

Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'





Subject: Science

Year group: 2

Term: Summer

Unit name: Plants

National curriculum:

- 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

<u>Prior Knowledge -</u> Plants can grow. The names of some common garden plants (e.g. poppy, rose) and the names of some common wild plants (e.g. daisy, dandelion, nettle). Deciduous trees lose their leaves in the autumn every year. Evergreen trees have green leaves all year round. The parts of a plant including petals, fruits, roots, bulbs, seeds, stem, trunks and branches.

Scientific enquiry		
Classifying	Based on the children's own criteria: classify	
	seeds; classify bulbs	
Observing over	Plant seeds and bulbs and observe how they	
time	grow.	
Pattern seeking	Children generate questions for investigation	
	such as: Do big seeds germinate more quickly?	
	Does it matter which way round you plant a	
	bulb or seed? Which comes first, the root or	
	the shoot?	
Comparative/fair	Not relevant	
testing		
Researching	Look at packets to decide how to plant and care	
	for seeds e.g. How much water do they need?	
	Do they need shade/full sun?	

Key vocabulary			
As for year 1:	Bark	Leaf	
	Branch	Petal	
	Bud	Root	
	Deciduous	Seed	
	Evergreen	Stalk	
	Flower	Stem	
	Fruit	Trunk	
Light	Light is a form of energy		
Shade	Darkness caused by light being blocked		
Sun	A hot ball of gas that gives off great amounts of energy		
Warm	Giving off heat		
Cool	The opposite of warm- it gives off less heat		
Water	A liquid that plants need to grow		
Grow	To become larger; increase in size		
Healthy	Most healthy plants are upright with green leaves.		
Spiritual Development			
Children will learn appreciate and be grateful for how plants provide us with food Psalms			

Children will learn, appreciate and be grateful for how plants provide us with food. *Psalms* 104:14: He makes grass grow for the cattle, and plants for people to cultivate- bringing forth food from the earth.



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Key Learning Assessment Statements- what will the children know by the end of the unit?

Plants may grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants. These mature plants may have flowers which then develop into seeds, berries, fruits etc. Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates. Some plants are better suited to growing in full sun and some grow better in partial or full shade. Plants also need different amounts of water and space to grow well and stay healthy.

To understand that plants are living things and require things to grow. Plants require things such as water, warmth, nutrients from soil and light to grow. If they do not have one or more of these things, they may stop growing. Plants can: move, grow, react to their surroundings (sense), absorb nutrients, reproduce.

To know that flowers make seeds to make more plants (reproduce).

To understand that humans need plants to survive- to eat and for clean air.

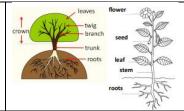
To understand which plants we are able to eat.

Many plants provide us with food by bearing fruits which carry their seeds. When farmers grow plants to provide us with food, these are called crops. We eat many fruits that contain seeds (including tomatoes!). We also eat different parts of vegetable plants: root vegetables (carrots, potatoes) stem vegetables (celery, spring onion) leafy vegetables (cabbage, lettuce) flowering vegetables (cauliflower, broccoli) We eat grains and cereals from plants too (wheat, oats). Nuts and seeds are also sometimes edible (sesame seeds, pumpkin seeds, peanuts). Many herbs are also grown to add flavour to foods.



To know that we can eat different parts of plants.

To confidently identify the parts of common trees and plants?



Assessment for Learning

Recapping prior knowledge- beginning of unit- what do children already know?

Beginning of each lesson- focus on recall of previous learning (quick quizzes)

Activity ideas

- Sort through pictures to show which things are living, which are dead and things which have never been alive.
- Plant a bulb or a seed and watch it grow. Record your observations in a diary.
- Compare the growth of that plant with a plant (using the same bulb or seed) where one of the conditions is different (no water, no light, a smaller container).
- Plant a seed on a wet cotton bud. Does it grow? Why might it grow and then stop?
- Dissect a variety of fruits and locate where their seeds are.
- Eat a variety of vegetables and identify which part of the plant they come from
- Create a bar chart to show how tall your plants are to the nearest cm.