

Year 3

Science

Plants

Significant Scientists

Joseph Dalton Hooker (1817-1911)



He was a doctor who travelled to many countries exploring why plants grow in different locations.

Professor Monique Simmonds

Monique Simmonds is the deputy director of Science at the Royal Botanical Gardens, Kew. She researches the traditional and economical uses of plants and fungi.

How plants survive and grow

Plants need water, light, air, warmth and nutrients from the soil to grow.

Parts of Flower

- Petal
- Carpel
- Stamen
- Sepal
- Pollen
- Stem

Key Vocabulary and Phrases

Roots

These anchor the plant in place and absorb water and nutrients from the soil.

Stem/trunk

Transports water and nutrients around the plant.

Petal

The colourful part of the plant.

Stamen

Male part of the plant that contains pollen.

Carpel

Female part of the plant that contains pollen.

Fertilisation

When pollen and egg join together to make a seed.

Pollination

The transfer of pollen to allow fertilisation.

Pollen

Yellow powder produced by the stamen.

Seed Dispersal

Spreading seeds over a wide area.

Photosynthesis

The way in which plants create their food.

Germination

When a seed sprouts a root and shoot.

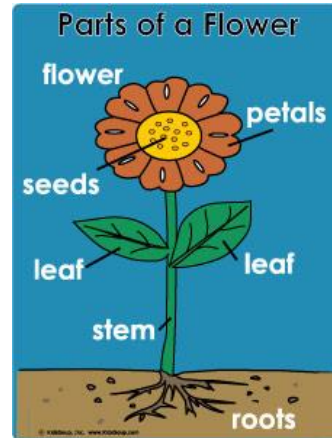
Year 3

Science

Plants

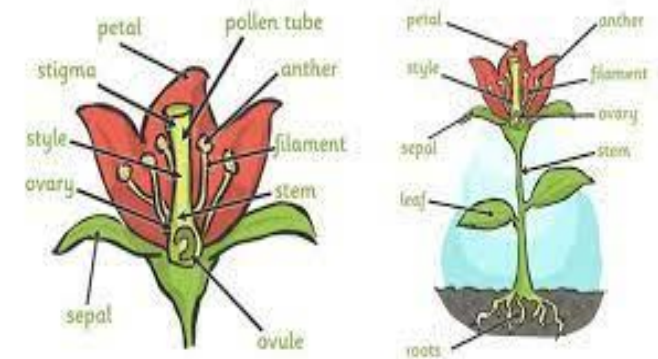
Seed Dispersal

Eaten by Animals	Animals eat seeds that do not digest properly so they poo out the seeds.
Wind	The wind can carry seeds.
Explosion	Seeds can burst out of their pods.
Stuck to Animals	Seeds can get stuck on animal fur.
Water	Rivers can carry seeds.



How does pollen travel?

Wind	The wind can blow pollen from one plant to another.
Insects	Insects can carry pollen. The pollen sticks to them and is transported to another flower when the insect lands on it.



Year 3

Science - Working Scientifically

Plants

Questions	What? Why? Where? When? How?
Record	Take photos, draw diagrams, tables and charts or writing to show your findings.
Diagram	A labelled picture.
Measure	Time - Seconds, Minutes, Hours Mass - Grams Volume - Millimetres Length - Centimetres and Metres.
Sort and group	Organise plants by their features.
Observe	Watch closely and carefully how a plant changes over time.
Compare and contrast	Look and similarities and differences between plants.
Variable	Something you can change or adapt in your investigation/experiment.

Things You Could Investigate:

Do plants need room to grow?

How are seeds dispersed?

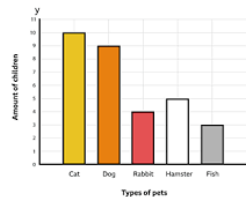
How is water transported in plants?

Equipment

A magnifying glass lets you observe closely.



Recording your findings



Bar Chart

Kind of flower	Number of flowers
Rose	1
Tulip	5
Lily	5
Orchid	4
Forget-me-not	9
Total	24

Table

Sorting rings let you sort objects into groups.

