

Science: Plants Unit 1

Definition:

a living organism of the kind exemplified by trees, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site, absorbing water and inorganic substances through its roots

Biology definition: The word **biology** is derived from the greek words /bios/ **meaning** /life/ and /logos/ **meaning** /study/ and is **defined** as the science of life and living organisms. An organism is a living entity consisting of one cell e.g. bacteria, or several cells e.g. animals, plants and fungi.

POS:

Identify and name a variety of common and wild garden plants including deciduous and evergreen trees

Identify and describe basic structure of a variety of common flowering plants

Prior learning EYFS:

Explore the natural world around them, making observations and drawing pictures of animals and plants
 Plant seeds and care for growing plants. (Nursery – Plants)
 Understand the key features of the life cycle of a plant and an animal. (Nursery – Plants)
 Begin to understand the need to respect and care for the natural environment and all living things. (Nursery – Plants)
 Explore the natural world around them. (Reception – Living things and their habitats)
 Recognise some environments that are different to the one in which they live. (Reception – Living things and their habitats)

Links to other science topics:

Plants (Y2 & Y3)

Living things (Y2, Y4, Y5)

Disciplinary concepts:

Structure: what is the structure of a plant?

Variation: how do the plants in a small area vary?

Common misconceptions:

plants are flowering plants grown in pots with coloured petals and leaves and a stem

- trees are not plants
- all leaves are green
- all stems are green
- a trunk is not a stem
- blossom is not a flower.

Core Knowledge:

Growing locally, there will be a vast array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.

Wider Knowledge:

Texts: Jack and the Beanstalk, The Tiny Seed by Eric Carle.

Stem ambassador – Botanist to allow children to enquire further.

Who classified all living organisms? – Swedish botanist – Carl Linnaeus – Devising new systems for naming and grouping all living organisms.

Working scientifically:

- Become familiar with common names of flowers, examples of deciduous and evergreen trees, and plant structures (including leaves, flowers, blossom, petals, fruit, roots, bulb, seed, trunk, branches, stem).
- Observing closely, perhaps using magnifying glasses and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees.
- Keep records of how plants have changed over time, for example, the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.

End Goals:

- Observed the one tree through the year which provides the opportunity to talk about how it has changed. For example, the leaves changing colour, falling off the branches, and then growing back again.
- Given many opportunities at different points during the year to look at many different plants growing in the school grounds which means the children have learnt to identify and name these plants.
- Used their senses to explore these plants, and can name and describe the parts of these plants with which they have become familiar.

CPD: Reach out CPD

Science Association / STEM website / Explorify / National Trust