

Investigation

Scientists design and carry out investigations.

Biology

Scientists have an understanding of life and living processes.

Chemistry

Scientists have an understanding of materials and their properties.

Physics

Scientists have an understanding of physical processes.

What should I already know?

To grow, plants need:

- water
- nutrients from the soil
- light
- air
- room to grow



Parts of a plant



- flower
- stem
- leaf
- roots

Roots

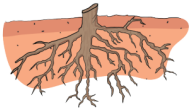
The roots have **different jobs**:

They take up **water** and **nutrients** from the soil.

They keep the plant **steady**.

They keep the plant **upright**.

They "**anchor**" the plant.



Stem

The job of the stem is to **transport** water and nutrients from the soil to the leaves, flowers or fruit through tiny, thin tubes called the **xylem**.



What am I going to learn?

Flower

The flower's main job is to create new seeds.

petal

brightly coloured to attract **insects**

stigma

sticky to catch the **pollen** grains

filament

holds the **anther** up



sepal

protects the **flower** when it starts to grow

style

holds up the **stigma** as pollen travels down it to the **ovary**

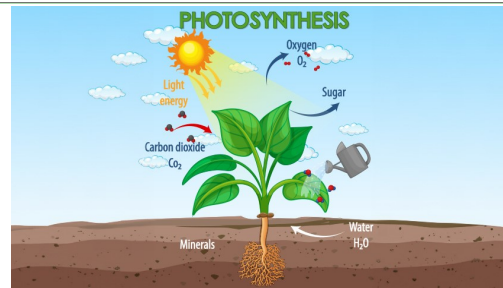
anther

contains the **pollen**

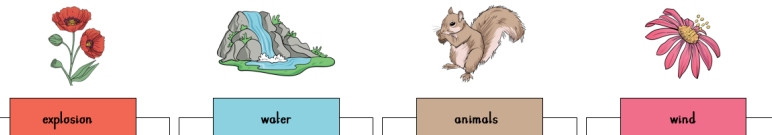
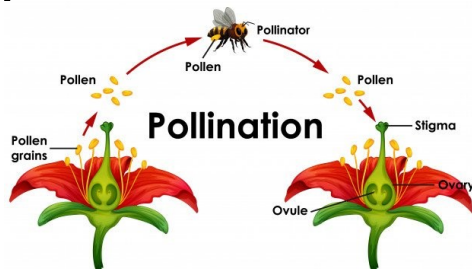
ovary

where the **seeds** are formed

PHOTOSYNTHESIS



There are **four main ways** that seeds are dispersed.



Key Vocabulary

Definition

pollination

The process by which flowering plants reproduce.

transportation

The transportation of things from one place to another.

photosynthesis

The process by which the action of sunlight on the chlorophyll in plants produces the substances that keep the plant alive.

pollen

A fine yellow powder produced by flowers.

seed dispersal

The movement, spread or transport of seeds away from the parent plant.

carbon dioxide

A clear gas.

chlorophyll

A green pigment in plants.

absorption

The soaking up of a liquid.

light energy

A kind of energy that is able to make types of light visible to human eyes.

Key Scientist(s)

[Carl Linnaeus \(1707– 1778\)](#)

He created a system for classifying plants.



Working Scientifically

Observe and discover how plants absorb water.



ab-