

KS1.CA.T3	Area of study: Plants  Unit aims / outcome: <ul style="list-style-type: none"> <li>• identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>• identify and describe the basic structure of a variety of common flowering plants, including trees.</li> <li>• observe and describe how seeds and bulbs grow into mature plants</li> <li>• find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</li> </ul>	
Geographical concepts to organise knowledge: <b>Biology-</b> the study of living organisms <b>Working Scientifically-</b> disciplinary knowledge required to think and work as a scientist.		
Key strands of learning:		
Hierarchical Strands: (see progression) Plants (Build year on year)	Cumulative Strands: e.g. environment (key features throughout NC)	
Learning in Reception:  Understand some important processes and changes in the natural world around them, including the seasons and changes in their personal environment.  Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.  Explore the natural world around them, making observations and drawing pictures of animals and plants.	Tier 2  <u><b>New</b></u> Wild plants Blossom Petals Bulb Seed Water light  <u><b>Review –</b></u> Plants Garden Roots Stem Flower Leaves Branches trunk	Tier 3  <u><b>New</b></u> deciduous evergreen suitable temperature
NC objective:	Vocabulary and crucial knowledge:	

- identify and name a variety of common wild and garden plants, including deciduous and evergreen trees
- identify and describe the basic structure of a variety of common flowering plants, including trees.
- observe and describe how seeds and bulbs grow into mature plants
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Context of study:

This builds upon knowledge taught in (KS1.CA.T1), where children have been taught plants produce oxygen and that they are living things. During (KS1.CA.T1) they will also know that plants often start simple food chains. Children will have learned about living things and plants through their forest school sessions in reception. Children should know plants can grow and can be found in gardens, allotments or in public areas.

Crucial Knowledge:

**Plants**

I know a plant is a living thing that grows from the soil and turns light from the sun into food.

I know a plant or flower have 4 different parts- roots, stem, leaves and flowers (blossom).

I know that a tree has 4 different parts- roots, trunk, branches and leaves.

I know that the roots of a living plant or tree take in the nutrients and water from the soil.

I know that the stem or the trunk give the plant structure.

I know that the leaves gather the sunlight and turn it in to oxygen.

I know that the branches of a tree hold the leaves and allow water to flow to them.

I know that the flower (blossom) allows bees to collect the pollen and seeds to grow to make new plants. (reproduction)

**Deciduous and Evergreen**

I know that you can have wild plants and garden plants.

I know a buttercup, nettle and clover is a common wild plant.

To know a rose, sunflower and lavender is a common garden plant.

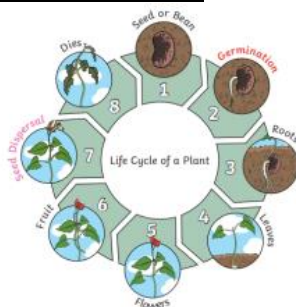
To know Deciduous trees lose their leaves in autumn.

To know oak and maple trees are deciduous.

To know Evergreen trees keep their needles (or pines) all year.

To know pine and fir trees are evergreen.

**Bulbs and Seeds**



I know that all plants start out as seeds from which they break open and grow.

I know all seeds and bulbs grow in to mature plants.

I know that bulbs grow underground and have their own food store.

I know seeds have their own food store at first.  
I know that seeds and bulbs need water to grow but might not need light.  
I know that for plants to grow they need water, light and a suitable temperature to grow.  
I know if I don't give plants enough or too much water they will die.  
I know most plants cannot survive hot temperatures without water.

Working Scientifically:

Identifying, Grouping and Classifying

- Ask questions: What are the similarities and differences between parts of trees and parts of a flower.
- Observing and measuring: what deciduous and evergreen trees can you see on the field?
- Record: How do you know if a tree is evergreen or deciduous?

Observe

- Observing and Measuring: observe the trees and wild common plants in our woodland area?
- Ask questions: can the children find out about common garden plants they have at home?
- Make predictions: do all plants fit in to one category or can some plants be wild and garden?

Fair Test

To work scientifically by performing simple comparative tests to explore the suitability of temperature, water and light for a plant to grow.

- Ask questions: ask about what a seed or bulb would need to grow and how we will compare and give each seed or bulb a different amount of light, water and a different temperature.
- Plan: think about how the test is going to be made fair and which variables are going to be changed e.g. 4 plants being grown, different locations, different amount of water, thermometer for temperature check
- Observe: each of the plants over time
- Record: record the results in a simple chart-how big/quick is the seed/bulb growing.
- Interpret: what have the results shown us and which plant has grown the best. What did it need to be successful?

Key scientists of study: (other trust schools will have these mapped out if we are struggling)