

Year 3/4 Natural Wonder

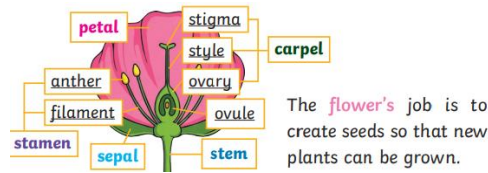


We identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. We explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. We explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. We learn about photosynthesis and that plants make their own food, as first identified by scientist - Jan Ingenhousz.

Amazing Facts:

- Some plants are carnivorous. This means they eat other living things! They gain nutrients from some insects and spiders, e.g. Venus flytraps.
- Some plants self-pollinate. They transfer the pollen grains from the anther to the stigma on the same flower. These plants do not need a pollinator, such as an insect, in order to reproduce. Only a few plants self-pollinate. Examples include peanuts, orchids, peas and sunflowers.
- Some plants do not have flowers or seeds, e.g. moss and ferns. They reproduce by making spores.
- Some plants live underwater - they are called aquatic plants.
- There are over 200,000 different plant species!

Parts of flowering plants



Carpel – The female parts of the flower made up of the stigma, style and ovary. The ovary contains ovules that get fertilised and become a new seed. The stigma collects the pollen and the style holds up the stigma.

Petal – the brightly coloured part of the flower that attracts insects to pollinate the plant.

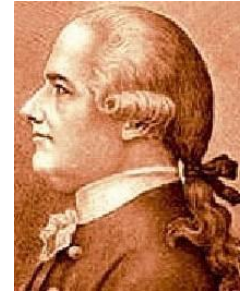
Sepal – protect the flower before it opens out.

Stamen – The male parts of the flower made up of the anther and the filament. The anther makes the pollen. The filament holds up the anther.

Stem – holds the plant up and carries water and nutrients from the soil to the leaves. A trunk is the stem of a tree.

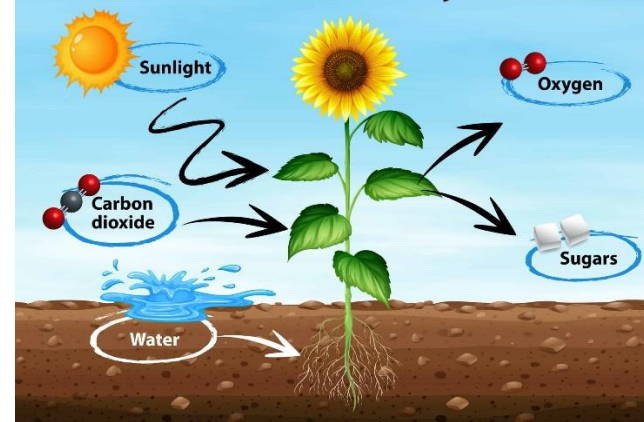
Photosynthesis

Dutch-born British physician and scientist Jan Ingenhousz is best known for the discovery of the process of photosynthesis, by which green plants in sunlight absorb carbon dioxide and release oxygen.



Leaves make food for the plant using sunlight and carbon dioxide from the air.

Process of Photosynthesis



Glossary

Absorb – soak up

Carbon dioxide – gas produced by animals and people breathing out

Fertilisation – When the male and female parts of the flower have mixed in order to make seeds for new plants.

Nutrients – substances needed by living things to grow and survive.

Plant – a living thing that grows in the earth and has a stem, leaves and roots.

