

Trust Me I'm a Botanist



6 weeks

**Rationale/Intent**

Where does our food come from? Children will look at the science behind where our food comes from and how it is created. This project will enable children to develop knowledge and key skills, building on from Year 2, in Science and DT.

Pupils will learn about the parts of flowering plants, including their life cycle, seed dispersal and how pollination works and its importance to plant reproduction.

In their design and technology understanding, pupils will research current products and use market research to discover what others would be interested in. Using design skills and annotated sketches, pupils will generate plans that they can work from to create their outcome using textiles-based skills, including how to cross stitch and knotting. Pupils will be encouraged to evaluate a product against design criteria and considering the view of others to suggest improvements to my work

The school's ASCENT and British Values of Nurture, Community and Democracy will be promoted through caring and tending to flowers as living things, creating decorative flower beds to enhance the communal areas of the school and by voting for the final designs and plant selections respectively.

**Hook**

Mr Allington has bought some flowers for our planters, but he's lost all the labels! The children will take on the role of botanists and work together to identify the plants before creating detailed plant studies of one of the botanical specimens, before designing and planting them in a class planter.

**Outcome**

The children in Year 3 will be immersed in Science, as they become botanists (plant scientists) and begin **thinking** deeply about what plants need in order to grow properly and support Hill View staff by writing Agony Aunt style letters to diagnose some real plants that are past their best. Hopefully the botanists will be able to cure them!

Children will harness their **creativity**, and be encouraged to become designers, to raise funds to revamp the flowerbeds on the school campus, making and designing their own cross-stitch bookmarks.

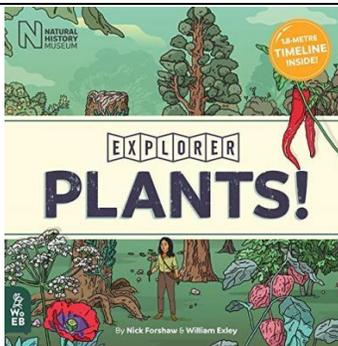
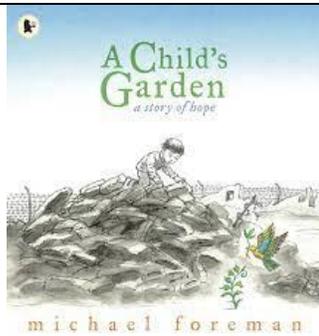
Children will work **collaboratively** to make their chosen flower bed design a reality, before finally showing off their knowledge by inviting parents into school for a grand opening of the newly planted flowerbeds to talk them through all of their new-found knowledge about the botanical world.

**English**

Link texts:

**A Child's Garden (Fiction)**

**Explorer Plants (Non-fiction)**



Link and model texts and extracts are used as 'What a good one looks like' to teach from and are used to enable children in the writing process, using **Talk for Writing**, to successfully achieve the main writing outcomes for the project.

### Main writing outcomes:

#### Narrative

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".

#### Non-fiction

Write Agony Aunt letters as botanists about ailing plants, giving advice on how to nurture and grow them.

#### Writing skills to cover

Structure of organisational/language features for a letter

Descriptive writing - developing scenes and characters, expanded noun phrases and ambitious vocabulary choices

Paragraphing

#### Punctuation and Grammar

Commas used correctly in lists and sometimes correctly to mark boundaries within sentences (e.g. following a fronted adverbial).

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.

#### Weekly free writes

These are used to re-visit previous learning and offer a range of opportunities and genres to apply previously taught skills.

### Science

Children learn all about plants and what they need to survive and thrive.

#### Learning Intentions / National Curriculum Links:

1. To identify the main parts of different flowering plants.
2. To identify and describe the functions of different flowering plants.

NC: identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

3. To explore the impact of nutrients in the soil on plants for life and growth, and how they vary from plant to plant.

NC: 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

4. To investigate the way in which water is transported within plants.

NC: Investigate the way in which water is transported within plants

5. To describe the lifecycle of a flowering plant.
6. To explain different methods of pollination in flowering plants.
7. To explain different methods of seed dispersal in flowering plants.

NC: explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

### D&T

Children design and create cross stitch bookmarks to raise funds for bedding plants.

#### Learning Intentions / National Curriculum Links:

1. To use research to develop the design of a functional and appealing product (existing products).
2. To use research to develop the design of a functional and appealing product (market research).
3. To design a product by generating and developing ideas through discussion and annotated sketches.

NC: use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

NC: generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

4. To thread a needle, knot a thread and work a needle to complete a cross stitch.

NC: Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

5. To evaluate my product against the brief and consider the view of others to suggest improvements to my work.

NC: Evaluate their ideas and products against their own

design criteria and consider the views of others to improve their work

**Visits and Visitors**

Visit to Upton Country Park

**Cultural Capital**

Children will gain the knowledge and experience of visiting a museum.

Children will gain an understanding and appreciation of money, by raising funds and researching how far this money will stretch to purchase items (flowers and plants for the outdoor areas).

**Home Learning**

Children will be provided with a seed and tasked with creating a plant diary to document its growth.