

Year 7 Knowledge Organiser – Plant Reproduction

Key words:

Pollen – contains the male sex cells. Produced by the stamens

Ovule (egg) – female sex cell, found in the ovary

Pollination – the transfer of pollen from the stamens to the stigma, either in the same flower or a different one

Fertilisation – the joining of a pollen grain nucleus and an ovule to form an embryo

Seed – structure containing the embryo of a new plant

Fruit – the ovary develops into this after fertilisation – it surrounds the seed

Carpel – all the female parts of a flower, made up of the stigma, style and ovary

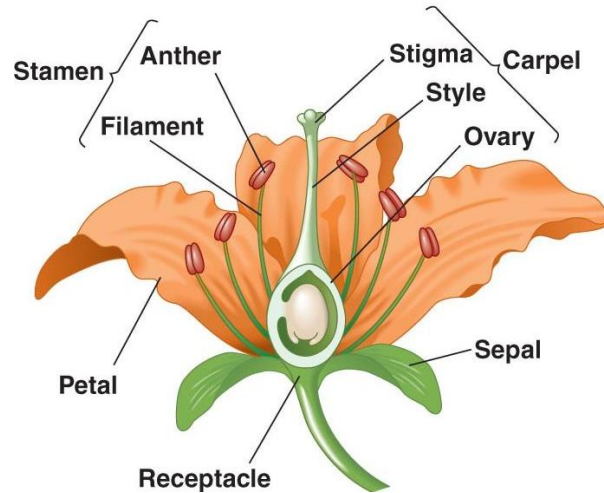
Websites that might be useful:

<https://www.bbc.com/bitesize/guides/zs7thyc/revision/1>

Extension ideas to research:

How do coconut palms disperse their seeds? Look up the squirting cucumber plant!

Flower structure



Seed dispersal

After fertilisation plants have to spread their seeds so they can grow in a new place. There are many ways that plants do this.

By the wind



By animals eating them



By making them stick to animal fur

By explosion or quick release



Plant organs

Plants have different organs to do different jobs:

Leaves – carry out photosynthesis and make food

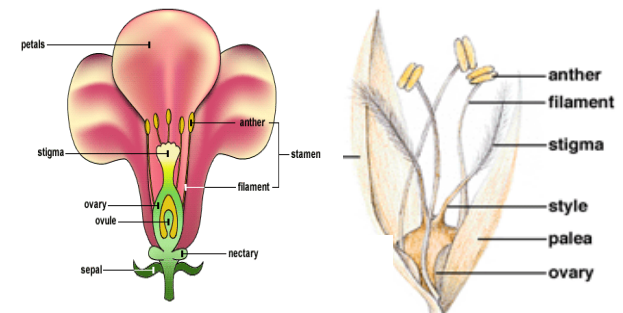
Roots – absorb water and anchor the plant

Stem – supports the leaves and transports water to them

Flower – carries out sexual reproduction

Pollination

This occurs when the **pollen grain** lands on the **stigma** and the nucleus fuses with the **ovule** to form a **seed**. It can be carried out by **insects**, animals or the **wind**.



Insect pollinated flowers have bright colours, scents and nectar to attract insects.

Wind pollinated flowers have long anthers, produce lots of pollen and have feathery stigmas to catch the pollen.