

Year 2: Plants

What should I already know?

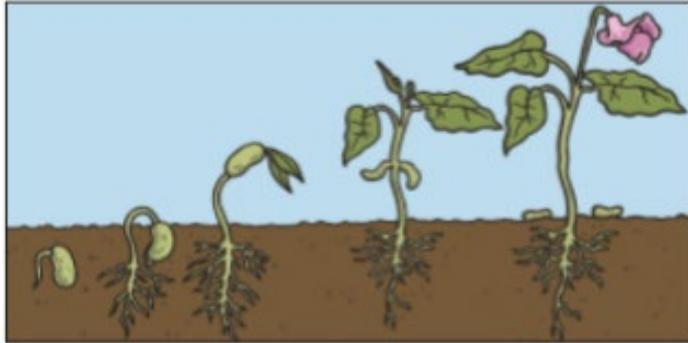
I know that plants grow in the wild and in my garden. I know that plants can change throughout the year. I know that plants need water and light to live. I know some parts of a plant.

Science - science is A subject where you ask questions about how the world works and find out the answers

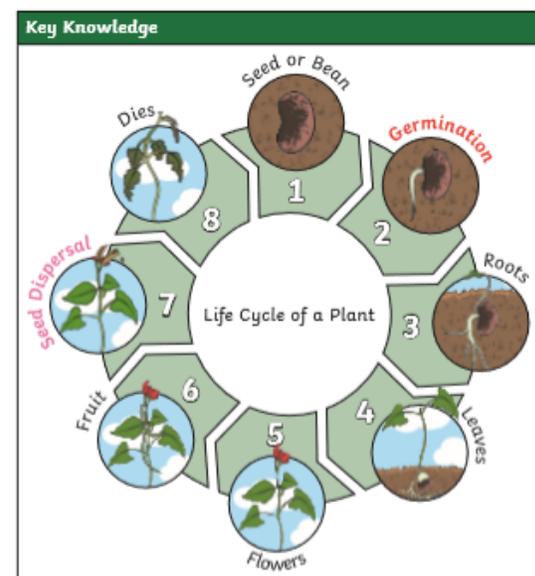
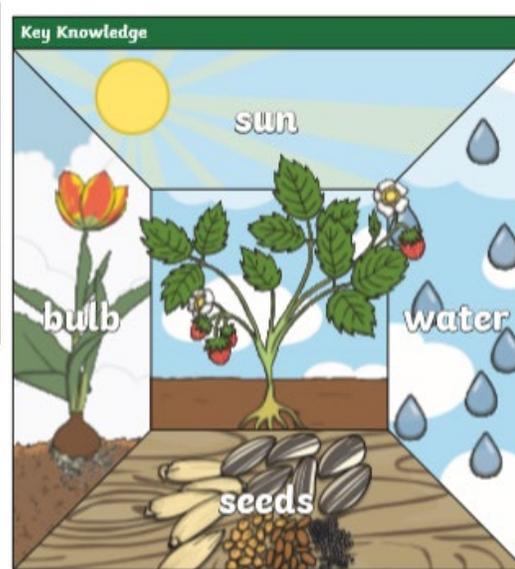
National Curriculum Objectives:

Observe how seeds grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

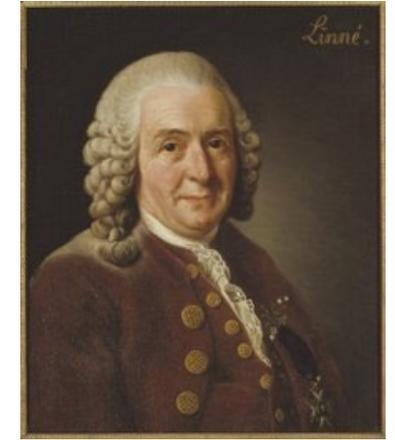
Powerful knowledge



Plants need water, light, air and space to survive.



Significant People



Carl Linnaeus
1707 - 1778

Carl was a famous botanist. He learned to classify plants.

He went to Lapland to see what new plants he could find.

Interesting facts -

Wheat is ready for harvest when it becomes golden in colour and completely dried out.

Glossary/Key Questions

Germination	When a seed starts to grow
Reproduction	When a living thing creates something like itself.
Grow	A living thing changes over time by getting taller.
What does a stem do?	The stem holds the plant up right so water can travel to the leaves.
What do roots do?	The roots soak up water and nutrients from the soil.
Why do plants need light?	Plants need light to make energy. This helps them grow and make food.
Why do plants need space?	Plants need room to grow. They need to spread out their roots and leaves. Other plants can get in the way and stop this.
Why do plants need water?	All living things need water to live.
When does germination happen?	Germination happens when a seed begins to grow in the soil.



