

# Year 3 Knowledge Organiser: Plants

## Skills

- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- 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.
- Investigate the way in which water is transported within plants
- Describe the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
- Can explain the function of the parts of a flowering plant.

## Knowledge

- To know that many plants, but not all, have roots, stem/trunks, leaves and flowers/blossom.
- The roots absorb water and nutrients from the soil and anchor the plant in place.
- To know that the stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal.
- To know that leaves use sunlight and water to produce the plant's food.
- To know that some plants produce flowers which enable plants to reproduce. Pollen, which is produced by the male part of the flower, is transferred to the female part of other flowers (pollination). This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways.
- To know that different plants require different conditions for germination and growth.

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## Essential vocabulary

<b>Photosynthesis</b>	How plants use carbon dioxide, green chlorophyll in plants, water and sunlight to produce plants own food.
<b>Pollen</b>	Pollen is fine powder produced by flowers.
<b>Insect/wind pollination</b>	When pollen is moved from the male anther of a flower to the female stigma. This is often done by insects or is carried by the wind to the next flower.
<b>Seed formation</b>	After pollination fertilisation takes place and a seed is formed. Ready to make a new plant.
<b>Seed dispersal- wind dispersal</b>	The seeds are moved away from the parent plant by the wind so that the seeds have the best chance of survival.
<b>Seed dispersal- animal dispersal</b>	The seeds attach themselves to animals as a method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.
<b>Seed dispersal- water dispersal</b>	The seeds drop into the water to move away from the parent plant so that the seeds have the best chance of survival.

## Question/Vocabulary

**What does a plant need in order to grow and be healthy?**

Air  
Light  
Water  
Nutrients from the soil  
Room to grow

**What are the main parts of a flowering plant?**

Roots  
Stem/Trunk  
Leaves  
Flowers

**What is pollination?**

When pollen (a fine powdery substance produced by a flowering plant) is moved from the male anther of a flower to the female stigma.

**Name two different types of seed dispersal**

Wind dispersal  
Water dispersal  
Animal dispersal  
Dropping, eating, bursting, shaking

**How is water transported through a plant?**

The roots absorb water from the soil  
The stem transports water to the leaves  
Water is sucked up the stem like a water being sucked up a straw.

