

# Knowledge Organiser - Science - Plants- Key Stage 1 (Year 1)

Careers connected to plants:  
horticultural management,  
plant biologist, plant pathologist



## What I already know

- I have explored the natural world around me, making observations and drawing pictures of animals and plants.
- I know some similarities and differences between the natural world around me and contrasting environments, drawing on my own experiences and what has been read in class.
- I understand some important processes and changes in the natural world around me.

## Sticky Learning

### What Plants Need to Grow

Plants need **water** to survive. Plants get water through their roots.

Plants need the right **temperature** to grow.

Plants need **sunlight** to help them grow and make their own food.

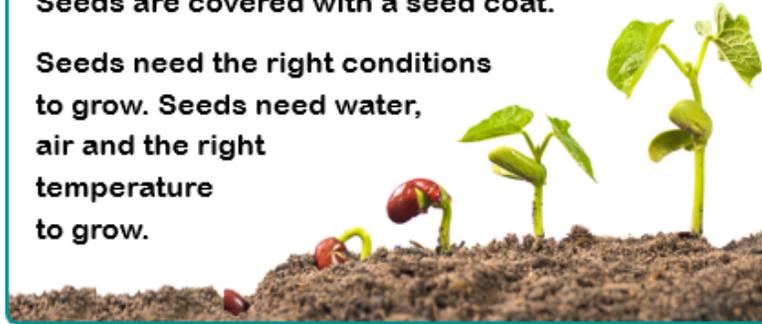
Plants need **room** to grow. Plants need time to grow. It can take days, months or even years for them to grow.



### Life Cycle of a Plant

A plant **germinates** when it starts to grow. Inside a seed/bulb is the baby plant. Seeds are covered with a seed coat.

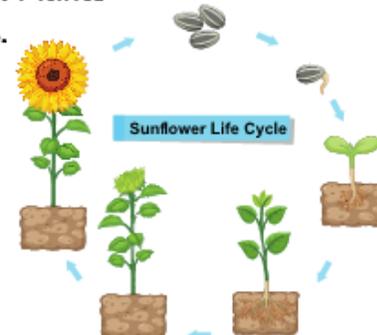
Seeds need the right conditions to grow. Seeds need water, air and the right temperature to grow.



### Life Cycle of a Plant

Plants begin life as **seeds or bulbs**. They need soil, air and water to grow. Plants grow into young plants called **seedlings**. Plants grow **flowers and fruits**.

These produce seeds. When the plant is pollinated, the seeds find their soil. The process starts again!



## Core Learning



1. To begin to know some differences between seeds and bulbs.



2. To begin to design an experiment to find out what plants need to grow.



3. To name what plants need to grow and stay healthy.



4. To describe the life cycle of a plant.



5. To observe and record the growth of plants over time.



6. To begin to understand that plants adapt to suit their environment.



Circle what plants need to grow.

garden                      watering can

water                      room                      air

time                      light                      right temperature



Explain why each point below is important to help a plant grow.

**Water**

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**Temperature**

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**Light**

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**Space and time**

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Explain what happens to plants to help them reproduce.

What do plants need to grow?

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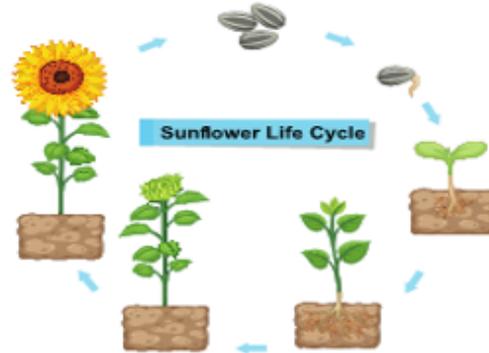
What happens to a plant when it dies?

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**Rocket Words**

<b>photosynthesis</b>	<b>the process in which green plants use sunlight to make their own food</b>
<b>carbon dioxide</b>	<b>plants use this to make their own food in a process called photosynthesis</b>
<b>oxygen</b>	<b>one of the main gases that make up air</b>
<b>glucose</b>	<b>a sugar that plays a vital role in the metabolism of most living organisms</b>
<b>pollination</b>	<b>the process that allows plants to reproduce</b>
<b>germination</b>	<b>the process by which a plant grows from a seed</b>
<b>crop</b>	<b>a plant or plant product that is grown and harvested</b>
<b>forests</b>	<b>places where there are mostly trees</b>