

Year 1 – Plants

How can we identify different plants and trees?

Overview of learning

During this unit, children learn to identify and name a range of common garden plants, wild plants and trees. They learn the basic parts of flowering plants (root, stem, leaf, flower, fruit, seed) and what each part does.

Children will explore their local environment to find examples of wild plants and compare them with familiar garden plants. They will learn the difference between deciduous and evergreen trees and identify trees by looking closely at their leaves.

Children will plant seeds and keep a plant diary, recording how their plant grows and changes over time. They will learn that many foods we eat come from different parts of plants. They will investigate a range of fruits and vegetables and classify them by the plant part that we eat. Across the unit, children will develop skills in observing, identifying, classifying and using simple evidence to answer questions about plants.

Knowledge and understanding objectives

NC Y1:

Children will:

- 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

Key vocabulary

Tier 1: flower, fruit, leaves, plant, stem, tree

Tier 2: bark, branches, bulb, classify, grow, identify, observe, petal, roots, seed, trunk

Tier 3: deciduous, evergreen, shoot

Misconceptions

Children may not realise that plants are living things that grow, change and can die, and may think only animals are alive. They may not understand that trees are plants, or that grass, weeds and herbs count as plants too. Some children may think plants “eat” soil, or that watering alone makes them grow, rather than knowing plants need water, light and air. They may not know that roots anchor the plant and take in water, or that fruits contain seeds. Children may also believe that vegetables are a separate type of plant, rather than different plant parts such as roots, stems, leaves, flowers or fruits.

Videos

Lesson 2 [The parts of a plant – KS1 Science curriculum - BBC Bitesize](#)

Lesson 8 [Plant Parts that we EAT! - YouTube](#)



Previous learning

Children may have explored different plants during EYFS. They may have learnt the names of different plants and their features. They may also have grown their own plants from seeds and watched the different stages of plant growth.

Future learning

Year 2 – Children will study how plants grow from seeds and bulbs in more detail. They will also look at what plants need to grow and stay healthy.

Year 3 – Children will learn about the functions of the different parts of the plant, find out how flowers play a part in the life cycle of the plant and investigate how water is transported in plants.

Year 5 – Children will look at the life cycle of a plant including the life process of reproduction.

Year 6 – Children learn how plants are adapted to survive in different environments, including how their features help them compete for light, water and nutrients.

KS3 – Children will study plants in much closer detail, observing the cell structure and how plants create their own food through photosynthesis.

How are scientific enquiry types and working scientifically skills developed within this unit?

Scientific enquiry type		Working scientifically skills	
	Classifying objects as a plant/not a plant		Observing plants and objects closely
	Identifying the parts of a plant		Observing closely using magnifying glasses
	Making observations over time to study plant growth		Recording observations of plants growing in a diary
	Identifying flowers by their features and classifying them into groups		Observing real flowers using the number of petals to sort them
	Observing how plants grow over time		Making observations over time and looking for changes
	Looking for patterns in growth between different types of plants		Comparing how plants grow and change, looking for patterns
	Identifying features of trees and classifying plants as trees or not trees		Observing how the features of trees are different from other plants
	Observing photos and real leaves and looking for patterns and relationships		Explaining findings by observing the leaves of deciduous and evergreen trees
	Identifying the parts of a plant that are eaten		Observing closely in order to identify the parts of a plant



Unit overview

How can we identify different plants and trees?

