

Big Questions: How does water get through a plant to where it is needed? Do all plants need exactly the same things?

Big Ideas: • **Living things are special collections of matter that make copies of themselves, use energy and grow.**

• **Living things on Earth come in a huge variety of different forms that are all related because they all came from the same starting point 4.5 billion years ago.**

Vocabulary

germination	When a seed or bulb starts to grow
pollination	To pollinate a plant or tree means to fertilise it with pollen. This is often done by insects
pollen	a fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds
fertilisation	in plants, where pollen meets the ovule to form a seed
dispersed	scattered, separated, or spread through a large area
life cycle	The main stages in the life of a living thing
mature	When something matures, it is fully developed
photosynthesis	the process in which green plants use sunlight to make their own food
transportation	The movement of water around a plant
conditions	water, warmth, sunlight, nutrients are all conditions needed for a plant to grow

Gregor Mendel was a monk born in 1822. He investigated plant genetics and learnt how living things pass characteristics to offspring



PARTS OF A PLANT

FLOWERS

The flowers are often brightly coloured and smell to attract insects. Insects help with the plants reproduction through pollination.

LEAVES

The **leaves** use light from the sun, along with carbon dioxide from the air and water to make food for the plant. This process is called photosynthesis.

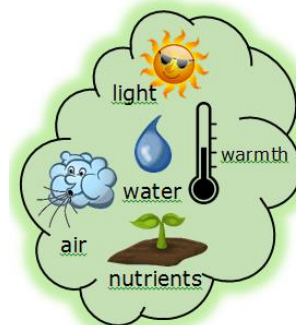
STEM / TRUNK

The **stem** carries water and nutrients to different parts of the plant. They keep the plant upright.

ROOTS

The **roots** of a plant take up water and nutrients from the soil. The roots also keep the plant steady and upright in the soil; they "anchor" the plant.

What does a plant need to grow?



PLANT REPRODUCTION

Pollination - Pollen is carried by insects or blown by the wind from one flower to another. This process is called **pollination**.

Fertilisation - Pollen reaches the carpel of the new flower. Pollen then travels to the ovary where it fertilises egg cells (ovules) to make seeds. This process is called **fertilisation**.

Seed Dispersal - The seeds are scattered by animals or the wind. This process is called **dispersal**. Some of the seeds will grow into new plants.

Life cycle of a flowering plant

