


## Dereham Church Infant and Nursery School- Science

	<b>Year group: 1, Summer 1</b>	<b>Area/topic: Plants</b>
<p><i>(Objectives from NC/ELG/Development matters)</i></p> <p><b>Working scientifically:</b></p> <ul style="list-style-type: none"> <li>*Observing closely, using simple equipment.</li> <li>*Identifying and classifying.</li> <li>*Performing simple tests.</li> <li>*Using their observations and ideas to suggest answers to questions.</li> </ul> <p><b>Plants:</b></p> <ul style="list-style-type: none"> <li>*Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees (Year 1, B1)</li> <li>*Identify and describe the basic structure of a variety of common flowering plants, including trees. (Year 1, B2)</li> <li>*Observe and describe how seeds and bulbs grow into mature plants. (Year 2, B3)</li> <li>*Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (Year 2, B4)</li> </ul> <p><b>Seasonal changes:</b></p> <ul style="list-style-type: none"> <li>*observe changes across the four seasons. (Year 1, E1)</li> </ul>		

Prior learning	Future learning
<ul style="list-style-type: none"> <li>*Plant seeds and care for growing plants. (Nursery - Plants)</li> <li>*Understand the key features of the life cycle of a plant and an animal. (Nursery - Plants)</li> <li>*Begin to understand the need to respect and care for the natural environment and all living things. (Nursery - Plants)</li> <li>*Explore the natural world around them. (Reception - Living things and their habitats)</li> <li>*Recognise some environments that are different to the one in which they live. (Reception - Living things and their habitats)</li> </ul> <p><b>Prior learning in the Autumn term:</b></p> <p><b>Plants:</b></p> <ul style="list-style-type: none"> <li>*Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees (Year 1, B1)</li> <li>*Identify and describe the basic structure of a variety of common</li> </ul>	<p><b>Plants:</b></p> <ul style="list-style-type: none"> <li>*Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees (Year 1, B1)</li> <li>*Identify and describe the basic structure of a variety of common flowering plants, including trees. (Year 1, B2)</li> <li>*Observe and describe how seeds and bulbs grow into mature plants. (Year 2, B3)</li> <li>*Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Year 2, B4)</li> </ul>

flowering plants, including trees. (Year 1, B2)  
 \*Observe and describe how seeds and bulbs grow into mature plants. (Year 2, B3)

**Seasonal changes:**

\*observe changes across the four seasons. (Year 1, E1)

**Working scientifically & encouraging scientific enquiry**

**Observing over time**

\*Observing plant growth of a vegetable and recording through drawing.

**Identifying and classifying**

- \*Children to identify and correctly name a range of wild and garden flowers.
- \*Children to identify and correctly name a range of trees whilst identifying if they are deciduous or evergreen.
- \*Children will decide different ways to sort and group plants, flowers or trees.

**Pattern seeking**

\*Children to carry out a simple investigation to answer a pattern-seeking question. E.g. Do all fruits/vegetables have the same number of leaves? This might be based on the vegetable children are planting.

**Research using secondary sources**

- \*Children to see and discuss images and photographs of different types of plants including flowers and trees.
- \*Children to view labelled diagrams of plants and create their own-labelled diagram.
- \*Children to view labelled diagrams of trees and create their own-labelled diagram.
- \*Using ID charts to support naming plants.
- \*Using images to support identifying and recognising if trees are deciduous or evergreen.

**What pupils need to know or do to be secure**

**Key knowledge and skills**

**Possible evidence**

\*I can identify and correctly name a range of wild and garden flowers including *some* of the following; cow parsley, daffodil, bluebell, lavender, dandelion, fuchsia and lily. (B1)  
 \*I can draw a diagram and label the different parts of a plant including the roots, stem, leaves, petals, fruit, flower, seed or bulb. (B2)  
 \*I can decide and represent different ways to sort and group flowers, plants or trees. (B1 & B2)

**There will be evidence of children meeting the 'I can' statements through:**  
 \*Quotes taken from discussions.  
 \*Children can correctly use the key vocabulary during lessons.