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6	Lesson 7	Lesson 8
Key question: What is a plant?	Key question: What are the parts of a plant?	Key question: How do plants start to grow?	Key question: How are flowers different?	Key question: How do plants change as they grow?	Key question: What makes trees different from other plants?	Key question: Why do some trees keep their leaves?	Key question: Which part of the plant do we eat?
Learning objective: I can identify and name some common wild and garden plants.	Learning objective: I can name and describe the basic parts of a plant.	Learning objective: I can observe how a plant begins to grow and notice simple changes.	Learning objective: I can compare and group flowers based on their features.	Learning objective: I can describe how a plant changes as it grows.	Learning objective: I can identify the features of a tree and say how trees are different from other plants.	Learning objective: I can identify deciduous and evergreen trees and notice patterns in their leaves.	Learning objective: I can identify the part of the plant that we eat.
Success criteria: By the end of the lesson, children will be able to say if something is a plant or not and identify and name some common plants.	Success criteria: By the end of the lesson, children will be able to name the parts of a plant, know that plants are different shapes and sizes and describe the characteristics of plants.	Success criteria: By the end of the lesson, children will be able to talk about plants growing from seeds and bulbs, identify seeds and bulbs and make observations over time as a plant grows.	Success criteria: By the end of the lesson, children will be able to identify common flowers, describe flowers using colour, shape and number of petals and classify and sort using different criteria.	Success criteria: By the end of the lesson, children will be able to describe how seeds grow into plants, talk about changes as a plant grows and understand that flowers change and make seeds.	Success criteria: By the end of the lesson, children will be able to recognise the features of trees, explain how a tree is different from other plants and sort plants into 'tree' and 'not a tree'.	Success criteria: By the end of the lesson, children will be able to identify deciduous and evergreen trees and make links between leaf shape and why some trees lose their leaves.	Success criteria: By the end of the lesson, children will be able to name some plants that we eat, say what part of the plant gets eaten and recognise that fruits contain seeds.
Cumulative quiz: Q1 – Q3	Cumulative quiz: Q4 – Q6	Cumulative quiz: Q7 – Q9	Cumulative quiz: Q10 – Q12	Cumulative quiz: Q13 – Q15	Cumulative quiz: Q16 – Q18	Cumulative quiz: Q19 – Q21	Cumulative quiz: Q22 – Q24
Scientific enquiry type:  Identifying & classifying	Scientific enquiry type:  Identifying & classifying	Scientific enquiry type:  Observing	Scientific enquiry type:  Identifying & classifying	Scientific enquiry type:  Observing  Pattern seeking	Scientific enquiry type:  Identifying & classifying	Scientific enquiry type:  Pattern seeking	Scientific enquiry type:  Identifying & classifying
Working scientifically skills:  Observing & measuring	Working scientifically skills:  Observing & measuring	Working scientifically skills:  Recording data	Working scientifically skills:  Observing & measuring	Working scientifically skills:  Observing & measuring  Recording data	Working scientifically skills:  Observing & measuring	Working scientifically skills:  Interpreting & communicating results	Working scientifically skills:  Observing & measuring



Unit overview

How can we identify different plants and trees?



Stretch and challenge ideas

Children could:

- use tally charts and simple bar charts to record how many of each plant or tree type they find
- create a simple map showing where different plants or wild plants were found in the school grounds
- measure plant growth over time using cubes or a ruler and record the results in a table
- create leaf rubbings and compare vein patterns, edges and shapes to spot similarities and differences
- order leaves by size and record measurements to compare length or width
- build a model plant using construction materials, showing all the key parts
- taste-test different fruits or vegetables and record similarities and differences in a simple table
- create a mini poster proving which plant part a food comes from, using drawings and evidence

Assessment

The **knowledge organiser** can be used to support children. This could be on display, on the tables, sent home or used for pre-teaching key vocabulary or concepts.

The **post-unit test** can assess the knowledge and understanding of objectives taught throughout the unit. This can be done independently or in small groups with a teacher.

There is a **cumulative quiz** with questions that can be used to assess children throughout the topic. The quiz questions will link directly to each objective. They can also be used at the end of each lesson to give immediate feedback to inform future planning and allow identifying children who do not understand.

Each lesson also includes small 'pit-stop' style activities, such as true-or-false or stop-and-jot activities.

Climate change and sustainability



Use the '**Climate change and sustainability links**' document and sustainability challenge cards to help pupils explore real-world sustainability challenges and choices.

Scientific enquiry type key



Testing



Researching



Observing



Pattern seeking



Identifying & classifying



Problem solving

Working scientifically key



Asking questions



Making predictions



Setting up tests



Observing & measuring



Recording data



Interpreting & communicating results



Evaluating

Please refer to the 'Science activities safety guidance' document when undertaking any practical activities.
Ensure that you check on allergies before any experiments with plants, seeds and bulbs.