Walkley Primary School		Science
Topic: Plants	Year 3	Biology

What should I already know?

- I can observe and describe how seeds and bulbs grow into mature plants.
- I can find out about and describe how plants need water, light and a suitable temperature to grow and stay healthy.

Vocabulary

photosynthesis	Process by which plants make their own food using carbon dioxide, water and sunlight.
pollen	A fine powder produced by flowers. It fertilises other flowers of the same species so that they can produce seeds.
fertilisation	When pollen meets the ovule to form a seed.
insect pollination	Insects carry the pollen from one flower to the next.
wind pollination	Pollen is carried to another flower by the wind.
seed formation	After pollination, the flower can make a seed that will grow into a new plant.
seed dispersal	How seeds get from the parent plant to a new place where they can grow. This can be done by the wind, animals, or in water.

Functions of different plant parts

Roots

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

Stem/Trunk

- The stem/trunk caries 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, helping with pollination, photosynthesis and seed dispersal.

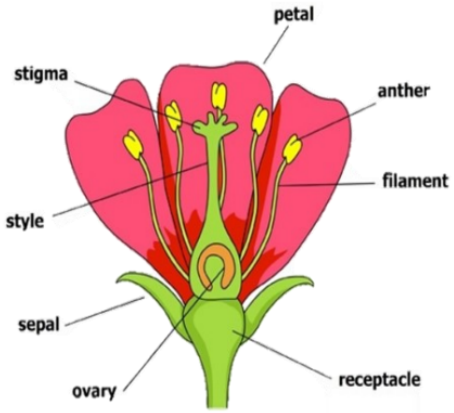
Leaves

- Leaves use sunlight, air, and water to produce the plant's food.
- 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

- The flower has male and female parts which work together to make seeds.
- The petals of a flower attract insects for pollination. Once the seeds are formed they are dispersed in different ways. Some flowers form berries or fruits to help with seed dispersal.

The Role of the Flower



Flowers play an important role in the reproduction of plants.

The male part of a flower is called a stamen - it is made up of a filament and an anther. The anther contains pollen.

The female part of a flower is called a carpel. It is made from a stigma, a style, and an ovary.

When the male pollen lands on the female stigma, pollination occurs.

This process means that a seed is produced.

Pollination can be done by insects. They are drawn to flowers by their bright petals. When they feed on the flower's nectar they are dusted with pollen. They then spread this to other places when they leave.

Requirements for life

Plant life begins when a seed germinates. Different seeds need different conditions for them to germinate.

All seeds need soil, water, oxygen and the right temperature before they will grow. Some seeds need to be frozen before they will germinate. Some need to be burnt and some need to have been through an animals digestive system.

Plants that do not have the right conditions will not grow properly.