

Petals



Petals make a flower look beautiful. They are brightly coloured to attract insects and bees to the flower in order to pollinate. Without the pollinators, new flowers could not be made.







×

Parts of a Flower







Pollen looks a bit like dust and is a bit sticky. It can be blown by wind or moved around by insects within the same flower or to another flower. The flower makes pollen in the anther, which is the top part of the stamen - the male part of the flower. That's easy to remember because stamen has the word 'men' at the end.

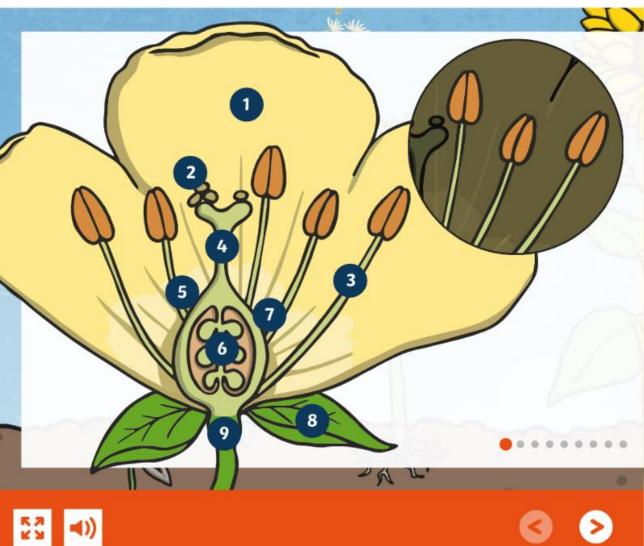
People who have hay fever are allergic to pollen and they can get runny or sore eyes and nose - a bit like having a cold in the middle of summer!













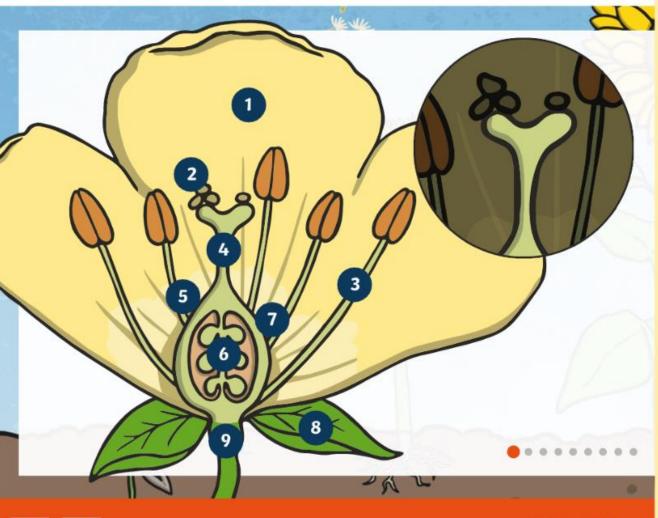


This is the male part of the flower. The stamen is a long part made up of the anther (the bit at the top) and the filament (the long bit attaching it to the flower). The stamen produces the pollen that then goes to fertilise the plant and eventually make more plants.









Stigma



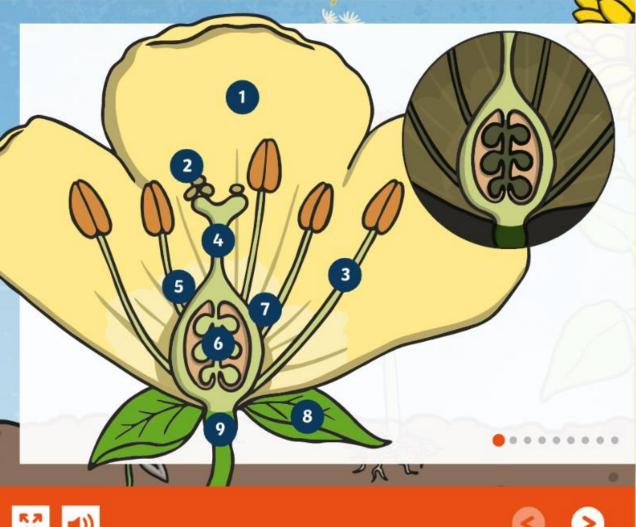
This is part of the female bit of the flower. The stigma is the bit at the top of the pistil that collects the pollen ready for fertilisation to happen.















