

Our Lady's Catholic Primary School - Knowledge Organiser

Plants

Science Spring 2

Year Group 3

Key vocabulary

- photosynthesis** The way in which plants make food in their leaves
- pollen** This is a very fine powder that is produced by the male part of the flower.
- pollination** When pollen is transferred to female parts of a flower. This can be done by wind or insects.
- seed formation** Seeds can develop after pollination. They can be found in berries or fruits.
- seed dispersal** Seeds can be dispersed in different ways, for example, wind, animals or water.
- germination** When a seed sprouts a root and shoot.

Significant scientists

Joseph Dalton Hooker (1817-1911)



Joseph Hooker was a doctor and travelled to many places. He was a plant collector and botanist and brought many plants back to the UK. Joseph was interested in finding out why plants grow in the locations they do.

Professor Monique Simmonds



Monique Simmonds is the deputy director of science at the Royal Botanic Gardens, Kew. She researches traditional and commercial uses of plants and fungi. Her work involves her promoting plant and fungal-based solutions to global challenges.

Functions of different plant parts

Roots

The roots grow into the ground. They are responsible for pulling water and minerals to the plant. They expand into the ground to widen the area they can find water. They also help to anchor the plant into the ground.

Stem/Trunk

The stem/ trunk carries the water and nutrients up to the leaves. The stem also carries food from the leaves to the rest of the plant. Stems grow upwards, reaching up for the sun.

Leaves

Leaves have veins inside them, to allow water and nutrients to flow. There are many different sizes and shapes of leaves, to fit the plant's needs.

Flowers

Flowers are the parts of the plants that are responsible for making both food and seeds.

Pollination: The petals of the flower attract insects like bees and wasps that transfer the male parts of a flower to the female parts of a flower to make the seedlings.

Methods of seeds dispersal

By wind



On animal fur



By exploding seed pods



By animals eating them



In water



How a plant takes up water



Plants need certain things to grow:

room

water

Soil nutrients



light

warmth

air