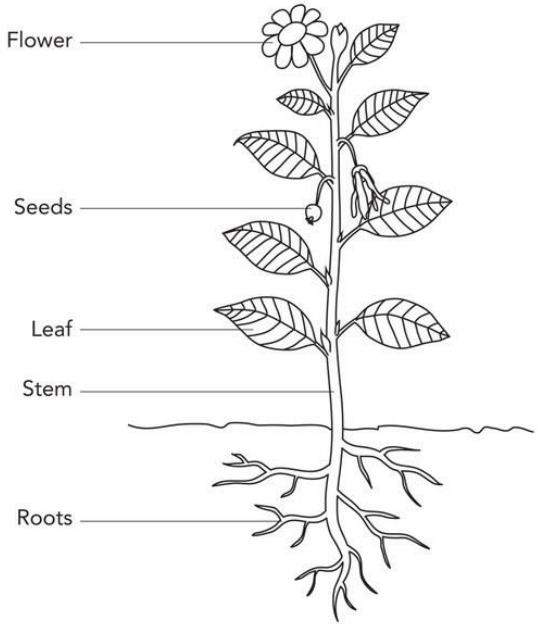
Knowledge Organiser – Plants (Science Year 3)

Key Vocabulary	Definition
Air	An invisible gas, made up of mainly oxygen and nitrogen.
Nutrients	Parts of foods that a living thing uses to survive and grow.
Soil	Substance on the surface of the Earth in which plants grow, made up of pieces of rock and humus.
Fertiliser	Substance that is added to soil to help the growth of plants.
Pollination	When pollen is moved from plant to plant to produce more plants.
Seed dispersal	When seeds are carried away from the parent plant.

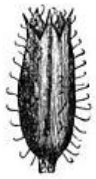
Parts of a plant



Life cycle of a plant

Germination → Growing and flowering → Pollination → Fertilisation and seed formation → Seed dispersal

Seeds



Develops into new plants.

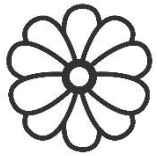
Leaves

Makes food for the plant using sunlight, carbon dioxide and water. This is called photosynthesis.

Roots

Take up water and nutrients from the soil. They 'anchor' the plant in the soil.

Flower



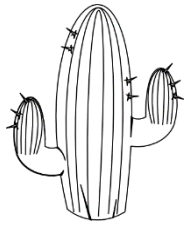
Attracts pollinators to the plant so that it can be fertilised and produce seeds.

Stem

Carries water and nutrients from the root to different parts of the plant.

Adaptations

The cactus has modified leaves so that it can survive in a dry desert. The spines are better at conserving water by limiting evaporation.

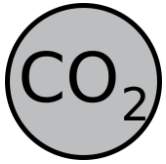


The water lily is adapted to have wide, flat leaves which keep the lily afloat.

Seeds need water, oxygen and the right temperature to germinate.

Provides energy for plants to make their own food energy in their leaves. It also provides warmth to help growth.

Plants take in carbon dioxide from the air to use in the process of PHOTOSYNTHESIS. This process gives off oxygen which we use to respire.



Water is used in PHOTOSYNTHESIS to help the plant make its own food. Water moves nutrients from the soil up through its stems and leaves. Water helps plants stay upright.

Pollination is the transfer of pollen from the stamens of one flower to the stigma of another flower of the same type.

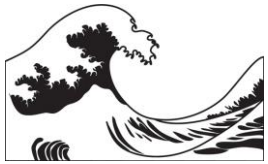
Flower

Withering

Fruit formation

It is here that the seeds are found.

Seeds need to be dispersed in order to have space to grow well. There are different ways in which this can happen.



water

wind

carried

eaten

explosion