

Trust Me I'm a Botanist



6 weeks

**Rationale** – Why do some people's plants always die? Do your parents battle with floppy leaves and wilting flowers? Wouldn't you love someone to be able to tell you what you're doing wrong? Well never fear, the Plant Doctors are here! The children in Year 3 will become plant doctors and will learn about what plants need in order to grow properly. Through science investigations, they will discover what can make a plant stop growing properly and diagnose some real plants that are past their best. Hopefully the doctors will be able to cure them! Using their ICT skills children will record the process of an ailing plant getting better, and then learn how to speed up this video footage. The Plant Doctors will finally show off their knowledge by inviting parents into school for a Grand opening of the newly planted tubs outside their classrooms. They will show their videos, demonstrating how to look after different sorts of plants.

**Hook**  
Jane Nicholls from Cherry Tree Nursery sends an email to the children saying that she has heard we are going to be looking at plants and that their nursery has some 'poorly' plants. Can we help them to revive them? She will then arrive in the Cherry Tree Nursery van to deliver a selection of plants. We all become 'Plant Doctors'.

**Outcome**  
Children to take their plants to the local nursing home and explain how to keep the plants healthy. Children will read their poems aloud.

**Spirituality**

- Think deeply and wonder about the world around them and find things that amaze and inspire them.
- Be passionate about things that interest them and they care about and be proud of their achievements
- Ask probing questions, some of which will not have answers, show curiosity and seek meaning in what they do and learn.

**Thinking**

- Give clear reasons for ideas and opinions, using technical vocabulary accurately. (y4)
- Pose a series of questions to guide research in finding solutions to a specified problem. (y4)

**Science**  
Dissect a lily and identify stamen, anther, ovary, Sepal, Petal, filament and stem.

Create a labeled diagram showing the main parts of a flower and its function to include stem, roots, flower, leaves

Create a labeled diagram of the life cycle of a flowering plant e.g.: lily, poppy, dandelion, antirrhinums, Nigella and tomatoes.

Sort and classify how seeds are dispersed and record as a table or decision tree.

Know that plants need air, light and water, nutrients from the soil and room to grow in order to thrive.

Investigate the impact of nutrients in soil on plant growth by carrying out a fair test. Know that different plants will thrive in different soils and the effect of different fertiliser on different parts of the plant. e.g. nitrogen,

**English**  
**Main writing tasks**  
Read "A Child's Garden: A Story of Hope" by Michael Foreman.  
Innovate own story based on "A Child's Garden: A Story of Hope". Use conjunctions for time and place with sentences containing more than one clause.

Write a letter of application to Cherry Tree Nursery.

Write a scientific, factual report on how water is transpired through a plant. Use conjunctions, simple sentences that are correctly punctuated.

Write a non-narrative report using paragraphs, headings and sub-headings on the type's nutrients and the effect on plant growth. Consider appropriate vocabulary and formality. Re-draft with images so this can be displayed.

**Other writing tasks**

**ICT**  
Use Wikipedia website to research Latin, French, Old English names for plants: Tomato, Dandelion, Rose, Nigella, Buttercup, Daisy, Sycamore, Apple.

Take photo/video footage of science experiment over timed. Put together for outcome.

(iMotion for time lapse or iPad camera and iMovie to compile images)

<p>phosphorous and potassium (potash)</p> <p>Gather and present data/findings using a table and timed photographs to help answer questions.</p> <p>Observe and record how water is transported through a plant to the flower.</p> <p>Know the names and functions of different parts of flowering plants - roots, stem, trunk, leaves and flowers.</p>	<p>Use a graphical organizer to record ideas in note form so that these can be discussed and used when writing up investigation about nutrients.</p> <p>Create labeled diagrams of flowering plants using technical vocabulary.</p> <p>Explore the definitions of dandelion, Scientific names of plants and nutrients and identify word families/definitions.</p> <p>Using a variety of visual stimulus (pictures, flower/plants, video) compose a piece of prose about "A Secret Garden". Include a description of a setting, using a thesaurus to ensure accurate and interesting word-use.</p> <p><b>Writing skills to cover</b>  Structure of organisational/language features for letter of application.  Descriptive writing - use of figurative language  Purpose and organisational devices of non-fiction text  e.g. bullet points, sub-headings</p> <p><b>Spelling, Punctuation and Grammar</b>  Word Families  Revision of  Common exception words 3/4  Suffix 'sion'  Suffix 'tion'  Suffix 'ssion'  Commas used correctly in lists and sometimes correctly to mark boundaries within sentences (e.g. following a fronted adverbial).  In narrative create settings, characters and plot.  Begin to use fronted adverbials to vary sentences.  Begin to develop accuracy in the use of inverted commas and other punctuation to indicate direct speech.</p> <p><b>Talk 4 Writing strategies</b>  Boxing up  Imitate, innovate, invent  Text mapping  Tool Kit</p>	
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<p><b>Art</b>  Create detailed sketches of plants and parts of plants, using pencil/pen/watercolours.</p>
<p><b>Mathematics</b>  Measure carefully in mls, grams - nutrients. Understand dilution rates from instructions. Using mm/cm measure plants accurately. Use of timed intervals for investigation.</p>
<p><b>Home Learning</b>  Create your own Top Trump cards by researching the names of different domestic or wild flowers - include Latin name and short descriptions with ranking about the conditions in which it will grow best. Draw a picture of the plant.</p>
<p><b>Visits and Visitors</b>  Visit garden centre or Hilliers Arboretum.  Visit from a Botanist or plant expert e.g.: Gardener from Dorset CC</p>