

Year: 1

Term: Summer

Science – Plants

Prior Knowledge

Plant seeds and care for growing plants. (Nursery – Plants)

Understand the key features of the life cycle of a plant and an animal. (Nursery – Plants)

Begin to understand the need to respect and care for the natural environment and all living things. (Nursery – Plants)

Explore the natural world around them. (Reception – Living things and their habitats)

Recognise some environments that are different to the one in which they live. (Reception – Living things and their habitats)

Key Knowledge:

What are plants?

Plants are living things. Most have roots which they use to absorb water and nutrients, and leaves which they use to absorb sunlight. Plants come in many different shapes and sizes, and live in different habitats around the world. Plants are part of the food chain and many are eaten by animals.

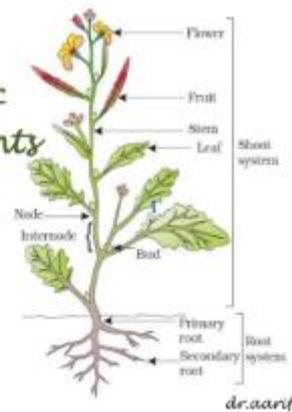
In order for a seed to survive and grow into a strong plant it needs water, light, suitable temperature, air and time.

What does a plant look like?

Identify and describe the basic structure of a variety of common flowering plants, including trees e.g. leaves, flowers (blossom), petals, fruit, roots, bulb, seed, trunk, branches and stem.

Morphology of flowering plants

1. Root
2. Stem
3. Leaf
4. Flower
5. Fruit
6. Seed



Common plants

Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees e.g.

common wild – fireweed, dandelion, chickweed, bull thistle

Common garden plants – daisy, poppy, stinging nettle, buttercup, rose, pansy

Pupils should use the local environment throughout the unit to explore and answer questions about plants growing in their habitat. Where possible, they should observe the growth of flowers and vegetables they have planted.

Key Vocabulary

Prior vocabulary - Plants, leaves, flower, seeds, grow, vegetables, fruit

Working scientifically key vocabulary – observe, test, record, equipment, magnifying glass

Roots	holds the plant into the ground and absorbs water and nutrients from the soil
stem	Transports water and nutrients to different parts of the plant.
leaves	use light, air and water to make food for the plant.
flower	the part of a plant that blossoms. Flowers produce the seeds that form new plants.
petals	attract pollinators e.g. insects and birds using their bright colours or unusual shapes.
trunk	the stem of a tree, from which its branches grow.
seeds	the part of a plant from which a new plant grows.
branches	The woody part of a tree or bush that grows out from the trunk
bulb	Something that grows underneath the ground before a plant grows
deciduous	A tree where the leaves drop off each year.
evergreen	A tree that keeps its leaves all year round.

Additional vocabulary to discuss across the unit - habitat, growth, tree, structure

Deepening and broadening the knowledge and understanding for GDS learners:

- identifies a large variety of common wild and garden plants including deciduous and evergreen trees
- explains the difference between a deciduous and an evergreen tree (i.e. states that the leaves fall from a deciduous tree in autumn)
- sorts and/or groups common plants and trees and can justify their groupings
- matches flowers or fruits to plants or trees, e.g. conker to horse chestnut, dandelion flower to dandelion plant, blackberry to bramble
- explains in simple terms what each part of the plant does
- names other parts of a plant, e.g. seeds, stones, stamens, petals, stigma
- knows that some plants bear fruit
- names a variety of plants/fruits that we can eat, e.g. celery, orange, carrot, cabbage
- researches where on a plant its edible part grows, e.g. cabbages, apples, carrots, potatoes, strawberries, bananas, pineapples, coconuts

Key Outcomes

1. What are the common parts of a plant?

Children will learn to identify, name and draw diagrams of the common parts of a plant including: leaves, petal, stem, root, bud, flower, seed, fruit. They will understand that these will look different on different plants and be able to identify them.

2. Can I identify and name some common garden and wild plants?

Children will explore the local environment, identify and name common wild and garden plants by matching them to named images and by making close observations of their leaves, seeds, flowers etc. looking at the key characteristics.

3. Can I identify some trees and name their parts?

Children will know that trees are plants and observe and identify some trees in the school grounds by looking at their bark and leaf shape and describing some of the key features of these trees e.g. the shape of the leaves, the colour of the flower/blossom. They will know that some trees drop their leaves in autumn growing them again in spring (deciduous) and others do not (evergreen) and can identify some of these.

4. Can I classify and compare plants?

Children will use close observation/ magnifying glasses, to compare and contrast familiar plants; describing how they were able to identify and group them.

5. Can I describe how plants change over time?

Children will observe how plants change over time e.g. the leaves falling off trees and buds opening. Children will plant bulbs/seeds of flowers and vegetables and observe and record observations during the whole term of them growing into mature plants and talk about their findings.

6. Can I share what I know about different plants?

Children will compare and contrast what they have found out about different plants, using correct vocabulary and key features to be able to explain that they recognise: plants are not just flowering plants grown in pots, trees are plants, not all leaves or stems are green, trunks are stems and blossoms are flowers, providing some examples.

Key Skills:

Knowledge Skills

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.

Working scientifically

- Observing closely – using magnifying glasses and comparing familiar plants
- Describing how they were able to identify and group plants and draw diagrams showing the parts of different plant including trees.
- Keep records of how plants have changed over time e.g. leaves falling off trees and buds opening.

Future Learning

Observe and describe how seeds and bulbs grow into mature plants. (Y2 - Plants)

Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants)

Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)

Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Y3 - Plants)

Investigate the way in which water is transported within plants. (Y3 Plants)