

Scientific Investigations:

- Observing Changes over Time
- Looking for Naturally- Occurring Patterns and Relationships
- Identifying and Classifying Things
- Comparative and Fair Testing

Scientific Skills Taught:

ASK

- To explore the world around them
- To ask their own questions
- To find answers from books, photographs, videos (secondary sources)

BREAKDOWN

- To use simple measurements
- To use simple equipment

CAPTURE

- To observe closely
- To compare using simple features
- To record what they notice in different ways
- To sort things using simple features
- To notice patterns and relationships
- To group things using simple features

DESCRIBE

- To explain what they found out
- To talk about what they have seen
- To use simple scientific language
- To know there are different ways to answer

Scientists:

- Horticulturist – plant scientist – The Eden Project Tim Smit.

Prior Learning:

- EYFS: Observe and record how plants and flowers in the garden and vegetable box are growing; growing broad beans for a 'beanstalk' competition.
- Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. (Early Learning Goal)

Curriculum	Learning Intention	Knowledge and Key Vocabulary
<p><u>Making links to previous learning and discuss the model (if needed)</u></p>	<p>What do you already know about plants pre assessment task?</p>	
<p><u>Knowledge and skills through investigations</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> - identify and name a variety of common wild and garden plants, including deciduous and evergreen trees 	<p>What do plants begin life as?</p> <p>To observe difference between a seed and a bulb. To predict what is needed to plant a seed or a bulb. To plant seeds and bulbs. To observe the plant or seed growing Record observation in a diary format.</p>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> - Children understand that plants begin life as seeds or bulbs. - Children correctly identify and label the 4 main parts of a flower. - Children identify and label a variety of parts of different plants and trees including:

<ul style="list-style-type: none"> - identify and describe the basic structure of a variety of common flowering plants, including trees. <p>Notes and guidance (non-statutory)</p> <ul style="list-style-type: none"> - Pupils should use the local environment throughout the year to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables that they have planted. They should become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches, stem). <p>Pupils might work scientifically by:</p> <ul style="list-style-type: none"> - observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. - Pupils might keep records of how plants have changed over time, for example the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants. 	<p>What are the parts of a flower? What are the parts of a tree? Identify, describe, say the name and label the parts of a flower and the parts of a tree. Describe basic structure of a flower.</p> <p>What is the difference between a fruit and a vegetable? To be able to name a range of fruits and vegetables. To be able to classify fruits and vegetables.</p> <p>What are some of our common plants and trees called? Identify and name a variety of common wild and garden plants and trees.</p> <p>What are deciduous trees? What are evergreen trees? Explore the difference between deciduous and evergreen trees. Classify trees as being deciduous or evergreen.</p>	<p>petals, roots, stem, leaves, trunk, branch, seed, flower, fruit and bulb.</p> <ul style="list-style-type: none"> - Children understand the difference between fruits and vegetables and classify some items correctly as being fruit or vegetables. - Children know some of the names of common plants. - Children know that there are two main groups of trees: evergreen and deciduous and what the main difference is. <p>Vocabulary:</p> <ul style="list-style-type: none"> - Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud. - Names of trees in the local area. - Names of garden and wild flowering plants in the local area.
<p>Application and Assessment Activity</p>	<p>https://www.educationquizzes.com/ks1/science/ Can I name wild plants and trees? To apply what they have learnt to wild plants. To carry out fieldwork. To identify a range of plants and trees.</p>	
<p>Thinking Deeper: Why are plants important to all life?</p>		
<p>Links to other subjects:</p> <ul style="list-style-type: none"> • Subject Specific links – <ul style="list-style-type: none"> - English: new vocabulary, explaining their work, describing images and processes. - Maths: sorting activities and comparative language. 		

- ICT: learning from activities and videos on IWB

- Personal Development – learning how to look after plants and the link to environmental changes.

- SMSC – learning how to look after plants and to respect nature.

- Cultural Capital –look at plants from different countries.

- Careers – farming, florist, tree surgeon, scientist, biologist,

- British Values – following safety rules and instructions to keep everyone safe during experiments as some parts of plants are not to be eaten.

- Equality – everyone can grow and look after plants no matter where they live in our community