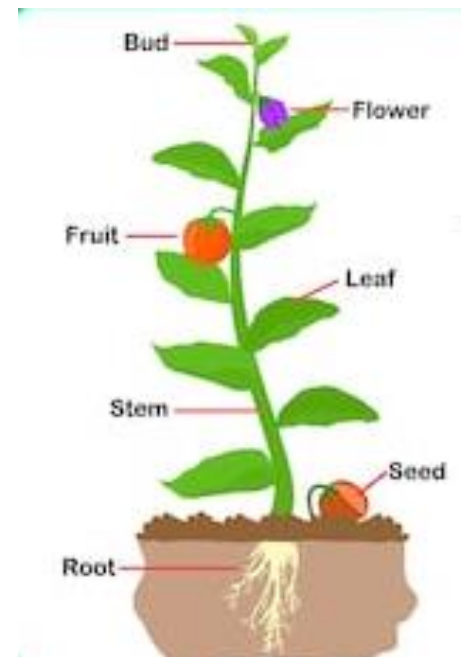


Year 3 Plants

Key Enquiry Questions	Key Facts
<ul style="list-style-type: none"> What are the functions of the parts of a plant? What do different plants need to grow? How do flowers help in the life cycle of flowering plants? 	<ul style="list-style-type: none"> The petals on a flower are usually bright - this is to attract bees and other insects so that they can collect pollen to make seeds. The seeds are then able to grow to make new plants. This is called germination. Leaves use carbon dioxide and sunlight to make food for the plant. The stem carries water and other nutrients from the roots to the rest of the plant. Leaves use this water to make food. The stem also helps to keep the plant upright so that the sunlight can reach it easier. The roots help to 'anchor' the plant in the soil. They also absorb water and nutrients from the soil for the stem to carry to the rest of the plant. Plants need air, water, sunlight, nutrients from the soil, room to grow and a suitable temperature. The amount of each of these may vary depending on the type of plant. For example, cacti need less water than other plants. Water is absorbed from the soil by the roots. It is then transported from the roots to the stem and then to the rest of the plant. The flower's job is to create seeds so that new plants can grow. Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects. The pollen then travels down and meets the ovule. When this happens, seeds are formed - this is called fertilisation. Seeds are then dispersed so that germination can begin again.

Key Vocabulary	
absorb	Soak up or take in.
anther	The part of a stamen that produces and released the pollen.
branches	Parts that grow out from the tree trunk and have leaves, flowers or fruit growing on them.
bulb	A root shaped like an onion that grows into a flower or plant.
carbon dioxide	A gas produced by animals and people breathing out.
common	Something that is found in large numbers or happens often.
dispersed	Scattered, separated or spread through a large area.
dissect	To carefully cut something up in order to examine it scientifically.
fertilisation	In plants, where pollen meets the ovule to form a seed.
fertiliser	A substance that is added to soil in order to make plants grow more successfully.
filament	Holds up the anther.
flower	The part of a plant which is often brightly coloured and grows at the end of a stem.
flowering	Trees or plants which produce flowers.
fruit	Something which grows on a tree or bush and which contains seeds or a stone covered by a substance that can be eaten (not always by humans).
function	A useful thing that something does.
germination	If a seed germinates or if it is germinated it starts to grow.
healthy	Well and not suffering from any illness.
leaf/leaves	The part of a tree or plant that are flat, thin and usually green.
life cycle	The series of changes that an animal or plant passes through from the beginning of its life until its death.
mature	When something matures it is fully developed.
nutrients	Substances that help plants and animals to grow.
ovary	Part of the plant that contains the ovule.
ovule	A small egg.
petal	Thin coloured or white parts which form part of the flower.
plant	A living thing that grows in the earth and has a stem, leaves and roots.

Parts of a plant



Investigate(suggestions)

- Compare the effect of different factors in plant growth (e.g. the amount of water, the amount of light and the amount of fertiliser). Discuss what would make this a fair test.
- Place white carnations in dyed water to observe how plants transport water.
- Discover how seeds are formed by observing plant life cycles.
- Dissect fruits to observe their structure and use this to explain how seeds are dispersed.
- Dissect a flower and identify each of the different parts that help with fertilisation.

pollen	A fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds.
pollination	To pollinate a plant or tree means to fertilise it with pollen. This is often done by insects.
roots	The parts of a plant that grow under the ground.
seed	The small, hard part from which a new plant grows.
sepal	Part of the plant that covers the petals before flowers.
stem	The thin, upright part of a plant on which the flowers and leaves grow.
stigma	The top of the centre part of a flower which takes in pollen.
structure	The way in which something is built or made.
style	Narrow section from the ovary that holds up the stigma.
temperature	A measure of how hot or cold something is.
transported	Taking something from one place to another.
tree	A tall plant that has a hard trunk, branches and leaves.
trunk	The large main stem from which the branches grow.
vegetation	Plants, trees and flowers.

