



Key Ideas & Vocabulary

Many plants, but not all, have roots, stems/trunks, leaves and flowers/blossom. The roots absorb water and nutrients from the soil and anchor the plant in place. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. The leaves use sunlight and water to produce the plant's food. Some plants produce flowers which enable the plant to reproduce. Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination). This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways. Different plants require different conditions for germination and growth.

germination



To start to grow; sprout.

pollen



A fine powder produced by some plants. Causes plants to form seeds.

pollination



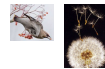
The process that allows plants to reproduce. Insects and wind transfer pollen from plant to plant.

photosynthesis



The process in which green plants use sunlight to make their own food.

seed dispersal



The movement, spread or transport of seeds by wind, animals and water.

seed formation

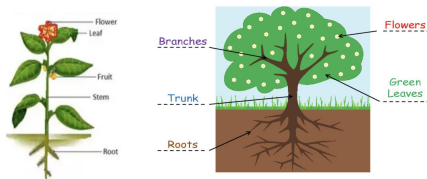


Flowers and fruit make their own seeds.

Knowledge I already have

In Year 1:

- I observed and described how seeds and bulbs grow into mature plants.
- I found out and describe how plants need water, light and a suitable temperature to grow and stay healthy.



New Knowledge

By the end of this unit:

- I will identify and describe the functions of different parts of flowering plants: roots; stem/trunk; leaves; and flowers.
- I will 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.
- I will investigate the way in which water is transported within plants.
- I will explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.



Future Knowledge

In Year 5:

- I will describe the life process of reproduction in some plants and animals.

In KS3:

- I will learn more about reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.

Scientific Enquiry

Identifying and classifying:

- Classify seeds in different ways including how they are dispersed.

Comparative and fair tests:

- Investigate what happens to plants when put in different conditions.

Researching using secondary sources:

- Observe and research different types of seed dispersal. Make predictions about how different seeds are dispersed. Explain observations during investigations.

Observing over time:

- Spot and record flowers, seeds, berries and fruits outside throughout the year; identify and explain the changes seen.
- Observe what happens to plants over time when leaves or roots are removed.

Vocabulary

germination	To start to grow; sprout.
pollen	A fine powder produced by some plants. Causes plants to form seeds.
pollination	The process that allows plants to reproduce. Insects and wind transfer pollen from plant to plant.
photosynthesis	The process in which green plants use sunlight to make their own food.
seed dispersal	The movement, spread or transport of seeds by wind, animals and water.
seed formation	Flowers and fruits make their own seeds.