



What should I Know by the end of the unit?

- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- Investigate the way in which water is transported within plants.
- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

- What should I already know how to do?

- Identify and name a variety of plants and animals in their habitats, including micro-habitats.
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.
- 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.

Key Vocabulary

The main parts of a Plant	• Flowers • Leaves • Stem • Roots
Flowers	They have colour and smell to attract insects.
Leaves	They change Carbon Dioxide and water into food for the plant and Oxygen.
Stem	They hold the plant up and carry water from the roots to the rest of the plant.
Roots	They hold the plant in the ground and soak up water and minerals from the soil.
Sometimes plants bear fruit	Fruit is the part of the plant we often eat but its main job is to keep the seeds safe.



Y3 Knowledge Organiser – Living things and their habitats

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How plants grow and survive

Fertilisation	• When the Pollen joins the Egg of the new flower a seed or many seeds are formed.
How do the new seeds get to the soil to grow?	The seeds are dispersed. This can be done in 3 main ways: 1) By wind, for example like Dandelion seeds. 2) By animals, (they get eaten and pooped out). 1) By explosion. Dry seed pods split open and shoot out the seeds.

How plants grow and survive

To grow and survive, plants need:	• Light • Water • Carbon Dioxide This is so that they can make their own food. • Warmth This is because if plants get too hot or too cold then they will die.
How does a plant get water?	• The roots take up water from the soil. The water travels through the stem of the plant to the leaves.
The importance of flowers	
The job of the flower	• The flower exists to make new plants. • The flower contains the pollen and eggs which make seeds. • The seeds grow into new plants.
Parts of the flower	• Petal • Stamen (The male part of a flower) • Carpel (The female part of a flower) (Look at the second diagram)
Pollination and Fertilisation	For a plant to grow a new seed, Pollen needs to get to its Carpel from another plant.
How does Pollen get from one plant to another?	Insects: • The insect goes to the first flower looking for Nectar. • Pollen gets stuck to it. • When it goes to another flower, the Pollen gets stuck to that flower. Wind: • Pollen is blown from one flower to another.



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Diagrams and Symbols

How a plant takes in water.



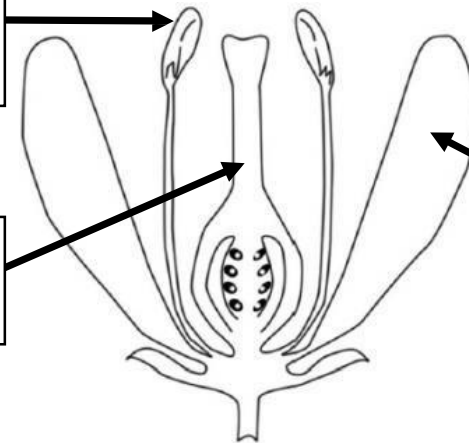
The Structure of a Flower

Stamen:

Contains pollen grains

Carpel:

Contains the eggs



Petal:

Attracts insect to the flower (usually brightly coloured)

Pre and Post Assessment

Statement	Pre Assessment response	Post Assessment response
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