ trunk, leaves and flowers - 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.											
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) Yr 2 – Growing Plants (plants) Yr 3 - What plants need (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 5 Life Cycles (Animals including Humans)											
Science strands	<table><tr><td>Related Enquiry Questions</td></tr><tr><td>Classifying</td></tr><tr><td>Not relevant</td></tr><tr><td>Observing over time</td></tr><tr><td>-Observe celery (with roots and leaves) in coloured water. -Observe white carnations (freshly cut) in coloured water. -Gather seeds and photographic evidence of blossoms/flowers and berries on a particular trail throughout the year.</td></tr><tr><td>Pattern Seeking</td></tr><tr><td>Not relevant</td></tr><tr><td>Comparative testing</td></tr><tr><td>Not relevant</td></tr><tr><td>Researching</td></tr><tr><td>-Research the functions of the parts of flowering plants. -Research different methods of seed dispersal. -Research different methods of pollination.</td></tr></table>	Related Enquiry Questions	Classifying	Not relevant	Observing over time	-Observe celery (with roots and leaves) in coloured water. -Observe white carnations (freshly cut) in coloured water. -Gather seeds and photographic evidence of blossoms/flowers and berries on a particular trail throughout the year.	Pattern Seeking	Not relevant	Comparative testing	Not relevant	Researching	-Research the functions of the parts of flowering plants. -Research different methods of seed dispersal. -Research different methods of pollination.
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Vocabulary/ Glossary	Stems/trunks, leaves, flowers/ blossom, roots, nutrients, Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)											
Knowledge (see italics for knowledge to remember)	<i>The knowledge that children will learn and remember:</i> 1. Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. 2. The roots absorb water and nutrients from the soil and anchor the plant in place.											

Science Scheme of Work

	3. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. 4. The leaves use sunlight and water to produce the plant's food. 5. Some plants produce flowers which enable the plant to reproduce. 6. Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination). 7. This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways – wind, animal and water dispersal)
SEND expectations	1. Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. 2. The roots absorb water and nutrients from the soil and anchor the plant in place. 3. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. 4. The leaves use sunlight and water to produce the plant's food. 5. Some plants produce flowers which eventually form seeds 6. Seeds are dispersed in different ways – wind, animal and water dispersal)
Common misconceptions	Some children may think: - plants eat food - food comes from the soil via the roots - flowers are merely decorative rather than a vital part of the life cycle in reproduction - plants only need sunlight to keep them warm - roots suck in water which is then sucked up the stem.