

Science Y3 Summer 1 – Plants

In this unit of work the children will investigate the different functions of flowering plants and how flowers help with the life cycle of flowering plants. They will find out what plants need to grow and compare and contrast different varieties, taking into account their different locations and the suitability of it. Through first-hand experience they will find out how water is transported within plants.

In this unit children will:

- Identify and describe the functions of different parts of a flowering plant including the roots, stem/trunk, leaves and flowers.
- Know the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant.
- Investigate the way in which water is transported within plants.
- Understand the life cycle of a flowering plant.
- Use the terms pollination, seed formation and seed dispersal.

Prior Learning

FS – Talk about the plants they have observed. Know that living things grow over time. Know how to care for a plant

Y1 – Name common, wild and garden plants and label the structure of a flowering plant.

Y2 – Describe how seeds/bulbs grow into plants and what they need to stay healthy.

Cross Curricular Links

Geography – Local area – plants which grow around our vicinity

Key Vocabulary

Absorb– Soak up or take in.

Anther – The part of the stamen that produces and releases the pollen.

Dispersed– Scattered, separated or spread through a large area.

Fertilisation– In plants, where pollen meets the ovule to form a seed.

Germination–If a seed germinates, or if it is germinated, it starts to grow.

Nutrients– Substances which help plants to grow.

Ovule – A small egg

Pollen– A fine powder produced by flowers ,which fertilises other flowers of the same species so that they produce seeds.

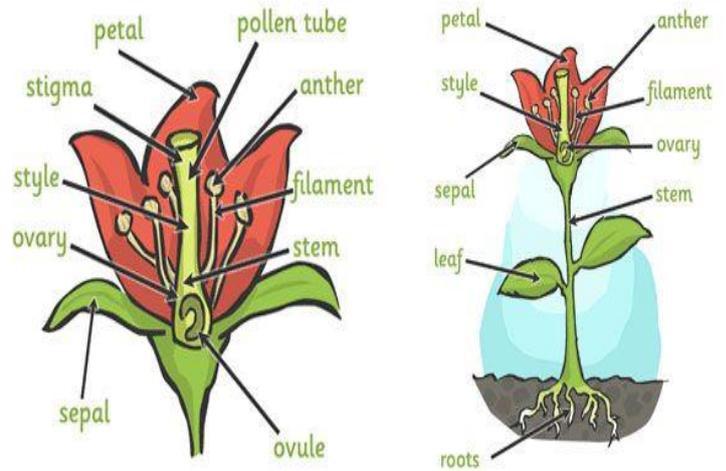
Pollination– To pollinate a plant or tree means to fertilise it with pollen, often done by insects.

Stigma – The top of the centre part of a flower which takes in pollen.

Transported – Taking something from one place to another.

Key Knowledge

- Petals on a flower are usually bright to attract bees and other insects so that they can collect pollen to make seeds.
- The seeds are then able to grow to make new plants, this is called germination.
- Leaves use carbon dioxide and sunlight to make food for a plant.
- The stem carries water and other nutrients from the roots to the rest of the plant. Leaves use this water to make food.
- The stem also helps the plant stay upright so that the sunlight can reach it easier.
- The roots help anchor the plant in the soil. They also absorb nutrients and water from the soil for the stem to carry around the rest of the plant.
- Plants need air, water, sunlight, nutrients from the soil, room to grow and suitable temperature. The amount of each of these may vary depending on the type of plant for example cacti need less water than other plants.
- Water is absorbed from the soil by the roots. It is then transported from the roots to the stem and then to the rest of the plant.



- The flower's job is to create seeds so that new plants can grow.
- Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects.
- The pollen then travels down to meet the ovule. When this happens seeds are formed and it is fertilisation; seeds are dispersed and germination happens again

Key Questions

- What 1 thing do all seeds need to grow?
- Why do some wild flowers have bright petals?
- Which part of the plant makes new food?
- What will happen if you place a stick of celery in red water?
- What do birds and insects help plant growth with?