

Pye Bank CE Primary DSAT Knowledge Organiser

YEAR 3

BIOLOGY: Plants What functions do the parts of a flower have?

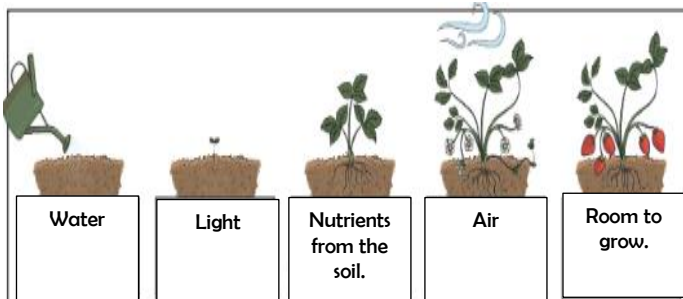
SCIENCE

KEY VOCABULARY

- Dispersal:** act of spreading seeds around.
- Fertiliser:** a material/substance you add to soil to increase the nutrients and help plants grow.
- Fruit:** a structure made by the ovary which helps disperse the seeds.
- Nectar:** a sugary liquid that insects drink to give them energy to fly.
- Nutrients:** taken from the soil through the roots that plants need to make energy, grow, develop, and reproduce.
- Pollen:** tiny grains made by the stamen which are needed by ovules in ovaries to make seeds.
- Pistil:** the female reproductive part of a flower.
- Pollination:** the act of transferring pollen grains from the male anther of a flower to the female stigma.
- Pollinator:** an animal or insect that causes plants to make fruit or seeds.
- Reproduction:** biological process by which new individual organisms – "offspring" – are produced from their "parents".
- Stamen:** a part of the flower which produces pollen at its tip, the male reproductive part of the plant.
- Sepal:** green leaf like structures at the top of the stalk.
- Flower:** the part of the plant which is concerned with reproduction.

KEY CONCEPT

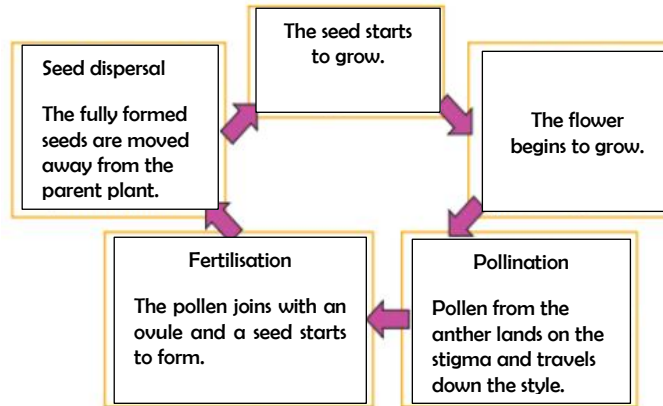
Requirements of plants for life and growth



Different plants vary in how much of these sources they need. For example, cacti can survive in areas with little water, whereas water lilies need to live in water.

KEY CONCEPT

Life cycle of a plant

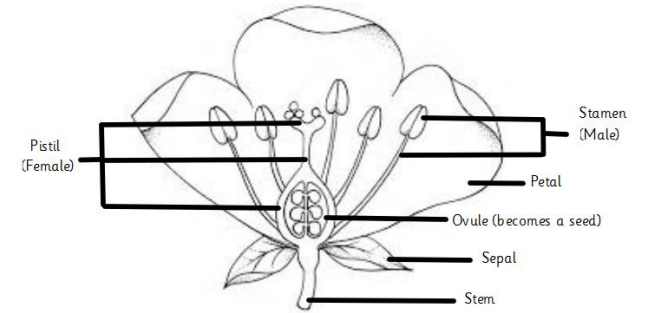


STICKY KNOWLEDGE

- Plants have male and female parts. The male part is called the stamen and this produces pollen. The female part is called the pistil and this is where the pollen needs to reach to make a seed for the plants lifecycle to continue.
- Insects take the pollen to the female part of the flower, this then starts a process to make a seed
- After the pollination process has occurred, the flower then makes a seed to continue its life cycle – once this seed is made the process is complete.
- The process of getting the seed from its parent plant is called dispersal and that can happen in a variety of ways dependent on the plant.

KEY CONCEPT

Labelled diagram of a flower



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KEY CONCEPT

Diagram to show seed dispersal

Seed Dispersal is Scattering Seeds

Seeds are **dispersed** or **spread out** so that they can grow **without** too much **competition** from **each other**. Here are some ways in which the seed can be dispersed:

1) Wind dispersal

Dandelion fruit.



Parachutes catch the wind.

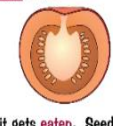
Sycamore fruit.



Wings help it fly away from the parent tree.

2) Animal dispersal

Tomato fruit.



Fruit gets eaten. Seeds come out in the animals' droppings.

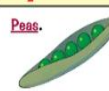
Burdock fruit.



Hooks catch animals' coats.

3) Explosions

Peas.



The pods **dry out** and **click** the seed out.

4) Drop and Roll

The heavy fruit **falls** down from the tree. It **splits** when it hits the ground and the seeds **roll** out.



Horse Chestnut fruit.

The seeds then tend to be further dispersed by animals.