

Year 3 – Plants

Working Scientifically	Sticky Knowledge	Linked Texts	Key Scientists
- Recall and use specific scientific vocabulary accurately (year group key vocabulary) - Ask relevant questions and use different types of scientific enquiries to answer them, include making their own questions - Set up simple practical enquiries, comparative and fair tests, aiming to do so independently with their own decisions. - Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers - Gather, record, classify and present data in a variety of ways to help in answering questions - Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables - Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions - Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions - Identify differences, similarities or changes related to simple scientific ideas and processes - Use straightforward scientific evidence to answer questions or to support their findings.	Plants are producers, they make their own food. Their leaves absorb sunlight and carbon dioxide Plants have roots, which provide support and draw water from the soil Flowering plants have specific adaptations which help it to carry out pollination, fertilisation and seed production Seed dispersal improves a plants chances of successful reproduction Seeds/bulbs require the right conditions to germinate and grow. Seeds contain enough food for the plant's initial growth From Yr 2 Plants grow from seeds/bulbs Plants need light, water and warmth to grow and survive Flowers make seeds to make more plants (reproduce) Plants are important We need plants to survive (to clean air, to eat) We can eat different parts of the plants (leaves, stems, roots, seeds, fruit)	<i>The Hidden Forest</i> <i>(Jeannie Baker)</i> <i>George and Flora's Secret Garden</i> <i>(Jo Elworthy)</i>	<u>Ahmed Mumin Warfa</u> - (Botanist) Dr Kelsey Byers (Biologist who studies flower smells)
Key Question(s):	Key Question(s)	WS vocabulary	
Can you name and describe five parts of a flowering plant? Can you describe the function of leaves in a plant? How does a plant that has been kept in a dark place grow differently to a plant that has light? Can you explain what germination is? Why are flowers important in the life cycle of flowering plants? Can you describe how water is transported through a plant? How does light affect plant growth? How does a plant get carbon dioxide?	How do plants reproduce? Do all flowers look the same? How do insects know which flowers to pollinate? Why do flowers smell? What do seeds do? Can a plant live without its leaves? Do grass/trees make flowers? What conditions are perfect for a seed to grow? How does the space between seeds affect how well they grow? Does seed size match plant size? Do plants take in water through their roots?	Investigation, enquiry, prediction, variable, dependent variable, independent variable, constant, patterns, equipment, apparatus, method, results, conclusion, graph, patterns, distance, data, theory, fair test, reasoning	

Teaching suggestions in Enquiry types

<u>Comparative tests</u>	<u>Identify & Classify</u>	<u>Observation over time</u>	<u>Pattern Seeking</u>	<u>Research</u>	<u>BIG Question – Problem solving</u>
How does the length of the carnation stem affect how long it takes for the food colouring to dye the petals? Which conditions help seeds germinate faster? 	How many different ways can you group our seed collection? 	What happens to celery when it is left in a glass of coloured water? How do flowers in a vase change over time? 	What colour flowers do pollinating insects prefer? 	What are all the different ways that seeds disperse? 	Why do plants have flowers? (Also use EXPLORIFY) <u>Assessment Opportunity</u> 