

# 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.

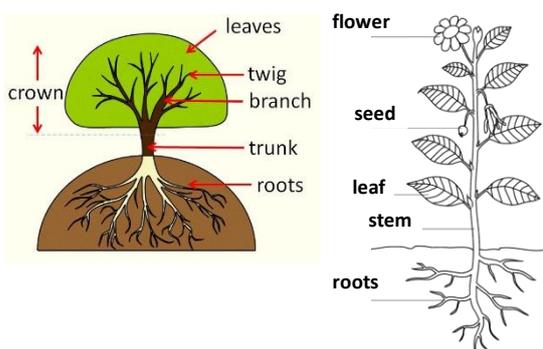
- **Plants** require things such as water, warmth, **nutrients** from soil and light to grow.
- If they do not have one or more of these things, they may stop growing.
- **Plants** can:
  - move
  - grow
  - react to their surroundings (sense)
  - absorb **nutrients**
  - **reproduce**

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 <b>tree trunk</b> and have <b>leaves, flowers, or fruit</b> growing on them
bulb	a root shaped like an onion that grows into a <b>flower or plant</b>
common	something that is found in large numbers or it happens often
crop	<b>plants</b> such as wheat and potatoes that are grown in large quantities for food
deciduous	a <b>tree</b> that loses its leaves in the autumn every year
evergreen	a <b>tree</b> or bush which has green <b>leaves</b> all the year round
flower	the part of a <b>plant</b> which is often brightly coloured and grows at the end of a <b>stem</b>
flowering	<b>trees or plants</b> which produce <b>flowers</b>
fruit	something which grows on a <b>tree</b> or bush and which contains <b>seeds</b> or a stone covered by a substance that you can eat
garden	a piece of land next to a house, with <b>flowers, vegetables, other plants,</b> and often grass
herb	a <b>plant</b> whose <b>leaves</b> 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 <b>flower</b>
plant	a living thing that grows in the earth and has a <b>stem, leaves, and roots</b>
reproduce	when an animal or plant produces one or more individuals similar to itself
roots	the parts of a <b>plant</b> that grow under the ground
seed	the small, hard part from which a new <b>plant</b> grows
stem	the thin, upright part of a <b>plant</b> on which the <b>flowers and leaves</b> grow
tree	a tall <b>plant</b> that has a hard <b>trunk, branches, and leaves</b>
trunk	the large main <b>stem</b> from which the <b>branches</b> grow
vegetable	<b>plants</b> such as cabbages, potatoes, and onions which you can cook and eat
vegetation	<b>plants, trees and flowers</b>
weed	a <b>wild plant</b> that grows in <b>garden</b> and prevents the <b>plants</b> that you want from growing properly
wild	animals or <b>plants</b> 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.

## Science Knowledge Organiser

**Plants**

**Yr 2**

**Main Foci: Biology**

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:								
<table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; padding: 5px; width: 50%;">root</td> <td style="border: 1px solid black; padding: 5px; width: 50%;">cauliflower</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px;">stem</td> <td style="border: 1px solid black; padding: 5px;">carrot</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px;">leaf</td> <td style="border: 1px solid black; padding: 5px;">cabbage</td> </tr> <tr> <td style="border: 1px solid black; padding: 5px;">flower</td> <td style="border: 1px solid black; padding: 5px;">celery</td> </tr> </table>	root	cauliflower	stem	carrot	leaf	cabbage	flower	celery		
root	cauliflower									
stem	carrot									
leaf	cabbage									
flower	celery									