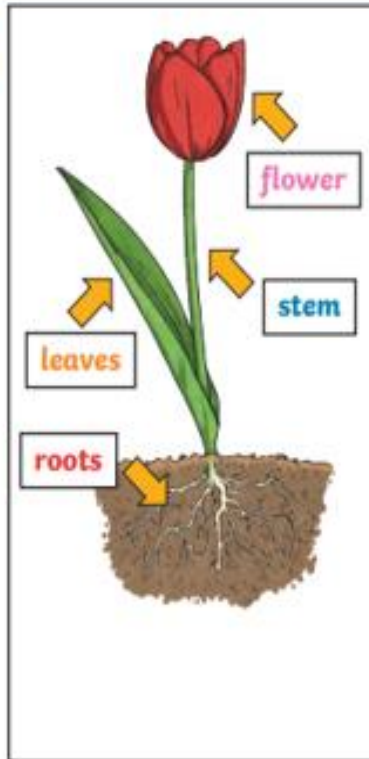


# SCIENCE KNOWLEDGE ORGANISER - PLANTS

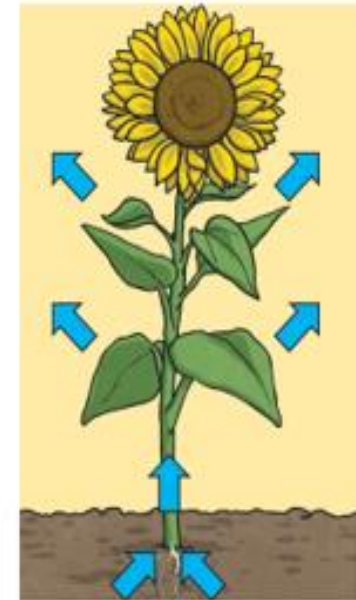
## Key Vocabulary

|                    |   |
|--------------------|---|
| <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 living things 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.   |



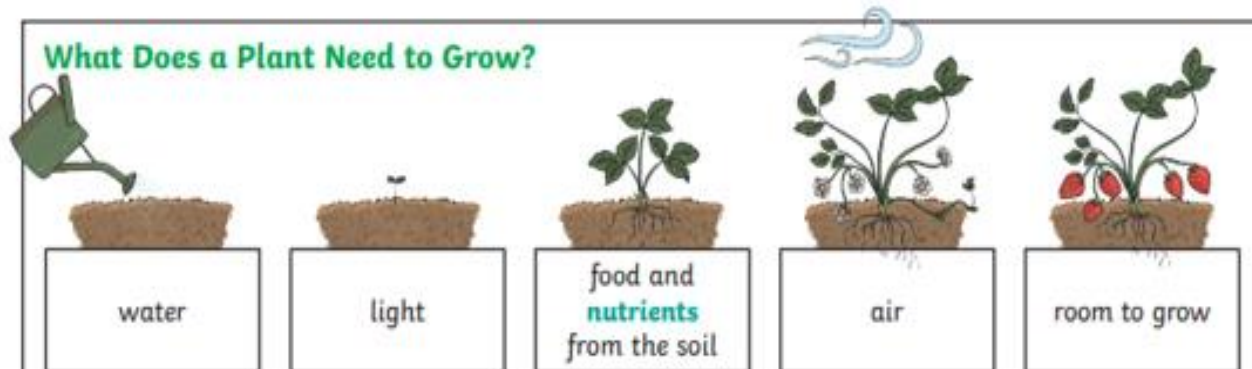
## How Water Moves through a Plant

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.

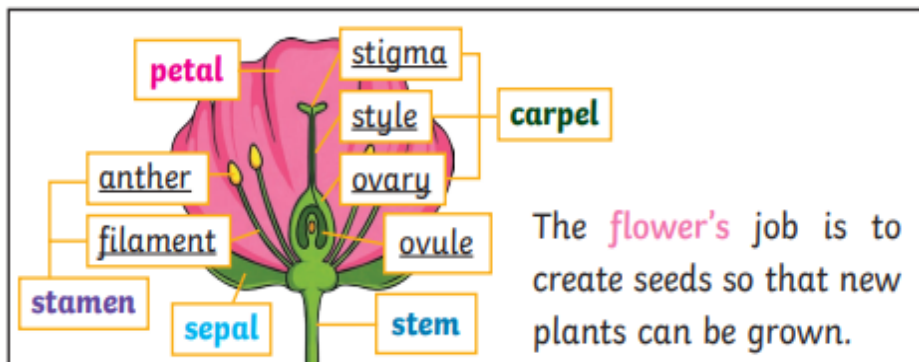
## What Does a Plant Need to Grow?



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.

## 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 <b>stamen</b> 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.   |
| <b>carpel (pistil)</b> | The female parts of the <b>flower</b> . 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 <b>pollinator</b> brushes by it. The ovary contains the ovules, which are the part of the <b>flower</b> that gets fertilised 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</b> plant) is moved from the male anther of a <b>flower</b> to the female stigma.   |
| <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

