



# Buglawton Primary School

Be the Best We Can

Topic: Plants

Subject: Science

Year: 3

Term: Spring

### What should I already know?

- Observe and describe how seeds and bulbs grow into mature plants. (Y2 plants)
- Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 - Plants)

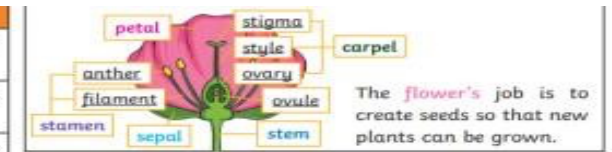
### What will I know and by the end of the unit?

- 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.
- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

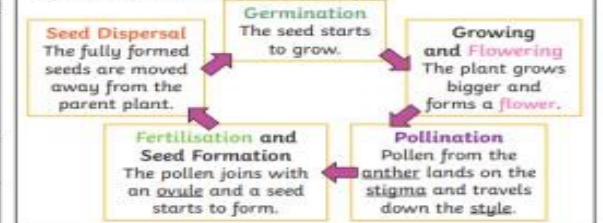
### What will I be able to do by the end of the unit?

- Can explain the function of the parts of a flowering plant
- Can describe the life cycle of flowering plants, including pollination, seed formation, seed dispersal, and germination
- Can give different methods of pollination and seed dispersal, including examples
- Can explain observations made during investigations
- Can look at the features of seeds to decide on their method of dispersal
- Can draw and label a diagram of their created flowering plant to show its parts, their role and the method of seed dispersal

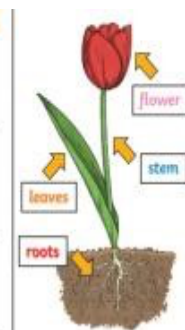
Key Vocabulary	
<b>fertilisation</b>	When the male and female parts of the <b>flower</b> have mixed in order to make seeds for new plants.
<b>petal</b>	The brightly coloured part of the <b>flower</b> that attracts insects to <b>pollinate</b> the plant.
<b>stamen</b>	The male parts of the <b>flower</b> . The stamen is made up of the <b>anther</b> and the <b>filament</b> . The filament's job is to hold up the anther. The job of the anther is to make the pollen.
<b>carpel (pistil)</b>	The female parts of the <b>flower</b> . Made up of the <b>stigma</b> , <b>style</b> and <b>ovary</b> . The job of the style is to hold up the stigma. The stigma collects the pollen when a <b>pollinator</b> brushes by it. The <b>ovary</b> contains the <b>ovules</b> , which are the part of the <b>flower</b> that gets <b>fertilised</b> and eventually becomes the new seed.
<b>sepal</b>	Leaf-like structures that protect the <b>flower</b> and <b>petals</b> before they open out.
<b>pollination</b>	When pollen (a fine powdery substance produced by a <b>flowering plant</b> ) is moved from the male <b>anther</b> of a <b>flower</b> to the female <b>stigma</b> .
<b>pollinator</b>	Animals or insects which carry pollen between plants. Examples include birds, bees and bats.
<b>germination</b>	When a seed starts to grow.
<b>seed dispersal</b>	A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.



### Life Cycle of a Flowering Plant



Key Vocabulary	
<b>roots</b>	These anchor the plant into the ground and absorb water and <b>nutrients</b> from the soil.
<b>stem</b>	This holds the plant up and carries water and <b>nutrients</b> from the soil to the <b>leaves</b> . A trunk is the <b>stem</b> of a tree.
<b>leaves</b>	These make food for the plant using sunlight and carbon dioxide from the air.
<b>flowers</b>	These make seeds to grow into new plants. Their <b>petals</b> attract <b>pollinators</b> to the plant.
<b>nutrients</b>	These substances are needed by a living thing to grow and survive. Plants get <b>nutrients</b> from the soil and also make their own food in their <b>leaves</b> .
<b>evaporation</b>	When a liquid turns into a gas.



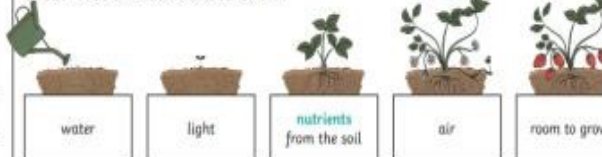
### How Water Moves through a Plant

1. The **roots** absorb water from the soil.
2. The **stem** transports water to the **leaves**.
3. Water **evaporates** from the **leaves**.
4. This **evaporation** causes more water to be sucked up the **stem**.

The water is sucked up the **stem** like water being sucked up through a straw.



### What Does a Plant Need to Grow?



Different plants vary in how much of these things they need. For example, cacti can survive in areas with little water, whereas water lilies need to live in water.

### Agreed Real Life Outcome:

Investigate what happens to plants when they are put in different conditions e.g. in darkness, in the cold, deprived of air, different types of soil, different fertilisers, varying amount of space.