



# Year 3 Science Knowledge Organiser: Plants



## Subject Specific Skills:

- I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- I can explore 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
- I can investigate the way in which water is transported within plants
- I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

## Prior Learning:

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

## Key Vocabulary:

**Fertilisation** : When the male and female parts of the flower have mixed in order to make seeds for new plants.

**Petal** : The brightly coloured part of the flower that attracts insects to pollinate the plant.

**Stamen** : The male parts of the flower. The stamen is made up of the anther and the filament. The filament's job is to hold up the anther. The job of the anther is to make pollen.

**Key Knowledge** : How plants grow and survive

To grow and survive plants need:

• Light • Water • Carbon Dioxide

This is so that they can make their own food.

• Warmth This is because if plants get too hot or too cold they will die.

How does a plant get water? The roots take up water from the soil. The water travels through the stem of the plant to the leaves

## Key Vocabulary:

**Roots**: These anchor the plant into the ground and absorb water and nutrients from the soil

**Stem**: This holds the plant up and carries water and nutrients from the soil to the leaves. A stem is the trunk of the tree.

**Leaves**: These make food for the plant using sunlight and carbon dioxide from the air.

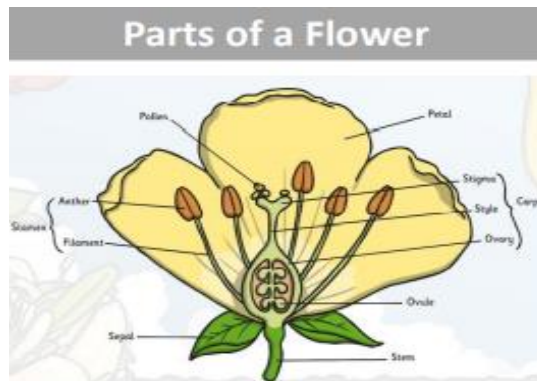
**Flowers**: These make seeds to grow into new plants. Their petals attract pollinators to the plant.

**Nutrients**: These substances are needed by a living thing to grow and survive. Plants get nutrients from the soils and also make their own food in their leaves.

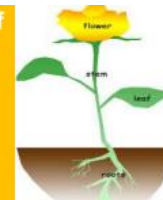
Key Individual:  
John Ray



## Key Knowledge:



## Functions of the main parts of a plant



The main parts of a plant

- Flowers
- Leaves
- Stem
- Roots

Flowers

*They have colour and smell to attract insects*

Leaves

*They change carbon dioxide and water into:*

- Food for the plant
- Oxygen

Stem

*They hold the plant up and carry water from the roots to the rest of the plant*

Roots

*They hold the plant in the ground and soak up water and minerals from the soil*

*Sometimes plants bear fruits. Fruit is the part of the plant we often eat but its main job is to keep the seeds safe.*

## How do the new seeds get to the soil to grow?

Wind The seeds are blown by the wind



Animals They are eaten by animals and pooped out



Explosion Dry seed pods split open and shoot out the seeds

