

Science Knowledge Organiser

Plants

Yr 2

Main Foci: Biology

What should I already know?

- **Plants** can grow.
- The names of some **common garden plants** (e.g. poppy, rose) and the names of some **common wild plants** (e.g. daisy, dandelion, nettle).
- **Deciduous trees** lose their **leaves** in the autumn every year.
- **Evergreen trees** have green **leaves** all year round.
- The parts of a plant including **petals, fruits, roots, bulbs, seeds, stem, trunks and branches**.

What will I know by the end of the unit?

Plants are living things and require things to grow.

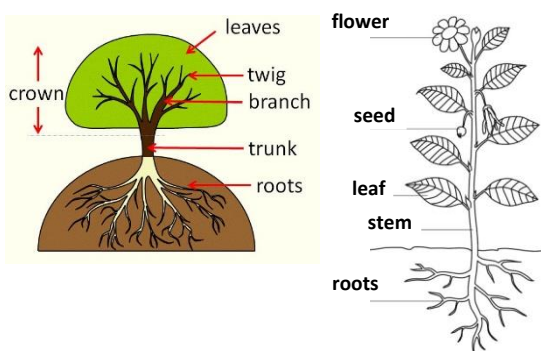
- **Plants** require things such as water, warmth, **nutrients** from soil and light to grow.
- If they do not have one or more of these things, they may stop growing.
- **Plants** can:
 - move
 - grow
 - react to their surroundings (sense)
 - absorb **nutrients**
 - **reproduce**

Which **plants** do we eat?

- Many **plants** provide us with food by bearing **fruits** which carry their **seeds**.
- When farmers grow **plants** to provide us with food, these are called **crops**.
- We eat many **fruits** that contain **seeds** (including tomatoes!).
- We also eat different parts of **vegetable plants**:
 - **root vegetables** (carrots, potatoes)
 - **stem vegetables** (celery, spring onion)
 - **leafy vegetables** (cabbage, lettuce)
 - **flowering vegetables** (cauliflower, broccoli)
- We eat grains and cereals from **plants** too (wheat, oats).
- Nuts and seeds are also sometimes edible (sesame seeds, pumpkin seeds, peanuts).
- Many **herbs** are also grown to add flavour to foods.



What are the parts of **common trees** and **plants**?



Vocabulary

branches	parts that grow out from the tree trunk and have leaves, flowers, or fruit growing on them
bulb	a root shaped like an onion that grows into a flower or plant
common	something that is found in large numbers or it happens often
crop	plants such as wheat and potatoes that are grown in large quantities for food
deciduous	a tree that loses its leaves in the autumn every year
evergreen	a tree or bush which has green leaves all the year round
flower	the part of a plant which is often brightly coloured and grows at the end of a stem
flowering	trees or plants which produce flowers
fruit	something which grows on a tree or bush and which contains seeds or a stone covered by a substance that you can eat
garden	a piece of land next to a house, with flowers, vegetables, other plants , and often grass
herb	a plant whose leaves are used in cooking to add flavour to food, or as a medicine
leaf / leaves	the parts of a tree or plant that are flat, thin, and usually green
nutrients	substances that help plants and animals to grow
petal	thin coloured or white parts which form part of the flower
plant	a living thing that grows in the earth and has a stem, leaves, and roots
reproduce	when an animal or plant produces one or more individuals similar to itself
roots	the parts of a plant that grow under the ground
seed	the small, hard part from which a new plant grows
stem	the thin, upright part of a plant on which the flowers and leaves grow
tree	a tall plant that has a hard trunk, branches, and leaves
trunk	the large main stem from which the branches grow
vegetable	plants such as cabbages, potatoes, and onions which you can cook and eat
vegetation	plants, trees and flowers
weed	a wild plant that grows in garden and prevents the plants that you want from growing properly
wild	animals or plants that live or grow in natural surroundings and are not looked after by people

Procedural Knowledge

- Sort through pictures to show which things are living, which are dead and things which have never been alive.
- Go on a **plant/tree** hunt. What do you notice about what they look like? What are their features?
- **Plant** a **bulb** or a **seed** and watch it grow. Record your observations in a diary. Compare the growth of that **plant** with a **plant** (using the same **bulb** or **seed**) where one of the conditions is different (no water, no light, a smaller container).
- **Plant** a **seed** on a wet cotton bud. Does it grow? Why might it grow for a little while and then stop?
- Dissect a variety of **fruits** and locate where their **seeds** are.
- Eat a variety of **vegetables** and identify which part of the **plant** they come from (note: do not taste nuts in school as they are allergens).
- Create a bar chart to show how tall your plants are to the nearest cm.

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Question 1: Which three living processes do plants do?

Start of unit:

End of unit:

move

grow

walk

reproduce

Question 2: Which three things does a plant need to grow well?

Start of unit:

End of unit:

water, exercise, wind

soil, water, wind

soil, sunlight, water

water, darkness, soil

Question 3: What is happening in this picture?



Start of unit:

End of unit:

the plant has fallen over

the plant is growing towards the light

the roots are not strong enough to keep the plant straight

the flower is trying to look out of the window

Question 4: Four identical seeds have been planted at the same time. Which of them will produce the tallest and healthiest seedling?

Start of unit:

End of unit:

The seed that has been watered and kept in the cupboard.

The seed that has been watered and kept in a fridge.

The seed that has been placed on a wet cotton ball.

The seed that has been watered and placed on a windowsill.

Question 5: Match these vegetables to the part of the plant they come from:

Start of unit:

End of unit:

root

cauliflower

stem

carrot

leaf

cabbage

flower

celery