This is the bottom of the female part of the flower and where the ovules are. The ovules then get fertilised and the ovary is where the new seeds grow.

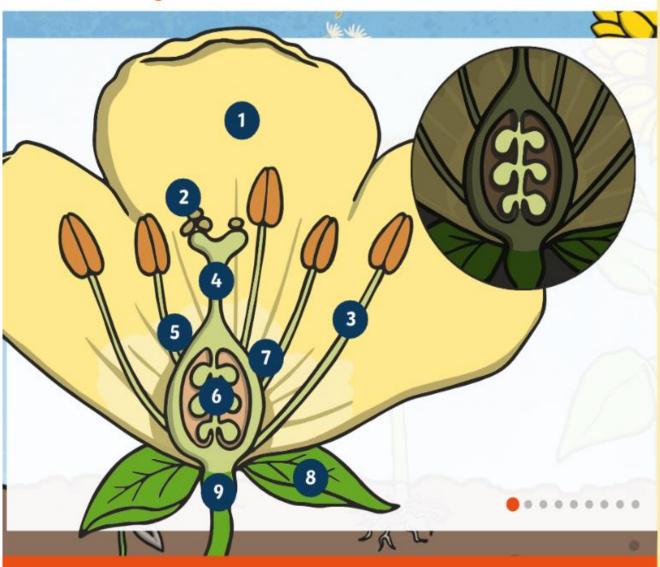








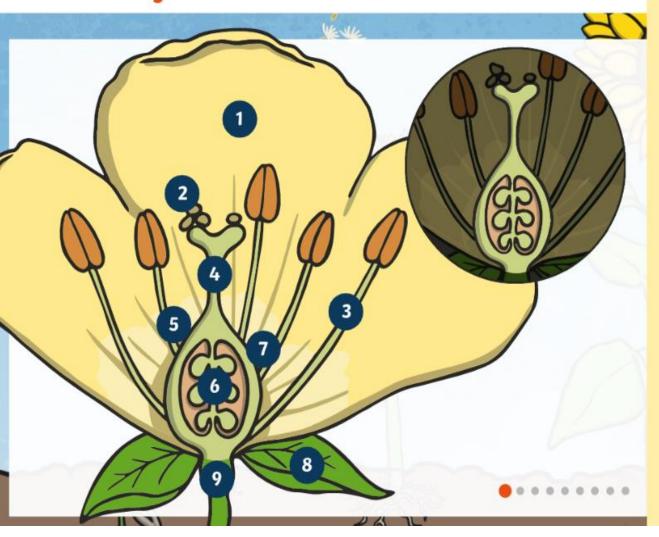




6 Ovule



This is the name for the part of the flower that gets fertilised and eventually becomes the new seed. Its name came from the Latin word 'ovulum' which means 'little egg'.

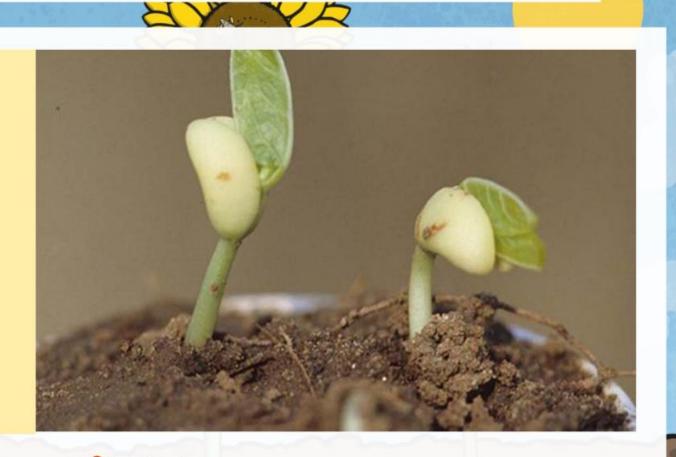


Pistil



This is the female part of the flower and is made up of the stigma (at the top), the style ~ (the long part linking the top and the bottom), and the ovary at the bottom (containing the ovule). It is in the pistil that fertilisation of the flower happens.

