

What do Plants Need to Grow?

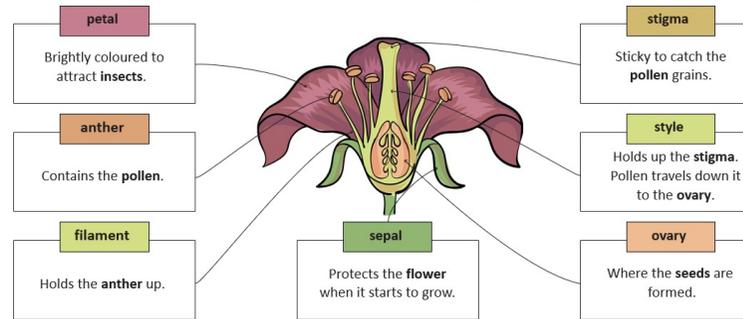
Plants are living things. There are 7 life processes that tell us if something is alive. The 7 life processes are **movement, respiration, growth, reproduction, excretion, nutrition and sensitivity**. Plants do all 7 of these things.



Plants need certain conditions to help them grow well. They need water, light and heat, as well as air and room to grow.

Plant Reproduction

The flower's **main job** is to create new **seeds** to grow new plants. There are lots of **different parts** of the flower.



Pollination and Dispersal

Pollination occurs when pollen from the anther is transferred to the stigma. Insects like bees and butterflies are attracted to the bright colours of the petals and the sweet scent of the flower. They visit the flower to drink a sweet liquid called nectar. When an insect goes into the flower to drink the nectar, some grains of pollen brush off the anthers onto their body. When the insect visits another flower for more nectar, the grains of pollen transfer from the insect's body to the sticky stigma of the new flower. This is **pollination**. The pollen on the stigma then travels down the style towards the ovary. Once it reaches the ovary, the pollen joins with an ovule. The ovule can then grow into a seed. This is known as **fertilisation**. Once the seeds are fully formed, the plant needs to **disperse** them. This means that the plant needs to move or transport the seeds away from the parent plant in some way so that they don't all try to grow in the same place. There are lots of different ways that seeds can be **dispersed**.



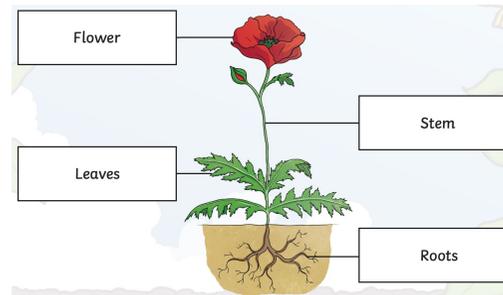
Parts of a Plant

Roots grow underneath a plant, below the surface of the soil. They are usually long and are covered in small hairs. The roots anchor the plant in the ground. They absorb water and nutrients from the soil.

Stem/Trunk: Branches, leaves and flowers grow from the stem or trunk. A trunk is woody, and often has a layer of bark around it. The stem or trunk holds the plant up. It also carries water and nutrients from the roots to the leaves.

Leaves make food for the plant using sunlight and carbon dioxide from the air.

Flowers are brightly coloured to attract insects and birds. The insects carry pollen to other flowers. Flowers use the pollen to make seeds to grow new plants.



Key Vocabulary



DISPERSAL: The spread of seeds to new areas.



FERTILISATION: The process of a plant reproducing by creating a seed.



HEALTHY: In good health and not ill.



NUTRIENTS: Substances that help plants to grow.



PLANT: A living thing that grows in the earth and has a stem, leaves and roots.



POLLINATION: When pollen from the anther is transferred to the stigma.



POLLINATOR: Something which pollinates plants, especially an insect.



REPRODUCTION: The process of a plant producing one or more individuals similar to itself.