

Science Knowledge Organiser

Plants

Yr 2

Main Foci: Biology

What will I know by the end of the unit?

To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

- Plants require water, warmth, soil and light to grow into a healthy plant.
- Seeds need warmth, water and air to germinate
- If they do not have one or more of these things, they may stop growing, become unhealthy and die.
- Plants grow from seeds or bulbs.
- First, roots grow from the seed, then a stem grows up and leaves grow out of the stem.

flower

germinate

leaf/leaves
plant

roots

seed

stem

Vocabulary

the part of a **plant** which is often brightly coloured and grows at the end of a **stem**

When a seed starts to grow and the seed splits and a shoot appears.

the parts of a tree or plant that are flat, thin- in a healthy plant these are usually dark green. a living thing that grows in the earth and has a **stem**, **leaves**, and **roots**

the parts of a **plant** that grow under the ground

the small, hard part from which a new **plant** grows

the thin, upright part of a **plant** on which the **flowers** and **leaves** grow

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).
- 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**.

Procedural Knowledge

- Plant seeds** and watch them 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, no soil).
- Measure how tall your plants are to the nearest cm using appropriate equipment.
- Use these observations to answer questions about what seeds and plants need to grow healthy and strong.



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1. What conditions does a seed need to germinate (start to grow)	Start of unit:	End of unit:
light		
soil		
water		
warmth		

Question 2: Which three things does a plant need to grow well and turn into a healthy plant?	Start of unit:	End of unit:
water, exercise, wind		
soil, water, wind		
soil, sunlight, water		
water, darkness, soil		

<p>Question 3: What is happening in this picture?</p> 	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		

<p>Question 4: Four identical seeds have been planted at the same time.</p> <p>Which of them will produce the tallest and healthiest seedling?</p>	Start of unit:	End of unit:
The seed that has been watered and kept in the cupboard.		
The seed that has been watered lots and lots.		
The seed that has been placed on a wet paper towel		
The seed that has been watered and placed on a windowsill.		
The seed that has been placed on wood chips and watered		