

Plants Knowledge Progression

		Key Vocabulary
Nursery	<p>Plants are the things that grow in the soil.</p> <p>Plants have green leaves.</p> <p>Some plants have flowers.</p> <p>Some plants grow fruit.</p> <p>Plants are living things like we are.</p> <p>We can look after our plants by giving them some water. We water plants using a watering can.</p> <p>The plants will change as they grow.</p> <p>Plants can die if they are not looked after.</p>	<p>Plant</p> <p>Flower</p> <p>Fruit</p>
Reception	<p>Plants and animals are living things like we are.</p> <p>Plants need water to drink and food to grow. They get their food from the sun.</p> <p>We can look after our plants by giving them some water and planting them in the sun.</p> <p>There are lots of different types of plants.</p> <p>Different plants look different from each other.</p> <p>You can tell different plants apart from looking on the internet or in a non-Fiction book about plants.</p> <p>Plants change as they grow. They get taller. The leaves might get bigger. There might be more leaves than there were before. If they have flowers, the flowers will grow and change as they grow. The flowers might drop off the plant. New flowers will grow in time.</p> <p>Farmers grow plants. These are called crops. Crops can be wheat, barley, oats, fruits and vegetables.</p> <p>When the crops are grown, the Farmer picks the crops and sells them. Some of the crops might be made into different things. Some of the crops might be sold on the market or at a supermarket.</p>	<p>Crops</p> <p>Wheat</p> <p>Barley</p> <p>Oats</p>

YI

The four seasons are:
Spring (March, April, May)
Summer (June, July, August)
Autumn (September, October, November)
Winter (December, January, February)

The weather includes the temperature outside, the wind direction and strength, as well as rain, cloud, snow and sun.

Daylight is when it is light outside. The amount of daylight changes with each season.

In spring, the weather starts to get warmer and leaves start to grow on trees and may have blossom (flowers). Plants start to grow and some animals have their babies, such as lambs.

In summer, the weather gets warmer and the daylight hours are longer. The trees are full of leaves, flowers grow and there are lots of insects and minibeasts.

In autumn, the weather gets cooler and the leaves fall from deciduous trees.

In winter, the weather is the coldest and there are no new plants or leaves. The daylight hours are shorter.

Wild Plants



dandelion



daisy



buttercup



nettles



ivy



dog rose



clover



brambles

Garden Plants



fuchsia



pansy



sweet pea



sunflower



rose



lavender



iris

Trees



cedar



horse chestnut



oak

Root: The part of a plant that attaches it to the ground.

Stem: The main stalk of a plant

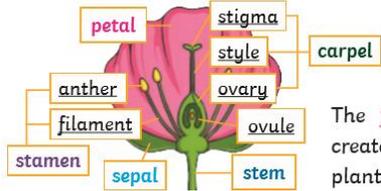
Leaf: Flat green part of a plant that makes food

Flower: Part of the plant that blossoms and helps reproduction.

Fruit: Part of the plant that contains seeds.

Seed/bulb: Grows into new plants

<p>Y2</p>	<p><u>Plant Growth</u> The growth of a plant depends on different conditions. They need the correct temperature and water to grow; they need light to grow green and strong.</p> <p><u>Plants grow in stages:</u></p> <ol style="list-style-type: none"> 1. Germination 2. Roots 3. Shoots 4. Stems 5. Leaves 6. Flowers 7. Fruit 	<p>Germination: When a plant starts to grow. Shoot: New growth of a plant where leaves will develop. Emergent: Layer of the rainforest that is very sunny because it is the very top. Canopy: Layer of the rainforest that is much of the rain is stopped by the thick foliage. Understory: Layer of the rainforest that has many vines, dense vegetation and not much light. Forest floor: Layer of the rainforest that is dark, damp, full of many dead leaves, twigs and dead plants.</p>
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<p>Y3</p>	<p><u>Functions of parts of a plant</u> Main root – Many plants have a main root that divides to anchor the plant to the ground. It keeps the plant steady and upright Secondary roots grow out from the main root Root hairs near the tip of each root take in, or absorb, water and minerals from the soil A plant's stem transports water through the plant. It also raises the height of the plant's flowers and leaves and brings them closer to the sun. Flowers – Flowers have petals that attract insects to the plant. Plants need insects to bring pollen they've collected from other flowers so they can make seeds. Petals are bright colours to attract the insects Leaves make food for the plant using sunlight and carbon dioxide from the air – the word to describe this is photosynthesis</p> <p><u>What Plants need to live and grow</u> Plants need the following to grow: water, light, food and nutrients from the soil, air, room to grow Different plants vary in how much of these they need. For example cacti can survive in areas with little water, whereas water lilies need to live in water</p> <p><u>How water is transported within plants</u></p> <ol style="list-style-type: none"> 1. The roots absorb water from the soil 2. The stem transports water to the leaves 3. Water evaporates from the leaves 4. This evaporation causes more water to be sucked up the stem <p><u>The role of flowers (pollination, seed formation, seed dispersal)</u> The flower's job is to create seeds so that new plants can be grown</p>  <p>The flower's job is to create seeds so that new plants can be grown</p> <p>Life cycle of a flowering plant: Germination – Growing and Flowering – Pollination – Fertilisation – Seed Dispersal – Germination</p> <p>Methods of seed dispersal: Water, shaking, dropping, carrying, eating, bursting</p>	<p>Main root: anchors the plant to the ground and keeps it steady and upright Secondary roots: grow out from the main root Root hairs: absorb water and minerals from the ground Minerals: a substance that occurs naturally in the ground Absorb: take in or soak up a liquid Photosynthesis: the process in which plants make food Pollination: When pollen (a fine powdery substance produced by a flowering plant) is moved from the male anther of a flower to the female stigma. Fertilisation: When the male and female parts of the flower have mixed in order to make seeds for new plants. Seed Dispersal: A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.</p> <p>Anther: the part of the stamen that contains the pollen Petal: The brightly coloured part of the flower that attracts insects to pollinate the plant. Carpel: The female parts of the flower. Made up of the stigma, style and ovary. The job of the style is to hold up the stigma. The stigma collects the pollen when a pollinator brushes by it. The ovary contains the ovules, which are the part of the flower that gets fertilised and eventually becomes the new seed. Stamen: The male parts of the flower. The stamen is made up of the anther and the filament. The filament's job is to hold up the anther. The job of the anther is to make the pollen. Sepal: Leaf-like structures that protect the flower and petals before they open out.</p>
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