Wheat needs to dry out to a golden colour before we can harvest it. This usually happens in September.

The grains of wheat are hard. Some are ground into flour, some are replanted to make more wheat.

Science Year 2 - Plants

National Curriculum Objectives: <ul style="list-style-type: none"> Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 			Prior Objectives: <ul style="list-style-type: none"> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees. 		
 Lesson 1 Skill - Observe	 Lesson 2 Skill - Name, describe	 Lesson 3 Skill - Investigate	 Lesson 4 Skill - Find out, Observe	 Lesson 5 Skill - Group	 Lesson 6 Skill - Identify
Knowledge - 4 main parts of a plant.	Knowledge - Purpose of the roots, stem, leaves and flower.	Knowledge - Germination occurs when a seed starts to grow.	Knowledge - Plants need light, air, water, nutrients and space.	Knowledge - Farmers must take care of crops & protect them from pests & weeds	Knowledge - We need a variety of fruit and vegetables in our diet.
<u>WALT: Observe plants.</u> WILF: -Create a plant -Identify parts of a flower -Make observations Teacher's note: Plant a sunflower seed in preparation for next lesson. Ask children to think, pair, share what they know about how plants grow and about what plants need in order to be able to grow. Children use different shapes to create their own plant. Show children pictures of lots of different plants. Do they all have flowers? Look closely to compare & share back with the class. Teach chn the 4 main parts of a flower and then a tree. Recording: Playground & garden & draw which plant they can see.	<u>WALT: Describe the purpose of parts of a plant.</u> WILF: -Describe the role of the roots -Describe the role of the stem -Describe the role of the leaf -Describe the role of the flower Show chn a small pot plant & carefully remove the plant from the pot.. Chn will be able to see the roots, leaves, stem and flower. Explain why each of these is very important. Can you describe a plant? Why does a plant need roots? How does a plant get energy to grow? Where do plants make their seeds? Recording: Videos, QR codes. Each table role-play a part of the plant acting out the role it plays.	<u>WALT: describe how seeds and bulbs grow.</u> WILF: -Define germination -Identify what a seed needs to grow. -Plant a seed. What is germination? Show a time-lapse video. Show the children a variety of seeds and bulbs - they all look very different. Ask them what the seeds and bulbs need to germinate and what they will need to keep growing healthily. Plant pea seeds How are we going to take care of it? Recording: A comic book style strip of frames in which chn draw each step the children took when planting the seeds.	<u>WALT: Find out what plants need to grow and stay health</u> WILF: -Experiment fairly -Make observations -Plant a seed -Identify the needs of a plant What do plants need in order to grow? Chn look at picture of plants with too much water and not enough water. Also without suitable temperature and nutrients. Chn go on to plant cress seeds. One as a control with suitable amount of water. One with no water at all. One with too much water. Recording: Take pictures of each plant every day.	<u>WALT: Understand that plants are grown for food.</u> WILF: -Identify the needs of a plant -Explain how bread is made -Sort foods into groups What are 'crops'? Explore the plants we eat and where they come from. Look at plants grown in the UK. What must a farmer do to look after his crops? Find out how bread is made from wheat. Read The Gigantic Turnip. What food could you grow in your home? Recording: Sort foods into groups depending on how they are grown. For example bananas are grown on trees, blueberries are grown on a bush,	<u>WALT: Identify which parts of the plant we eat.</u> WILF: - Name Fruits and vegetables -Explain why some plants are dangerous -Identify parts of plants we eat Show chn some familiar vegetables & discuss which part of the plant we eat. Show chn the whole part of the plant, e.g. carrots with their tops still on. Explain that the fruit and vegetables we see in supermarkets are just a part of the plant that would have grown. Discuss the important fact that some plants are dangerous and we must not pick and eat plants we do not know about. Recording: Chn draw the entire fruit/Veg and the part we eat next to it.

Assessment: Use the vocabulary mat to assess the children's prior knowledge and use the mats again to assess what the children have learnt.

Key Vocabulary: Observation, growth, seeds, bulbs, temperature, roots, stem, predict, leaf, flower, measure, diagram, measure, life cycle, life process, germinate, grain

growing



plants



branch



root



stem



trunk



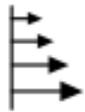
flower



leaf



grow



weed



seedlings



leaves



growing



living



alive



not living



light



healthy



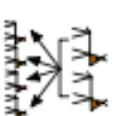
dead



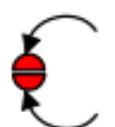
not alive



reproduce



produce



young



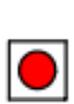
temperature



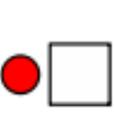
shoot



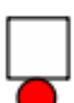
within



under



next to



fruit



earth



soil



seeds

