

In this unit: Pupils will dissect different plants and about the different parts and their functions. They will build on their knowledge from year 2 and investigate growing conditions. Pupils will investigate areas of Barnsley where flowers could be displayed and justify their choice.

Children should know:

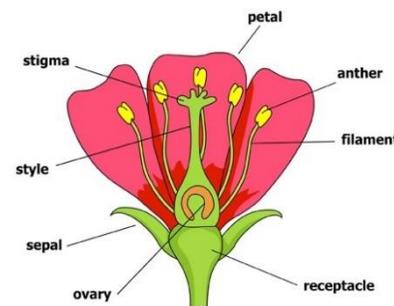
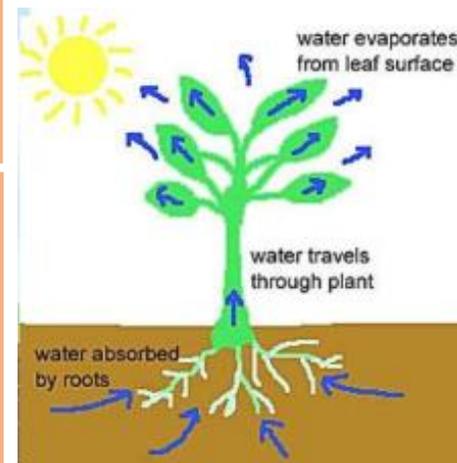
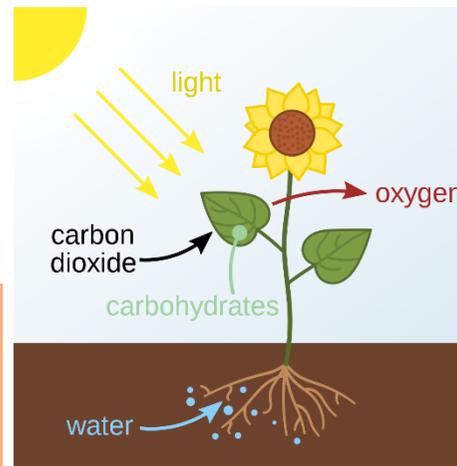
- that plants require things such as water, warmth, nutrients and light to grow and that without one of these they may stop growing.
- the basic parts of plants e.g. leaves, stem, fruit, roots, trunk, branches
- that plants can move.
- that plants provide us with food and some can be eaten by humans.
- that plants mostly get their nutrition from soil.
- a variety of common wild and garden plants, including deciduous and evergreen trees and how to identify them.

By the end of this unit, children will know:

- the functions of different parts of flowering plants e.g. that petals are bright to attract insects to help them pollinate.
- that seeds are able to grow into new plant and this is called germination.
- that leaves use carbon dioxide and sunlight to make food for the plant.
- that the stem carries water and other nutrients from the root.
- that roots anchor the plant and absorb water and nutrients from the soil.
- that plants need air, water, sunlight, nutrients, room and a suitable temperature to grow, but the amount of each varies depending on the type of plant.
- that flowers help in the life cycle of flowering plants and how.
- the types of plants and trees that grow in different climate zones.

Pupils could investigate:

- the different factors in plant growth e.g. the amount of water, the amount of light, the amount of nutrients.
- how water is transported in plants.
- the structure of fruits, by dissecting them.
- the different parts of a flower and how each part helps with fertilisation.
- the effects of flower competitions on urban life.



Key Vocabulary

absorb	soak up or take in
anther	the part of the stamen that produces and releases pollen
canopy	the upper layer of the habitat zone
carbon dioxide	a gas produced by animals and people breathing out that is used by plants to make energy
climate zone	sections of the earth that are divided according to the climate. There are three climate zones: polar, temperate and tropical.
dispersal	scattered, separated or spread through a large area
dissect	to carefully cut something up to examine it scientifically
fertilisation	in plants, where pollen meets the ovule to form a seed
formation	the process of being formed or made
ovule	a small egg
oxygen	a gas given out as a waste product by plants and trees that animals need to survive
stigma	the top of centre part of a flower which take in pollen
transported	taking something from one place to another

Key Questions:

- what is the role of the [part] in a plant?
- will a plant grow without [water]?
- what are the parts of a flower called?
- how is water transported within plants?

