









**National Curriculum: Science**

**Key Learning**

**Vocabulary**

- Pupils should be taught to:
- distinguish between an object and the material from which it is made
  - identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
  - describe the simple physical properties of a variety of everyday materials
  - compare and group together a variety of everyday materials on the basis of their simple physical properties
  - identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
  - find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Wild plants	Garden plants	Deciduous trees	Evergreen trees
 dandelion	 lily	 horse chestnut	 holly
 daisy	 rose	 oak	 pine

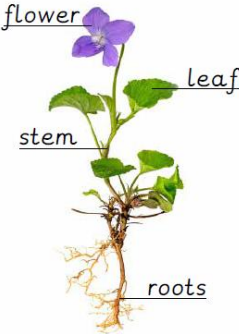
**Evergreen trees**



Leaves:

- Always green.
- Tough and waxy.
- Are narrow and needle-like.

**Plant parts**



flower

leaf

stem

roots


**Deciduous trees**



Leaves:

- Change colour.
- Fall in winter.
- Are wide and flat.

**What do plants need for healthy growth?**



water

light

warmth

- Data** The information collected when something is observed.
- Investigation** A way to find the answer to a question.
- Diagram** A simple drawing with labels.
- Shoot** The young stem of a plant.
- Garden plants** Plants that have been planted and are looked after by humans.
- Grouping** To sort things based on similarities.
- Identification** To name or select something using knowledge.
- Wild plants** Plants that grow naturally without help from humans.
- Blossom** Small flowers on a tree.
- Branch** The parts of a tree that grow out of the trunk.
- Deciduous** A tree that loses its leaves seasonally.
- Evergreen** A tree which keeps its green leaves all year.
- Measure** To find out the size or amount of something.
- Trunk** The thick stem of a tree.
- Bulb** A rounded root from which a new plant can grow.
- Growth** Animals and plants changing over time.
- Prediction** To guess what will happen.
- Edible** Safe to eat.
- Feature** The important parts of something.

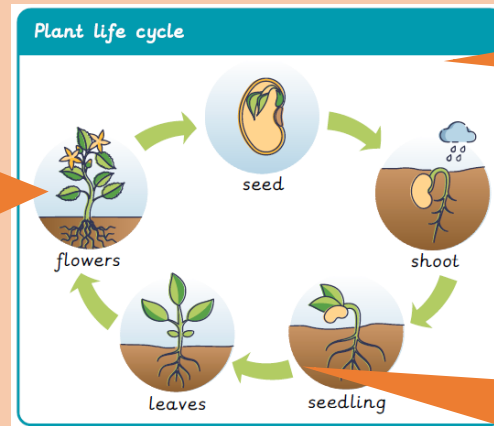
**National Curriculum: Science**

**Working Scientifically:**

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions.

**Key Questions**



What are the different parts of a plant?

What is a plant?

Do plants have a life cycle?

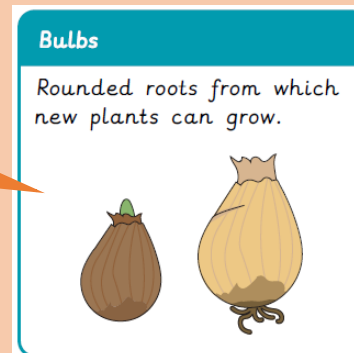


The shoot is the first green part of a plant to grow from a seed.

What do seeds need to germinate?

What do plants need for healthy growth?

Do seeds and bulbs contain everything they need to grow?




**Bulbs**

Rounded roots from which new plants can grow.

**Investigation**

- Flower** The colourful part of a plant where seeds are made.
- Fruit** The juicy part of a plant that contains seeds and is usually juicy.
- Leaf** The green part of a plant that grows from the stem or branches.
- Observe** To watch carefully.
- Plant** A living thing that stays in one place and makes its own food from sunlight.
- Roots** The part of a plant that grows underground.
- Seed** A small part from the flower that can grow into a new plant.
- Stem** The part of a plant that grows above ground and keeps the plant upright.
- Research** A way to find answers or new information.
- Comparative test** An experiment in which different conditions are tested and compared.
- Conclusion** A summary of what has been found out.
- Energy** Used by living things to grow, survive and stay healthy.
- Nutrient** Food needed for growth and health.
- Seed coat** A hard layer that covers and protects a plant seed.
- Shoot** The first green part of a plant to grow from a seed.
- Condition** The state or situation something is in.
- Germinate** Begin to grow.
- Measure** To find out the size or amount of something.
- Observe** To watch carefully.
- Wilt** To lose strength and droop.

## Key Learning:

1 	<p><b>What is a plant?</b> Identifying plants on the school grounds and planning an investigation to find out if a bean needs water to grow. Identify plants and their features. Asking questions about plants and deciding how to set up an investigation. <b>Learning:</b> To identify plants in the school grounds and plan an investigation.</p>
2	<p><b>What are the different parts of a plant?</b> Using magnifying glasses to observe the parts of flowering plants and drawing and labelling diagrams. Recall the parts of a flowering plant. Using a magnifying glass to observe closely. Drawing and label a diagram of a flowering plant. <b>Learning:</b> To identify parts of a flowering plant. To draw and label a diagram.</p>
3	<p><b>What are the differences between garden and wild plants?</b> Identifying wild and garden flowering plants in the outdoors and grouping similar flowers together. Using pictures to help me identify plants. Using a magnifying glass to observe closely. Choosing a way to sort flowering plants into groups. <b>Learning:</b> To identify and name wild and garden plants. To sort flowers into groups.</p>
4	<p><b>How can we tell the difference between deciduous and evergreen trees?</b> Measuring, comparing and sorting leaves and recognising key features of deciduous and evergreen trees. Naming some trees and their parts. Observing leaves and identify similarities and differences. Measure leaves using cubes. <b>Learning:</b> To identify and name deciduous and evergreen trees. To measure and compare leaves.</p>
5	<p><b>How can we sort different seeds?</b> Sorting seeds and bulbs, recognising that they can grow new plants and making predictions about which plants will grow. I can recall that plants grow seeds or bulbs. Using similarities and differences to group seeds and bulbs. Recognising when my observations do not match my predictions. <b>Learning:</b> To recognise that new plants come from seeds and bulbs. To recognise that observations do not always match predictions.</p>
6	<p><b>Which plant parts can you eat?</b> Learning about discoveries from plant research and identifying edible plant parts through close observation. I can name important discoveries made by scientists. Closely observing different plant parts. Identifying plant parts that are eaten. <b>Learning:</b> To recognise the importance of a scientist's role. To use observations to find answers to questions.</p>
7	<p><b>What do seeds need to grow?</b> Planning comparative tests to find out what conditions seeds need to grow. I can suggest conditions that help seeds grow. Suggesting what should change when planning a comparative test. Planning what to observe and measure. <b>Learning:</b> To recognise that seeds need certain conditions for growth. To plan comparative tests.</p>