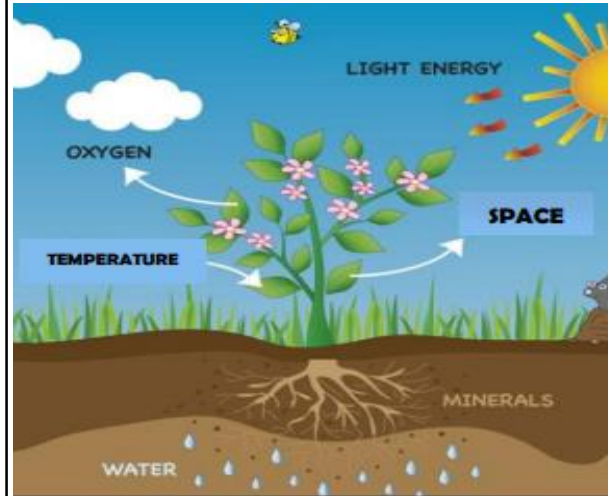




Key Vocabulary	
Roots	These anchor the plant into the ground and absorb water and nutrients from the soil.
Stem	This holds the plant up and carries water and nutrients from the soil to the leaves. A stem is the trunk of the tree.
Leaves	These make food for the plant using sunlight and carbon dioxide 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 a living thing to grow and survive. Plants get nutrients from the soils and also make their own food in their leaves
Reproduction	The process by which a living organism creates copies of itself.
Germination	When a seed starts to grow
Pollination	The process by which pollen is transferred to the female parts of the plant which means the plants can make seeds and reproduce.
Pollinator	Animals or insects which carry pollen between plants. Examples include birds, bees and bats.
Fertilisation	When pollen joins with the ovule (egg), a new seed is created
Seed Dispersal	A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.
Life-cycle	The different stages of life for a living thing.

What does a plant need to grow?

Plants need air, water, sunlight, nutrients from the soil, room to grow, sustainable temperature.



The amount of each of these may vary depending on the type of plant. For example, cacti need less water than other plants.

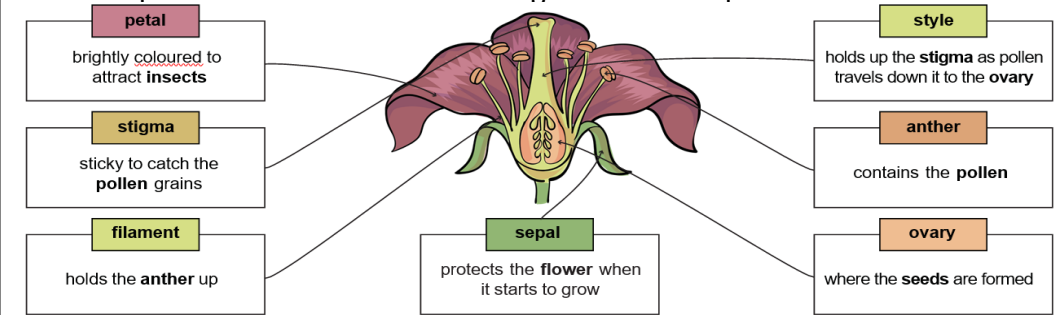
- A plant that is kept in a dark place will grow tall and spindly, as it searches for light.
- A plant that is not watered will have a weak stem. Its leaves will dry up and eventually it will die.
- A plant that is not given enough space will have stunted growth, and may die if it cannot reach enough light.
- A seed will not germinate at all if the temperature is too cold.

How do plants reproduce?

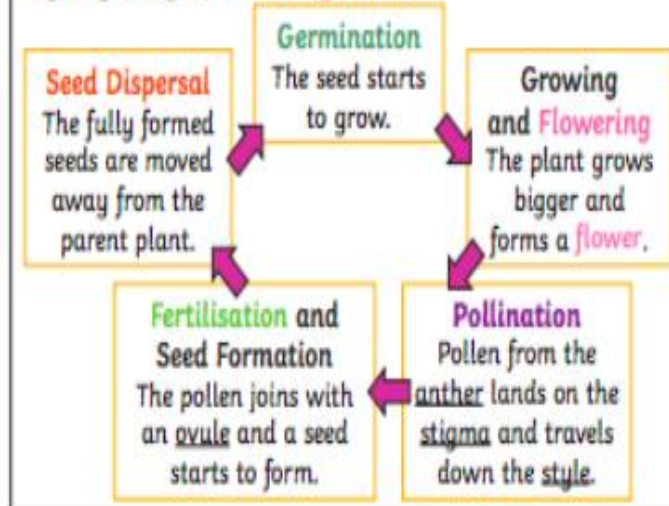
Pollination - Pollen is carried by insects or blown by the wind from one flower to another. This process is called **pollination**.

Fertilisation - Pollen sticks to the flower and 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



Seed Dispersal

Seeds can be dispersed by:



Focused Scientist – Katherine Esau

A Russian-born American botanist (1898-1997) who did ground breaking work on the structure and workings of plants. Her book Plant Anatomy is a classic in the field.