Germination is when a seed starts to grow into a plant. Seeds on their own or in a packet at the garden centre have not germinated yet. They need to be planted and have air, water and some warmth to start to grow - or germinate. First the seed will crack open as it starts to grow and the first thing to be seen (under or over the ground) is a tiny green shoot. That tells us that the seed is germinating.







Plants and flowers need to get their seeds moved around to new places in order to grow new plants and spread. This is called dispersal and it just means handing something out or spreading it far and wide. They do this in a number of clever and different ways. Keep clicking the seed button to see these different ways!

Animals including humans can get certain seeds called burrs stuck to them and when they move to a new place, so do the seeds. The seeds will eventually drop off in a new place.

Some plants actually explode after seeds are made which scatters them far and wide.

Animals (especially birds) will eat seeds and fruits containing seeds. The seeds will pass through their bodies and eventually out the other end as poo... meaning the seeds have moved somewhere else!

Water can be used to disperse some seeds. The coconut, which is a seed, can float in the sea to find a new place to start to grow.

Wind can blow the seeds to a new place where they might start to grow. You will notice that dandelion seeds are designed to travel in the air with an umbrella type design that acts like a parachute.

Humans move plant seeds on purpose. This may be to make our gardens and towns look pretty or to grow crops for food.

Fertilisation

×



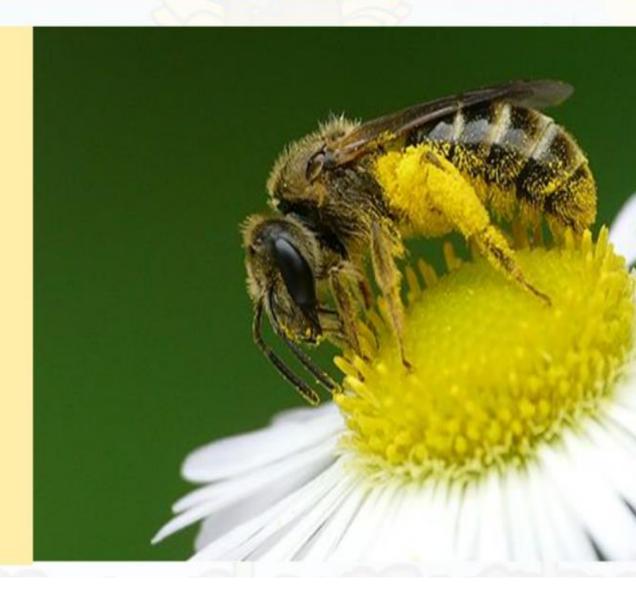


This is what happens when the male and female parts of the flower have mixed. The pollen from the male part of the flower lands on the stigma at the top of the female part of the flower. The flower is now able to make seeds for new plants.



EY VE

The bee is a very important insect for flowers and crops in general. Not only do they make honey - which is very sweet and tasty - they help to pollinate flowers by moving the pollen from the male part of the flower to the female part of the flower. If this did not happen, then new flowers could not be made. It is estimated that about $\frac{1}{3}$ of the food we eat every day depends on bees pollinating along with some other insects and animals.



Roots

X

The roots of a plant have a few jobs. One important job is to collect water and nutrients from the soil (or whatever it is growing in). Another job is to keep the plant upright and stable. If the roots are not very strong, the plant might not stay in the soil, or fall over. Tree roots do the same job, but are sometimes so strong that they can cause damage to walls, roads and buildings. Tree roots can also spread out further than the tree is tall!



Soil

WENTE

EY VA

Many plants grow in soil, but you can grow plants in or on things other than soil such as water or cotton wool. Soil makes it easier as it keeps everything close at hand for the plant. Plants need water and nurtients from soil. You can get different kinds of soils in different areas. Some might contain different minerals and some might hold more water. Different soils can be suited to different types of plants helping them to grow better.



Y YA

This is the end and the beginning of the life cycle of the plant. After it has made new seeds, the plant has finished with everything it needed to make those seeds, so the plant dies. Even the dead plant is useful though as its goodness goes back into the soil to be used by other plants. A plant or flower can also die before it should if it is missing one of the things it needs to grow such as air, light, water or warmth.

