






<p>Programme of Study Statements</p> <ul style="list-style-type: none"> Identify and describe the functions of different parts of flowering plants: roots; stem/trunk; leaves; and flowers. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. 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. 					<p>Key Vocabulary</p> <p>Air, light, water, nutrients, soil, support, anchor, reproduction, pollination, dispersal, transportation, flower, energy, growth, seedling, carbon dioxide, oxygen, sugar, material, photosynthesis, chlorophyll</p>
<p>Investigations and Skills for thinking like a Scientist</p> <div style="display: flex; justify-content: space-around; align-items: center;">      </div>					<p>Sticky Knowledge:</p> <p>Plants are producers, they make their own food.</p> <ul style="list-style-type: none"> 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
<p><u>Comparative Tests</u></p> <p>How does the length of the carnation stem affect how long it takes for the food colouring to dye the petals?</p> <p>Which conditions help seeds germinate faster?</p>	<p><u>Identify & Classify</u></p> <p>How many ways can you group our seed collection?</p>	<p><u>Observation over time</u></p> <p>What happens to celery when it is left in a glass of coloured water?</p> <p>How do flowers in a vase change over time?</p>	<p><u>Pattern seeking</u></p> <p>What colour flowers do pollinating insects prefer?</p>	<p><u>Research</u></p> <p>What are all the different ways that seeds disperse?</p>	<p><u>Prior Knowledge:</u></p> <ul style="list-style-type: none"> Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants) <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 – Plants)</p>

<p>Potential Evidence to support our Scientists:</p> <p>Can explain the function of the parts of a flowering plant</p> <ul style="list-style-type: none"> • Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination • Can give different methods of pollination and seed dispersal, including examples • Can explain observations made during investigations • Can look at the features of seeds to decide on their method of dispersal • Can draw and label a diagram of their created flowering plant to show its parts, their role and the method of pollination and seed dispersal <p>Big Question:</p> <p>Why do plants have flowers?</p>		<p>Future Knowledge:</p> <ul style="list-style-type: none"> • Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats) • Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. (KS3)
<p>Cultural Capital</p>		
<p>Visits and visitors</p> <p>Redwood Lower Woods (Gloucestershire Wildlife Trust) Westonbirt Arboretum</p>	<p>Experiences and events</p> <p>Trip to Westonbirt Arboretum Walk to Lower Woods Growing own vegetables in the school gardens Selling your own vegetables. Vegetable competition at summer fayre.</p>	<p>Key texts</p> <p><i>The Hidden Forest</i> (Jeannie Baker) <i>George and Flora's Secret Garden</i> (Jo Elworthy) <i>The Boy Who Grew Dragons</i></p>
<p>Community events and links</p> <p>Summer Fayre</p>	<p>Global issues</p> <p>Deforestation Bee populations</p>	<p>Famous people/ Key Scientists</p> <p>Jan Ingenhousz (Photosynthesis) Joseph Banks (Botanist)</p>
<p>Life Skills</p> <p>Teamwork Problem Solving Resilience Making Links</p>	<p>Key places</p> <p>Lower Woods Wickwar Playing Fields Wickwar Allotments School Garden and school field and trees</p>	