

Teaching and Learning Resources

from Diane Hawkins



Reproduction in Flowering Plants

A collection of slides to teach Key Stage 2 Science Unit 5B Life Cycles. Children will learn to name and explain the functions of some parts of a flower; describe the processes of pollination, fertilisation, seed dispersal and germination.

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The Parts of a Flower

- Most flowers have four parts:
- sepals,
- petals,
- stamens,
- carpels.



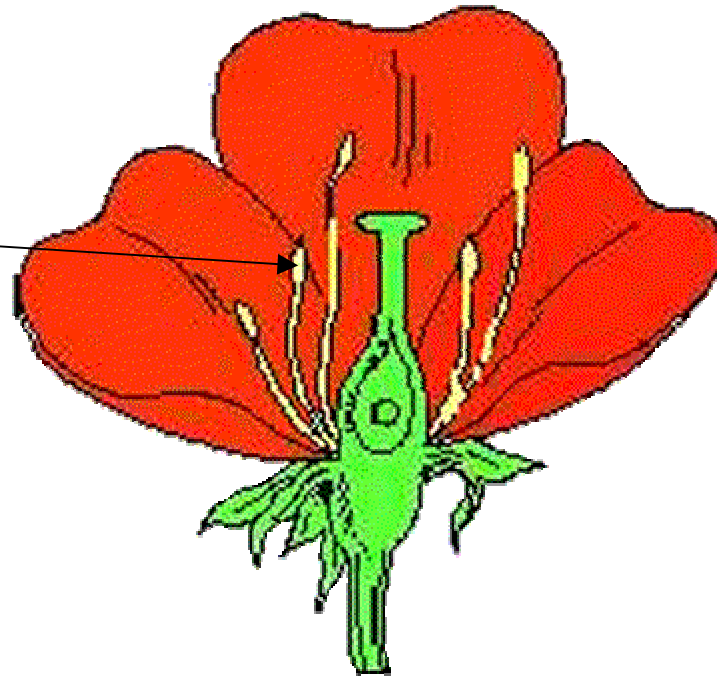
The parts of a flower

- Sepals protect the bud until it opens.
- Petals attract insects.
- Stamens make pollen.
- Carpels grow into fruits which contain the seeds.



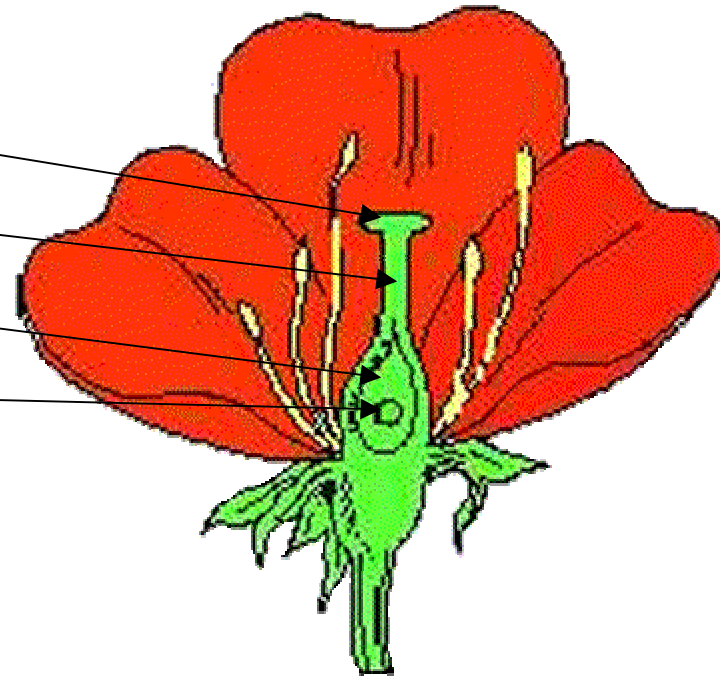
Stamen (male)

- Anther: pollen grains grow in the anther.
- When the grains are fully grown, the anther splits open.



Pistil (female)

- Stigma
- Style
- Carpel (ovary)
- Ovules (eggs)



Pollination

- Flowering plants use the wind, insects, bats, birds and mammals to transfer pollen from the male (stamen) part of the flower to the female (stigma) part of the flower.



Pollination

- A flower is pollinated when a pollen grain lands on its stigma.
- Each carpel grows into a fruit which contains the seeds.



Fertilisation

- Pollen grains germinate on the stigma, growing down the style to reach an ovule.
- Fertilised ovules develop into seeds.
- The carpel enlarges to form the flesh of the fruit and to protect the ovary.



Wind pollination

- Some flowers, such as grasses, do not have brightly coloured petals and nectar to attract insects.
- They do have stamens and carpels.
- These flowers are pollinated by the wind.



Seed dispersal

Seeds are dispersed
in many different
ways:

- Wind
- Explosion
- Water
- Animals
- Birds
- Scatter



How birds and animals help seed dispersal

- Some seeds are hidden in the ground as a winter store.
- Some fruits have hooks on them and cling to fur or clothes.



How birds and animals help seed dispersal

- Birds and animals eat the fruits and excrete the seeds away from the parent plant.

