Castlefield School - Science

| Topic: Plants | Year: Three | Theme: The World Around Us | Strand: Biology |
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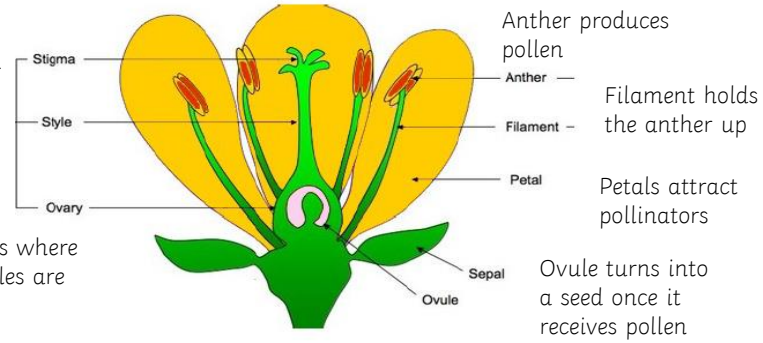
## Key Concepts

### How are plants adapted to their habitats?

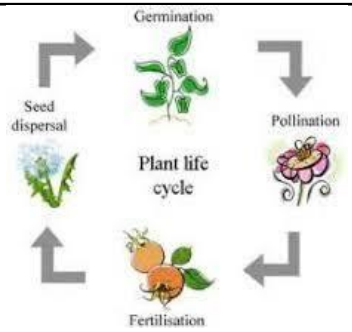
- Depending on where the plant is growing, it may need more or less air, space, water, light and temperature.
- Plants in hot deserts have adapted to store water within their trunks or stems so that they can survive when there is little rain.

### What are the parts of a flower?




### What is the life cycle of a flowering plant?

- The flower's job is to create seeds so that new plants can grow.
- After being planted in the soil for a few days, the seed absorbs water. The stem pushes through the soil along with the seed leaves; this is called germination.
- Pollination occurs when pollen from the anther is transferred to t the stigma by bees and other insects.
- The pollen then travels down and meets the ovule. When this happens, seeds are formed - this is called fertilisation.
- Seeds are then dispersed so that germination can begin again




### How do plants disperse their seeds?

- Seeds are spread in many ways including: wind, animals, water and ballistic.

| Wind | Animals | Water | Ballistic (explosion) |
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## Key Vocabulary

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| anther | the part of a stamen that produces and releases the pollen |
| dispersed | scattered, separated, or spread through a large area |
| fertilisation | in plants, where pollen meets the ovule to form a seed |
| fertiliser | a substance that is added to soil in order to make plants grow more successfully |
| germination | if a seed germinates or if it is germinated, it starts to grow |
| mature | When something matures, it is fully developed |
| pollen | a fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds |
| pollination | To pollinate a plant or tree means to fertilise it with pollen. This is often done by insects |
| stigma | the top of the centre part of a flower which takes in pollen |

## Famous Scientists

Barbara McClintock (1902 –1999) was an American botanist (someone who studies plants) who won the Nobel prize for her work on the healing powers of plants.

## Working Scientifically Skills

Asking relevant questions.

Explaining results – drawing conclusions and using results.

Setting up enquiries and choosing equipment.

Recognising when to use other sources of information to find answers.