Knowledge Organiser

VOCABULARY

Plant- a living thing that usually grows from the ground.
Germinate- start of growth.

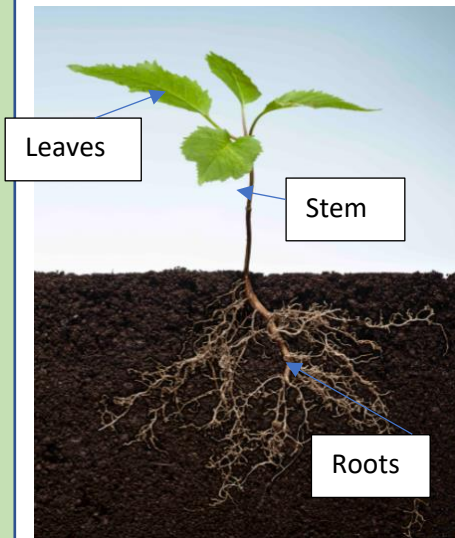**Photosynthesis**- plant uses sunlight to make food for the plant.

Pollination- flower reproduction.

Animal dispersal- seeds transported on animals through being buried, carried on fur, in berries or in poo.

Water dispersal- seeds are carried from one place to another in the water.

Wind dispersal- seeds are carried from one place to another by wind.

Capillary action- water being transported through the plant.

Leaves

Stem

Roots

Roots
Covered in small hairs.
Anchors plant.
Absorb nutrients and minerals.

Flower
Attracts insects.
Helps pollination.
Uses pollen to make new seeds.
POLINATION

Leaf
Makes food for the plant using sunlight and carbon dioxide from the air.
PHOTOSYNTHESIS.

Stem
Hold plant up.
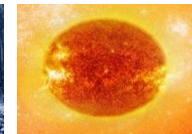Carries nutrients and minerals from the roots to the leaves.

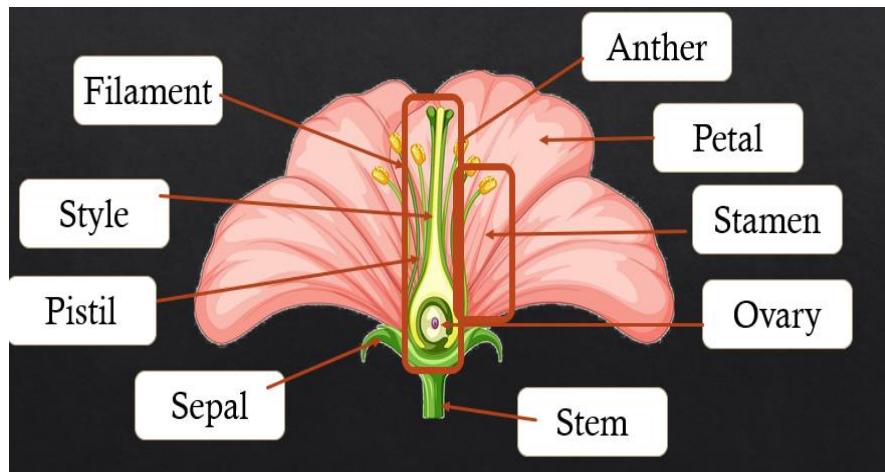## Conditions for growth

Rain/water	Sunlight	Temperature
Air	Time	Nutrients

Parts of a flower.

Filament

Anther

Style

Petal

Pistil

Stamen

Sepal
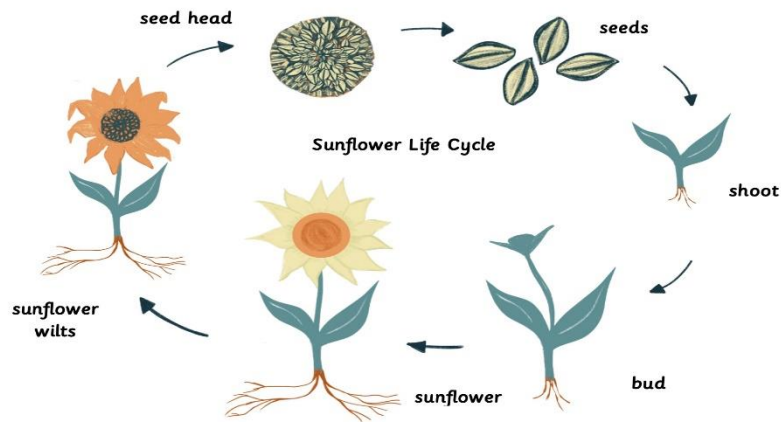
Ovary

Stem

Water, minerals and nutrients

stem

xylem

The water is transported through the flower using a process called **capillary action**. The water transports up the stem to the rest of the flower. The water is needed keep the plant alive and healthy.

Plymouth Science

Lifecycle of a sunflower

Sunflower Life Cycle

seed head — seeds — shoot — bud — sunflower — sunflower wilts

Photosynthesis

light — oxygen — carbon dioxide — carbohydrates — water

Photosynthesis uses sunlight to make food for the plant.
Photosynthesis happens in the leaves of a plant.

The leaves contain chlorophyl, this and light energy help convert carbon dioxide and water into oxygen and glucose- which is food for the plant.

Seed Dispersal

| By animals | By wind | By explosion | By water |

Pollination

Stamens
- The *stamens* are the male part of the flower.
- The plant makes *pollen* in the part of the stamen called the *anther*.

stamen — anther — filament — petal — sepal — stigma — style — pistil — ovary
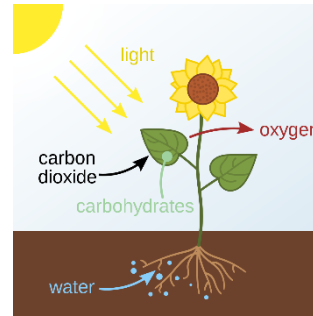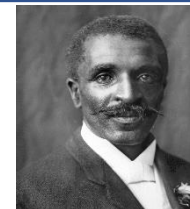
Pollination happens when an insect carries pollen from the male part of the plant (stamen) to the female part (pistil).

This allows the new plant to make new seeds and fruit.

Famous botanists.

| Carl Linnaeus | George Washington Carver | Alexander Von Humboldt | Oliver Rackham | Dr Angie Burnett. |