\*I can draw a diagram of a tree and label the parts including the trunk, branches, leaves, roots and bark. (B2)

\*I understand that plants can be food for humans and animals. (B1)

\*I can plant a seed or bulb to grow vegetables; I know it must be planted into soil and understand the seed/bulb needs water and sunlight to grow. (B4)

\*I can watch and record, through drawing, my seed/bulb change and verbally explain what happens as it grows. (B3)

\*I can compare vegetable plants and explain the different parts that humans use to eat explaining if the vegetable comes from the plant's flower, root, leaves or stem. (B2)

\*I can explain what the word evergreen means and how an evergreen tree looks during each season. (B1)

\*I can explain what the word deciduous means and how a deciduous tree looks during each season. (B1)

\*I can compare and explain the similarities and differences between evergreen and deciduous trees. (B1)

\*Children recording through drawing.

\*Photographs of children's learning.

\*Written explanations of understanding or adult scribing a child's understanding depending on individual needs.

\*Children beginning to ask questions around plants.

### Key vocabulary

Common, wild, garden, roots, stem, stalk, bud, petals, fruit, berry, flower, seed, bulb, trunk, branch, leaves, bark, herbaceous plants, fern, moss, herb, deciduous, evergreen.

Names of trees, garden and wild flowering plants in the local area.

### Common misconceptions

\*Children may see plants as only being flowering plants that grow in pots with colourful petals and a stem.

\*Children may not recognise that trees are a plant.

### Books linking to this area

\*Leaf man by Lois Ehlert

\*Jaspers beanstalk by Nick Butterworth

- \*Children may think all leaves and stems are green.
- \*Children may not understand that a trunk is a stem.
- \*Children may not recognise that blossom is a flower.

- \*Look what I found in the woods by Moira Butterfield
- \*Eco Girl by Ken Wilson-Max
- \*The extraordinary gardener by Sam Boughton
- \*It starts with a seed by Laura Knowles and Jennie Webber
- \*The tree book
- \*Ten seeds by Ruth Brown

### Memorable first hand experiences

- \*Completing a local walk to identify and classify trees, plants, leaves etc.
- \*Planting seeds and observing growth.
- \*Using grown vegetables to create a dish to eat.

### Opportunities for communication

- \*Children to be given opportunities for communication with partners, groups and whole class to discuss as completing practical activities and also to share findings.
- \*Children to be provided with lots of opportunities to be outside observing plants and encouraged to discuss and describe what they see.
- \*Through the use of Explorify.

DCINS Reasonable adjustments for pupils with SEND

**Communication and Interaction**

- \*Visual aids, pictures of equipment with words labelled, word mats with pictures for key words in that lesson.
- \*Freedom to explore scientific equipment and investigate in own way.
- \*Hands on experiences to encourage communication and interaction with others.
- \*Pre teaching any new vocabulary.

**Cognition and Learning**

- \*Opportunity for lots of hands on exploration and verbally sharing thoughts and ideas.
- \*Freedom to explore scientific equipment and processes.
  - \*Pre teaching new vocabulary or concepts.
  - \*Activities adapted if needed for safety and ease.
- \*Visual aids, pictures of equipment, mats with key words and pictures
- \*Learning recorded through photos and adult quotes, children not expected to write for recording their understanding.
- \*Using working walls to aid learning and remind of previous learning.

### *Social, Emotional and Mental health*

- \*Awareness of individual needs, any potential triggers within the curriculum and the child's background.*
- \*Pre prepare children for any activity they could find triggering or difficult in some way.*
- \*Practical activities or experiments to be completed within a smaller group or 1:1 if needed.*
- \*If the class are sharing their learning within a large group, take the child in a smaller focus group if they struggle with social situations.*
- \*Adjustments made where needed to suit individual.*

### *Sensory and Physical*

- \*Adult support with any practical activities.*
- \*Awareness of the individual's likes or dislikes and their own reactions to sensory activities.*
- \*If a child enjoys sensory activities, then plan for this wherever possible within the lesson.*