

Allotment

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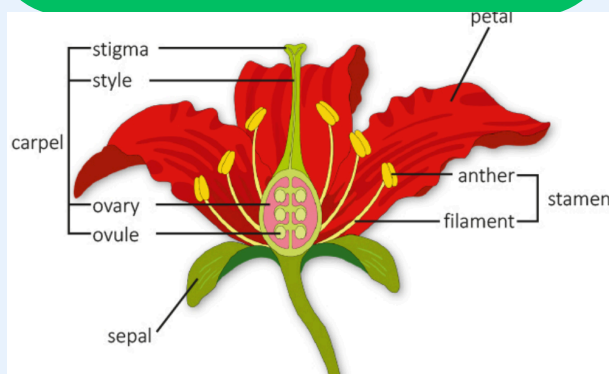
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An allotment is a small piece of land used to grow fruit and vegetables

Parts of a flowering plant

Flowering plants come in different colours, shapes and sizes but they all have a similar structure. Most have a female part called a carpel and a male part called a stamen.



Plant reproduction

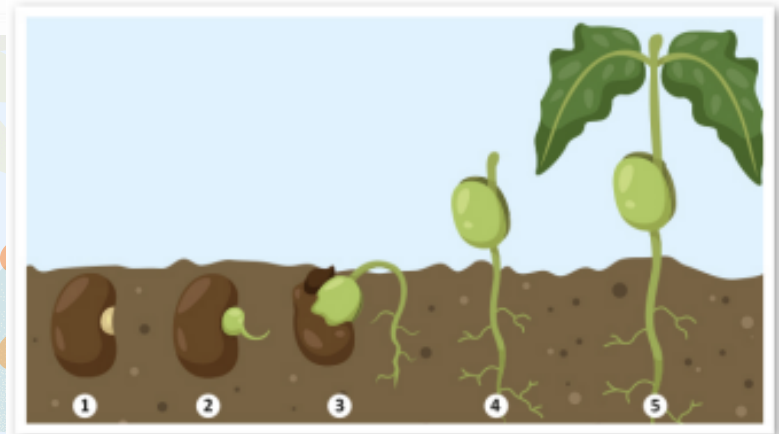
Plants reproduce to make new plants. All flowering plants go through the following cycle to produce a new plant:

1. Brightly coloured or fragrant flowers attract insects.
2. Pollinating insects, birds, animals or the wind move the pollen grains from the anther of one flower to the stigma of another. This is called pollination.
3. A pollen grain travels down the style to reach the ovary.
4. The pollen fertilises an egg cell called an ovule inside the ovary.
5. The ovule develops into a seed inside the fruit.
6. The seeds are dispersed.
7. When the seeds land on the ground and the conditions are right, a new plant grows.

Botanical drawings of plants can be achieved by using a variety of techniques including shading, contouring, cross-hatching and stippling

Stages of plant growth

1. A seed remains inactive until the conditions are right for germination and growth.
2. If a seed has the space, water and warmth it requires, a root breaks out of the seed coat and grows downwards into the soil.
3. More roots develop and a green shoot appears. The shoot breaks open the seed coat and pushes upwards and out of the soil.
4. The shoot grows towards the light as the plant's roots absorb water and nutrients.
5. Over time, the plant develops and leaves appear.



Wildlife

Some animals play a vital role in plant reproduction and pest control. Insects help plants reproduce by moving pollen from one plant to another. Earthworms burrow through the soil, allowing air and water to reach the roots of plants. However, some animals damage plants. Cabbage white butterflies lay eggs that develop into caterpillars that eat crops, slugs eat the leaves of growing plants and mice burrow underground, disturbing roots.



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Farming
When plants and animals are grown or reared for people to eat, it is called farming. Farmers living in different countries work in different climates and landscapes so they adapt their farming to their local conditions. Because of this, the types of farming vary across the world.

Farming across the world can take a range of forms, including subsistence, fair trade and intensive farming. Foods farmed in other countries include rice from China, salmon reared in Europe and tea leaves grown in Africa.

Plants are seasonal which means they only grow at certain times of the year eg lettuces are planted in April for harvest in June. Plants also need particular conditions to thrive - sunlight, warmth, water and a suitable environment eg pot or planter. Thought must be given to the materials these can be made from - wood, plastic materials or recycled items. - and the amount of room plants are likely to need for growth. A careful plan and design should consider all these factors.

Farming in the UK
There are three main types of farming in the UK: arable, pastoral and mixed:
Arable farms grow crops and cereals.
Pastoral farms rear animals.
Mixed farms grow crops and keep animals.
The map below shows farming practices across the UK.

Key Vocabulary...

bio-degradable	materials which break down naturally through the action of living organisms such as bacteria and fungi.
disperse	To scatter
fair trade	A way of buying and selling produce to ensure farmers have good working conditions and get a fair price.
fertilisation	The process of pollen joining with an ovule, causing it to become a seed.
germination	The process whereby a seed starts to grow.
harvest	To gather in crops.
intensive farming	A method of farming that produces a large amount of produce
photosynthesis	The process by which plants use sunlight to make food from carbon dioxide and water.
pollen	Tiny particles made by the anthers of flowers that fertilise the ovules of a different flower.
produce	Food such as fruit and vegetables that are grown or farmed.
reproduction	The process that produces offspring.
seedling	A young plant that is grown from a seed.
shoot	The first part of a plant to appear above the ground.
sow	To plant seeds.
subsistence farming	A method of farming where farmers grow enough food to feed their family.

Key

- arable
- fruit
- dairy cattle
- mixed
- beef cattle
- pig
- hill sheep

