Plants

We will learn…

The petals on a flower are usually bright. This is 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 the 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 to keep the plant upright so that the sunlight can reach it easier. The roots help to 'anchor' the plant in the soil. They also absorb water and nutrients from the soil for the stem to carry to the rest of the plant.

What do different plants need to grow?

Plants need air, water, sunlight, nutrients, soil, room to grow and suitable temperature. The amount of each of these may vary depending on the type of plant. 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.

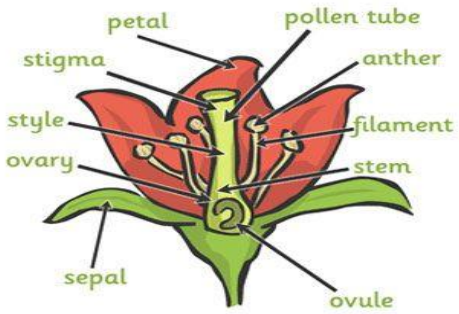
How do flowers help plants?

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 and meets the ovule. When this happens, seeds are formed. This is called fertilisation. Seeds are then dispersed so that germination can begin again.

Key vocabulary:

fertilisation	Pollen meets the ovule to form a seed.
germination	A plant starts to grow.
pollination	Insects take pollen to the ovule. Bees carry pollen to make a new seed.
seed	The small, hard part from which a new plant grows.
stigma	The top of the centre part of a flower which takes in pollen.
ovule	A small egg.
anther	The part of the plant that makes and releases pollen.

Diagram of a flower



Inspirational Scientist

Agnes Arber – botanist

Investigate:

- Compare the effect of different factors in plant growth.
- Place white carnations in dyed water to observe how plants transport water.
- Dissect fruits to observe their structure and use this to explain how seeds are dispersed.
- Dissect a flower and identify each of the different parts that help with fertilisation.

Working scientifically

In science this term we will learn the following practical skills:

- ✓ making systematic and careful observations and, where appropriate, taking accurate measurements
- ✓ setting up simple practical enquiries, comparative and fair tests