

Goonhavern Primary School- Science

TOPIC: Plants

YEAR: 3

STRAND: Biology

<ul style="list-style-type: none"> What should I know already? 	What will I know by the end of the unit?	
<ul style="list-style-type: none"> Which things are living and which are not. A variety of common wild and garden plants, including deciduous and evergreen trees and how to identify them. The structure of common flowering plants, including trees (including leaves, flowers, fruits, roots, bulbs, seeds, stem, trunks and branches). Seeds and bulbs grow into mature plants. Plants need water, light and a suitable temperature to grow and stay healthy. Plants and animals depend on each other to survive. 	The functions of the different parts of flowering plants	<ul style="list-style-type: none"> The petals on a flower are usually bright - this is to attract bees and other insects so that they can collect pollen to make seeds. The seeds are then able to grow to make new plants. This is called germination. Leaves use carbon dioxide and sunlight to make food for the plant. The stem carries water and other nutrients from the roots to the rest of the plant. Leaves use this water to make food. The stem also helps to keep the plant upright so that the sunlight can reach it easier. The roots help to 'anchor' the plant in the soil. They also absorb water and nutrients from the soil for the stem to carry to the rest of the plant.
	What do different plants need to grow?	<ul style="list-style-type: none"> Air, water, sunlight, nutrients from the soil, room to grow, suitable temperature The amount of each of these may vary depending on the type of plant. For example, cacti need less water than other plants
	How is water transported within plants?	<ul style="list-style-type: none"> Water is absorbed from the soil by the roots. It is then transported from the roots to the stem and then to the rest of the plant.
	How do flowers help in the life cycle of flowering plants?	<ul style="list-style-type: none"> The flower's job is to create seeds so that new plants can grow. Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects. The pollen then travels down and meets the ovule. When this happens, seeds are formed - this is called fertilisation. Seeds are then dispersed so that germination can begin again.

Vocabulary	
Anther	The part of a stamen that produces and releases the pollen.
Carbon dioxide	A gas produced by animals and people breathing out.
Climate zone	Sections of the Earth that are divided according to the climate. There are three main climate zones; polar, temperate and tropical.
Dispersed	Scattered, separated, or spread through a large area.
Fertilisation	A substance that is added to soil in order to make plants grow more successfully.
Germination	If a seed germinates or if it is germinated, it starts to grow.
Life cycle	The series of changes that an animal or plant passes through from the beginning of its life until its death.
Nutrients	Substances that help plants and animals to grow.
Pollen	A fine powder produced by flowers. It fertilises other flowers of the same species so that they produce seeds.
Pollination	To pollinate a plant or tree means to fertilise it with pollen. This is often done by insects.
Stigma	The top of the centre part of a flower which takes in pollen.

Diagrams	Investigate!
	<ul style="list-style-type: none"> • Compare the effect of different factors in plant growth (e.g. the amount of water, the amount of light and the amount of fertiliser). Discuss what would make this a fair test. • Place white carnations in dyed water to observe how plants transport water. • Discover how seeds are formed by observing plant life cycles. • Dissect fruits to observe their structure and use this to explain how seeds are dispersed. • Dissect a flower and identify each of the different parts that help with fertilisation.

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TOPIC:	YEAR:	STRAND:

Q1	Start of Unit	End of Unit	Q3	Start of Unit	End of Unit
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