

# Plants

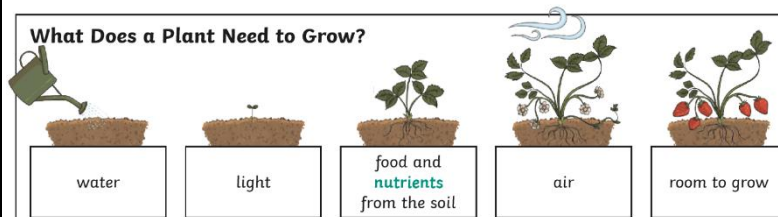
## KS2 Science Knowledge Summary

### Specific Vocabulary & definitions (meanings)

<b>roots</b>	These anchor the plant into the ground and absorb water and nutrients from the soil.
<b>stem</b>	This holds the plant up and carries water and nutrients from the soil to the leaves. A trunk is the stem of a tree.
<b>flower / petals</b>	These make seeds to grow into new plants. Their petals attract pollinators to the plant.
<b>leaves</b>	These make food for the plant using sunlight and carbon dioxide from the air
<b>oxygen</b>	Oxygen is used by animals and plants in the respiration (breathing) process.
<b>germination</b>	When a seed starts to grow.
<b>pollination</b>	When pollen (a fine powdery substance produced by a flowering plant) is moved from the male anther of a flower to the female stigma.
<b>pollinator</b>	Animals or insects which carry pollen between plants. Examples include birds, bees and bats.
<b>nutrients</b>	These substances are needed by a living things to grow and survive. Plants get nutrients from the soil and also make their own food in their leaves.
<b>photosynthesis</b>	Photosynthesis is a chemical reaction that takes place in the leaves of a plant, producing food for the plant to survive. Carbon dioxide, water and light are all needed for photosynthesis to take place.
<b>carbon-dioxide</b>	
<b>fertilisation</b>	When the male and female parts of the flower have mixed in order to make seeds for new plants.
<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.
<b>carpel</b>	The female parts of the flower. Made up of the stigma, style and ovary. The job of the style is to hold up the stigma. The stigma collects the pollen when a pollinator brushes by it. The ovary contains the ovules, which are the part of the flower that gets fertilised and eventually becomes the new seed
<b>stamen</b>	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 the pollen.

### Facts to know by the end of the sequence

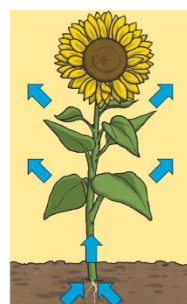
#### What Does a Plant Need to Grow?



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.

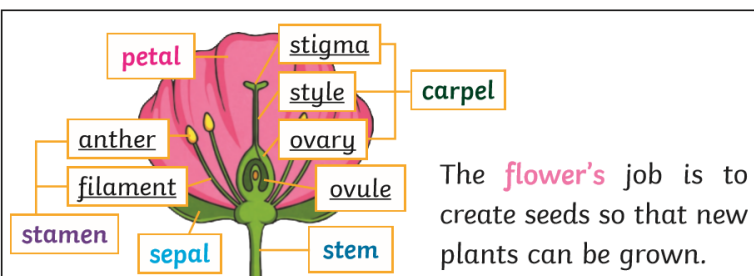
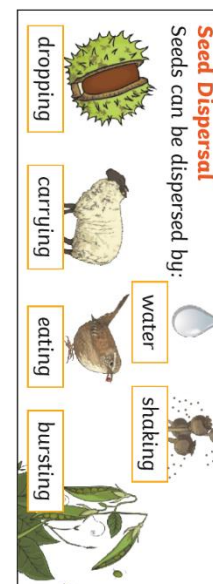
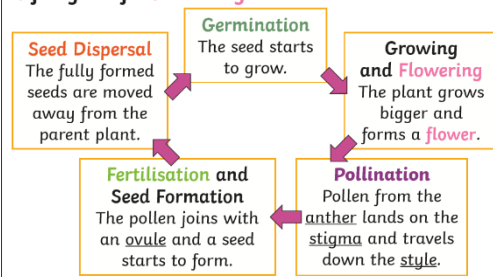
#### How Water Moves through a Plant

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.

#### Life Cycle of a Flowering Plant



The **flower's** job is to create seeds so that new plants can be grown.

### Interesting Resources

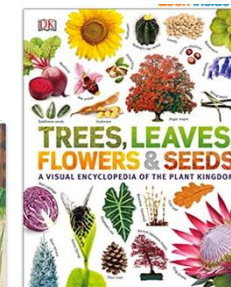
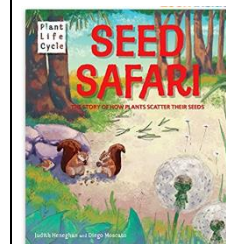
[www.bbc.co.uk/programmes/articles/Mf5rhbTkHLZ3fbJzScyDvC/primary-science-plants](http://www.bbc.co.uk/programmes/articles/Mf5rhbTkHLZ3fbJzScyDvC/primary-science-plants)

Parts of a flower and pollination:

[www.youtube.com/watch?v=djPVgipbdU&feature=youtu.be](http://www.youtube.com/watch?v=djPVgipbdU&feature=youtu.be)



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### At the end of the topic, I can:

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