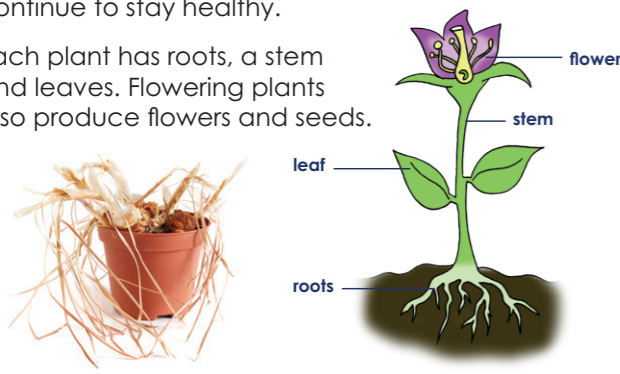




What do plants need to grow?

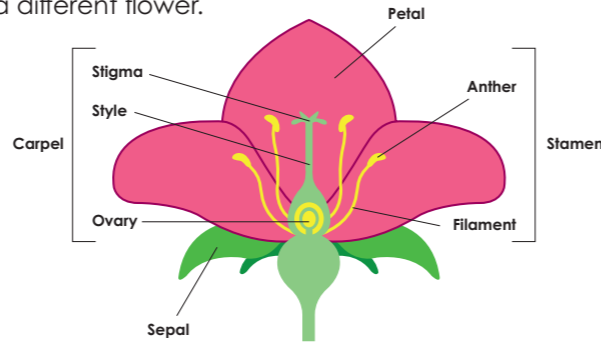
Plants need air, light, water, warmth, nutrients and room to grow. A healthy plant will survive because it can make its own food. All of the parts of the plant have a special function so that it can continue to stay healthy.

Each plant has roots, a stem and leaves. Flowering plants also produce flowers and seeds.



What is inside a flower?

Most flowering plants have flowers which have both male and female parts. The anther and stamen are male parts and the carpel, ovary and ovule are female parts. The petals help attract insects who move the pollen from this flower to a different flower.



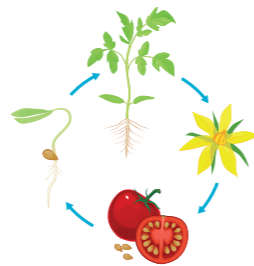
What is the lifecycle of a flowering plant?

Flowering plants have lifecycles like all other living things — including us!

A flowering plant will begin life as a seed — the roots and shoot will then begin to grow. We call this germination.

The plant will then grow and produce flowers. Pollination happens next so that seeds can be produced and fertilised.

The plant will then disperse the seeds so that new plants can grow.



What is seed dispersal?

Once seeds have been made, they need to be dispersed so that new plants can grow. Seed dispersal makes sure that the new plants are growing away from the parent plant so that they are not competing for water, sunlight and other nutrients. Some types of seed dispersal will move the new plant a long way away from the parent plant. They can be dispersed in 6 different ways: wind, water, animals (carried or eaten), explosive or drop and roll.

How are seeds dispersed?



Seeds from plants like dandelions are specially designed so that they can be carried long distances by the **wind**. Another example is the seed of a sycamore tree.

Coconuts are seeds from palm trees and seeds like this are specially designed so that they can float on **water** to new places. Another example is the seed of a waterlily plant.

Animals help with seed dispersal in different ways. When they **eat** seeds, they pass through them and are excreted in new places. Also some seeds are designed to stick to animals so they can be **carried** to new places.

Some plants can **burst** their seed pods when they are ready to and throw their own seeds to new locations. An example of this is a pea pod.

Seeds are grown in a protective case. When they fall from the tree or plant, they **roll** to a new location before the casing opens and the seed can grow.

Glossary

| | | |
|----|-----------------------------|--|
| 1 | carnivore | an animal that only eats meat |
| 2 | consumer | cannot make its own food – a consumer eats something else in the chain |
| 3 | fertilisation | happens after pollination and is how a new seed is made |
| 4 | flower | the reproductive part of the plant |
| 5 | food chain | shows how each living thing gets food within its own habitat |
| 6 | function | the purpose of something – the job it has to do |
| 7 | herbivore | an animal that only eats plants |
| 8 | leaf | attaches to the stem and helps produce food |
| 9 | life cycle | the changes a living thing goes through during its life |
| 10 | nutrients | what the plant needs so that it can stay healthy and can grow |
| 11 | omnivore | an animal that eats both plants and meat |
| 12 | photosynthesis | how the plant makes its own food |
| 13 | pollination | the moving of pollen from one plant to another for fertilisation |
| 14 | producer | any kind of green plant – a producer is the first food source in the chain |
| 15 | root | lies under the soil to attach the plant to the ground |
| 16 | seed | grows into a new plant |
| 17 | seed dispersal | the moving of seeds away from the parent plant |
| 18 | shoot | the part of a new plant that is just beginning to grow above ground |
| 19 | stem | the main body of the plant |
| 20 | water transportation | how the plant takes water from the ground through the roots and then up the stem to the leaves |

What is pollination?

Pollination is when the pollen from the male part of one plant is moved to the female part of another plant. This allows the plant to produce seeds. Insects like bees help with pollination.



What is the function of a root, stem, leaf and flower?

| | | | |
|---|--|--|--|
| | | | |
| Root | Stem | Leaf | Flower |
| The roots anchor the plant into the ground and absorb water and nutrients. They also store some food for the plant. | The stem transports water and nutrients from the roots to the leaves. It also holds the plant up towards the sunlight. | Plants make their own food using their leaves. | The flower is the part of the plant that makes seeds so that new plants can grow. The petals attract bees for pollination. |