Key Facts

A simple flower has petals and contains a single set of reproductive organs at the centre, such as a buttercup or lily. Many common flowers that children are familiar with are compound. Compound flowers appear to be single flowers, but the 'flower' itself is actually made up of numerous small flowers or 'florets' arranged within a flower head. Daisies, dandelions and sunflowers are good examples of this.

The petals around the outside of a sunflower are in fact 'ray flowers'. At the centre of the flower head there are many tiny button-shaped florets, each containing both male and female reproductive organs.

It is acceptable for young children to use the broad term 'flower' to describe both simple and compound flowers.

The two main functions of roots are to absorb water and dissolved nutrients, and to secure the plant in the ground.

Branching of roots and the presence of root hairs increases the surface area for absorption.

The spreading of fibrous roots and deep tap roots provides greater anchorage in the soil. Roots can also act as a store of food. The root is the first part of the plant to grow when a seed germinates.

Science Year 1 Plant

Vocabulary

Word	Definition
Branch	Is between the seasons summer and winter. It is also called *fall*. The duration of daylight becomes shorter and the temperature cools. One of its main features in temperate climates is the shedding of leaves from deciduous trees.
Bud	to rain in light drops.
Leaves	a thick mass, like a cloud, made up of tiny water drops floating in the air near the ground.
Root	one of the four parts of the year; Spring, Summer, Autumn and Winter.
Root System	is a season following winter and before summer. Days and nights are approximately twelve hours long, with day length increasing and night length decreasing as the season progresses.
Stem	is the hottest of the four seasons, falling after spring and before autumn. The days are longest and the nights are shortest, with day-length decreasing as the season progresses after the solstice.
Tree	the degree of heat or cold of an object or an environment. *The temperature is higher in the afternoon than in the evening.*
Trunk	not letting water through; not absorbent.
Twig	the season of the year between autumn and spring. *It can get very cold in the winter.*

Common misconceptions:

- Many children have a concept of 'plant' that does not include trees. They may perceive that plants are small scale and can be grown only in pots.
- Trees are seen as a separate grouping. This can also sometimes be true of grass. Children may not recognise that the school field is covered with plants

Knowledge and Understanding:

Children will learn to:

- The emphasis within this term must be on first-hand experience; children exploring and investigating what is familiar and that they see every day around them, such as garden plants, wild plants and trees in school grounds or close by that they can observe first-hand themselves.
- Children look closely at familiar garden plants and wild plants growing in and close to their school, and become increasingly aware of the enormous variety that there is. They are introduced to the names of some common varieties of wild and garden plants, including trees, and begin to make simple comparisons. They learn the simple names of parts of a plant that most plants have in common, and observe and describe a variety of very different examples, such as flowers of contrasting size and shape and roots of different types and structures.

Key skills and concepts:

Children will be able to:

- Children observing closely, identifying and classifying, and comparing and contrasting.
- Children use simple vocabulary to describe their observations and to identify similarities and differences, and group the evidence they collect in different ways, sometimes using criteria provided by their teacher and sometimes developing their own criteria, with support and where appropriate.

Key Questions

What garden plants can we find around the school?

What makes a tree a tree?

What is the same and different about the plants around us?

What is happening underground beneath our plants?

What wild plant can we find around the school?