

General note

'Food' in plants

Food provides a source of energy for living processes.

Animals are known as consumers and obtain their energy from the plants and animals that they consume.

Green plants are known as producers and are able to trap energy from the sun, using the green pigment chlorophyll. This energy is used to produce sugars, by the process of photosynthesis. The sugars are subsequently broken down to provide the source of energy for living processes in the plants. Plants are therefore said to make their own food.

In addition to obtaining energy, all animals and plants need other substances to build up their cells and grow successfully. These substances include mineral salts. Animals obtain their minerals from the plants and animals that they consume. Plants usually obtain their minerals from water taken up by the roots, and this water contains dissolved mineral salts.

Children are often confused by use of the term 'food' particularly when they know that 'plant food' can be purchased (say from a garden centre) and added to the soil to 'feed' plants. (This is mainly mineral salts.) They should understand that in science, we link 'food' primarily with it being a source of energy.

Curriculum links

Parts of a plant

National Curriculum (Sc2)	KS1: 3b, 3c; KS2: 3b, 3c
QCA guidelines – Scheme of work	Unit 1B; Unit 2B
Scottish ISE 5-14 framework/attainment targets	LT-B2.3, LT-B2.4, LT-C2.4

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