


Dereham Church Infant and Nursery School- Science

	<p>Year group: Nursery</p>	<p>Area/topic: Plants</p>
<p><i>(Objectives from NC/ELG/Development matters)</i></p> <ul style="list-style-type: none"> *Use all their senses in hands-on exploration of natural materials. (Understanding the world) *Explore collections of materials with similar and/or different properties. (Understanding the world) *Plant seeds and care for growing plants. (Understanding the world) *Understand the key features of the life cycle of a plant and an animal. (Understanding the world) *Begin to understand the need to respect and care for the natural environment and all living things. (Understanding the world) 		

<i>Prior learning</i>	<i>Future learning</i>
<p>*Explore natural materials, indoors and outside. (Birth to three)</p>	<p>*Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants)</p> <p>*Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants)</p> <p>*Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)</p>

<i>Working scientifically & encouraging scientific enquiry</i>
<p>Comparative testing</p> <ul style="list-style-type: none"> *Compare how quickly different seeds/bulbs germinate. *Compare how different vegetable tops grow. <p>Observing over time</p> <ul style="list-style-type: none"> *Children to plant and watch a seed/bulb grow. *Observe a piece of fruit or a vegetable decay over time. <p>Research using secondary sources</p> <ul style="list-style-type: none"> *Look at seed and bulb packets to learn how to plant and care for them.

What pupils need to know or do to be secure

Key knowledge and skills	Possible evidence
<p>Children will be taught to:</p> <ul style="list-style-type: none"> -With support, recognise that leaves fall from trees. -With support, talk about the colours of leaves as they change. -Show curiosity of nature they find outside or in the classroom such as a pine cone. -With support, recognise that flowers start to die during Autumn. -Be encouraged to notice the plants and flowers that are growing in the outdoor area. -Describe the size and colours of the flowers growing in Spring with support and encouragement from the adults. -Use their language to explain what they have observed in the outdoor area and describe the plants they have seen. -Take part in a plant hunt in the school outdoor area. -To begin with, children to be supported to use the words plant, flower or tree when they find one. -Be supported to understand how and why questions about plants and begin to form answers with support. -Use a range of media to record their observations of plants e.g. drawing, painting, play dough etc. -Towards the end of the academic year, children independently use the word plant, flower or tree to explain what they have observed outside. -Explore and be exposed to a different environment during a local walk. -Use prior knowledge of nature to identify plants, flowers and trees seen in a different environment during a local walk using the simple vocabulary 'plant/flower/tree'. 	<ul style="list-style-type: none"> *Can describe some differences between seeds and bulbs. *Can identify seeds and bulbs. *Can talk about how they planted and cared for seeds and bulbs. *Can explain that a seed or bulb grew into a plant and then died. *Children do not damage the living things they encounter in the natural environment. *Children show care and encourage others to care for things they encounter in the natural environment.
<h3>Key vocabulary</h3>	
<p>Plant, leaf, stem, branch, root, bark, flower, petal, seed, berry, fruit, vegetable, bulb, plant, hole, dig, water, weed, grow, shoot, die, dead, soil, names of plants the children grow.</p>	
Common misconceptions	Books linking to this area
<p>Some children may think:</p> <ul style="list-style-type: none"> *Trees are not plants *Bulbs are big seeds *Big plants grow from big seeds and big bulbs *Fruit and vegetables come from the supermarket *Plants grow at night or when we are not watching them. 	<p>Traditional stories and nursery rhymes</p> <ul style="list-style-type: none"> *Jack and the Beanstalk *The Giant Turnip <p>Other texts</p> <ul style="list-style-type: none"> *Jim and the Beanstalk by Raymond Briggs

	<ul style="list-style-type: none"> *Titch by Pat Hutchins *Oliver's Vegetables by Alison Bartlett & Vivian French *We Planted a Pumpkin by Rob Ramsden
<i>Memorable first hand experiences</i>	<i>Opportunities for communication</i>
<ul style="list-style-type: none"> *Local walk to a park. *Visit a garden centre. *Plant seeds or bulbs. *Observing plants grow. *Removing seeds from fruit. *Visit the local market to see fruit, vegetables and plants on sale. 	<ul style="list-style-type: none"> *Children to be given opportunities for communication with partners, groups and whole class to discuss as completing practical activities. *Adults to model and encourage discussion during play.

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.*