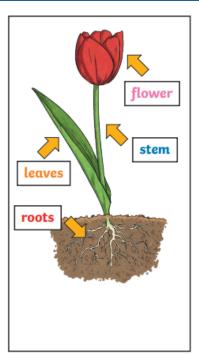


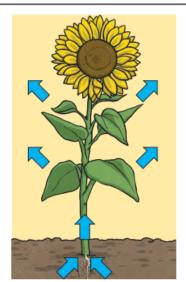
## Science—Plants

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 trunk is the stem of a 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 living things to grow and survive. Plants get nutrients from the soil and also make their own food in their leaves.
evaporation	When a liquid turns into a gas.

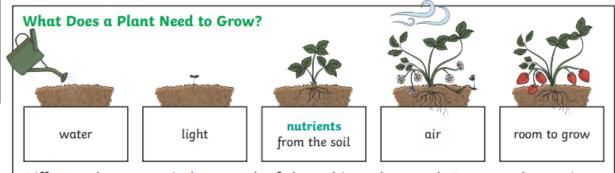


## How Water Moves through a Plant

- The roots absorb water from the soil.
- 2. The **stem** transports water to the **leaves**.
- 3. Water evaporates from the leaves.
- 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.

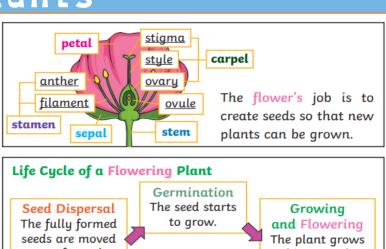


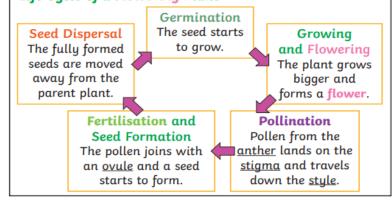
Different plants vary in how much of these things they need. For example, cacti can survive in areas with little water, whereas water lilies need to live in water.

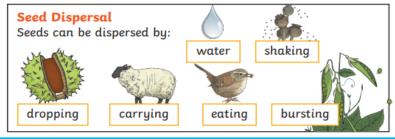


## Science—Plants

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 the pollen.
carpel (pistil)	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.
sepal	Leaf-like structures that protect the flower and petals before they open out.
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.
pollinator	Animals or insects which carry pollen between plants. Examples include birds, bees and bats.
germination	When a seed starts to grow.
seed dispersal	A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.









Professor Monique Simmonds is Deputy Director of Science for the Royal Botanic Gardens at Kew. She has a PhD from the University of London and worked in industry before joining Kew, where she co-ordinates research into uses of plants/fungi, their potential as cosmetics, pharmaceutical and agrochemical leads, and as sources of sustainably harvested medicines. She has over 350 scientific publications and was awarded an OBE for services to science, the environment, technological innovation and community.