

Science— Plants

Key Vocabulary

carpel (pistil)	The female parts of the flower. Made up of the stigma, style and ovary.
fertilisation	When the male and female parts of the flower have mixed in order to make seeds for new plants.
flower	The colourful part of the plant that has petals to attract insects. Flowers are where the seeds are made.
germination	When a tiny new plant bursts out of the shell of the seed.
leaves	Usually green in colour, the leaves are where food is made.
nutrients	The substances needed by living things in order to grow and survive. Plants get nutrients from the soil and absorb them through the roots.
pollination	When insects move pollen from the male anther to a female stigma.
reproduction	When a plant produces a seed which becomes a new plant.
roots	The part of the plant underground that anchors the plants in place. They absorb water and nutrients from the soil.
seed	The part of a plant that is made after the plant has flowered which it then drops so that it can become a new plant.
seed dispersal	When the seeds move away from the parent plant. They can be moved by the wind, water or animals.
sepal	Leaf-like structures that protect the flower and petals before they open.
shoot	The first part of the plant that grows upwards from the seed above the ground to find sunlight.
stamen	The male parts of the flower. The stamen is made up of the anther and the filament.
stem	Holds the plant up and carries water and nutrients from the roots to the leaves, and food from the leaves to the rest of the plant. The stem of a tree is called a trunk.

What Does a Plant Need to Grow?

The diagram illustrates the growth of a plant through five stages. Below each stage is a label in a box: 1. A watering can pours water onto a pot of soil. 2. A small seedling grows in a pot. 3. A larger plant with roots in soil. 4. A plant with leaves and a wind symbol above it. 5. A plant with fruit (strawberries) in a pot.

Seed Dispersal

Seeds can be dispersed by:

The diagram shows four methods of seed dispersal, each with an illustration and a label in a box: 1. A green seed pod with a brown opening. 2. A white sheep. 3. A brown bird. 4. A seed pod with seeds flying out.

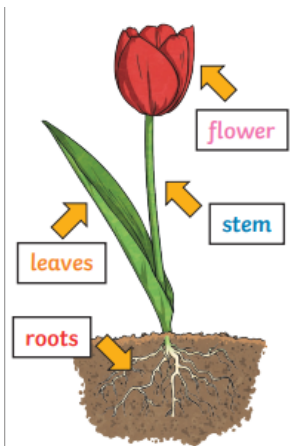
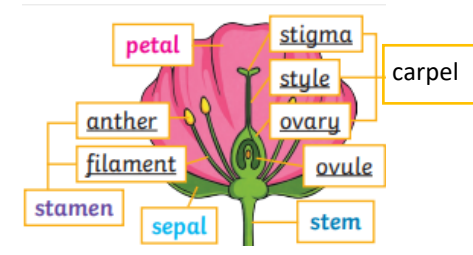
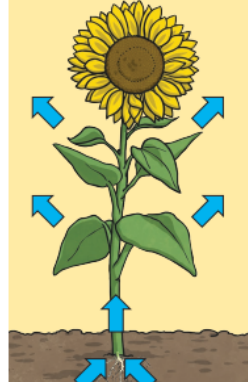
Key Facts

When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called **germination**. A shoot will then grow up and out of the soil in search of light. It will use the light, and the water and nutrients from the soil to grow bigger.

Plants need water, light, suitable temperature to germinate, grow and thrive. Different plants require different amounts of each thing for example, cacti live in the desert and need very little water whereas, a water lily needs to live in water.

The flowers have brightly coloured petals to attract pollinating insects to them. The female part of the flower (carpel) is made up of the stigma, style and ovary. The style holds up the stigma, the stigma collects pollen. The ovary contains the ovules that become seeds once fertilised.

The male part of the flower (the stamen) is made up of the anther and filament. The filament holds up the anther and the anther holds the pollen where the insects will rub against it, collecting pollen.

<p style="text-align: center; color: orange;">Parts of a plant</p> 	<p style="text-align: center; color: orange;">Parts of a flower</p> 	<p style="text-align: center; color: purple;">Life Cycle of a Flowering Plant</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid gray; padding: 5px; width: 30%;"> <p style="color: orange; font-weight: bold;">Seed Dispersal</p> <p>The fully formed seeds are moved away from the parent plant.</p> </div> <div style="border: 1px solid gray; padding: 5px; width: 30%;"> <p style="color: green; font-weight: bold;">Germination</p> <p>The seed starts to grow.</p> </div> <div style="border: 1px solid gray; padding: 5px; width: 30%;"> <p style="color: purple; font-weight: bold;">Growing and Flowering</p> <p>The plant grows bigger and forms a flower.</p> </div> <div style="border: 1px solid gray; padding: 5px; width: 30%;"> <p style="color: green; font-weight: bold;">Fertilisation and Seed Formation</p> <p>The pollen joins with an ovule and a seed starts to form.</p> </div> <div style="border: 1px solid gray; padding: 5px; width: 30%;"> <p style="color: purple; font-weight: bold;">Pollination</p> <p>Pollen from the anther lands on the stigma and travels down the style.</p> </div> </div>	<p style="color: blue; font-weight: bold;">How Water Moves through a Plant</p> <ol style="list-style-type: none"> 1. The roots absorb water from the soil. 2. The stem transports water to the leaves. 3. Water evaporates from the leaves. 4. This evaporation causes more water to be sucked up the stem. <p style="color: blue; font-weight: bold;">The water is sucked up the stem like water being sucked up through a straw.</p> 
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Tier 2

Vocabulary

environment

The surroundings or conditions in which a person, animal, or plant lives.

structure

The way in which something is built or organised.