



Science Focus

Plants

Year 1/2

**What? (key knowledge)**

**Plants**

A plant	A living thing that usually grows from the ground.
The main parts of a plant	Flowers Leaves Stem Roots
5 common plants to identify	Tulips Daffodils Roses Bluebells Foxgloves

**Plants (Trees)**

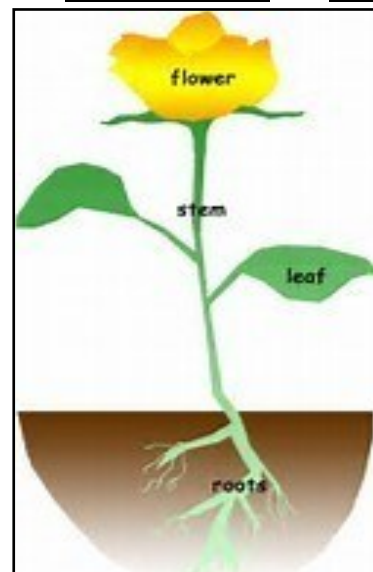
The main parts of a tree	Crown Leaves Twigs Branches Trunk Roots
5 common trees to know	Ash Beech Birch Maple Oak

**What? (key vocabulary)**

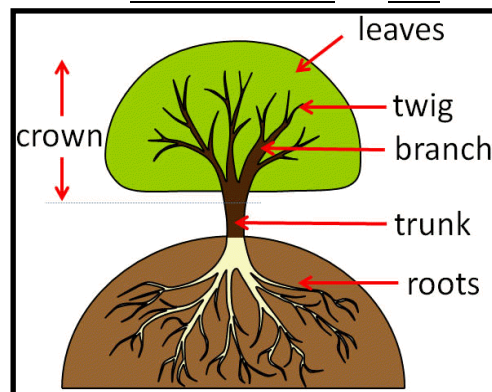
Seed	The part of a flowering plant that can develop into a new plant.
Evergreen	A plant or tree that keeps its leaves all year.
Deciduous	A tree that loses its leaves in Autumn and grows new ones in Spring.

**Diagrams and Symbols**

The Structure of a Plant



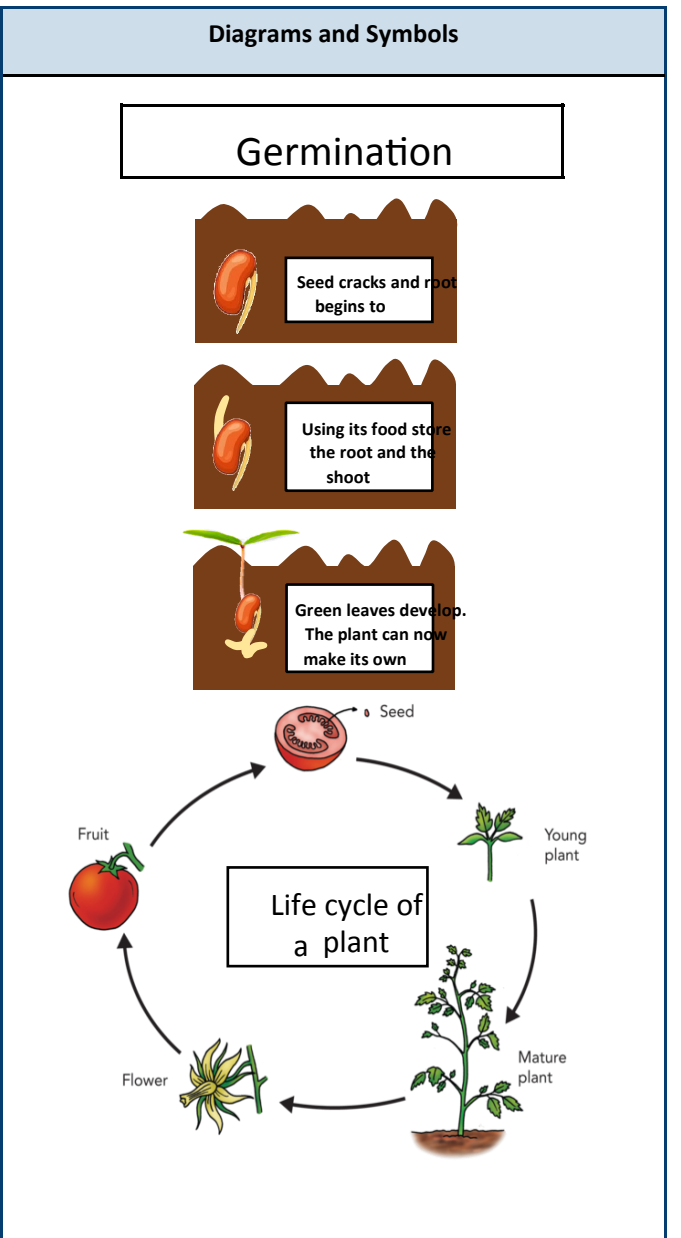
The Structure of a Tree





What? (key knowledge)	
How seeds and bulbs grow	
When seeds start to grow, this is called...	Germination.
To germinate, seeds need:	Warmth Air (Oxygen) Water
Seeds don't need light...	This is because they have a store of food inside them already.
What next?	Once the Stem breaks through the soil it is then a plant.
How plants grow	
A plant	A living thing that usually grows from the ground.
The main parts of a plant	Flowers Leaves Stem Roots
To grow and survive, plants need:	Light Water Carbon Dioxide  This is so that they can make their own food.
To grow and survive, plants need:	Warmth  This is because if plants get too hot or too cold then they will die.
What next? (The life cycle of a plant)	The plant grows. The flower comes and then dies. A fruit with seeds is left behind. The seeds get scattered. The process begins again. <b>This is called the life cycle of a plant.</b>

What? (key vocabulary)	
Survive	Continue to live or exist
Life Cycle	Continue series of changes showing the life of something
Scattered	Move in various random directions
Germination	When a seed starts to grow
Oxygen	Air





What? (key knowledge)	
Functions of parts of a plant	
The main parts of a plant	Flowers, Leaves, Stem, Roots
Flowers	They have colour and smell to attract insects.
Leaves	They change Carbon Dioxide and water into food for the plant and Oxygen.
Stem	They hold the plant up and carry water from the roots to the rest of the plant.
Roots	They hold the plant in the ground and soak up water and minerals from the soil.
Sometimes plants bear fruit	Fruit is the part of the plant we often eat but its main job is to keep the seeds safe.
How plants grow and survive	
To grow and survive, plants need:	Light, Water, Carbon Dioxide This is so that they can make their own food.
To grow and survive plants need	Warmth This is because if plants get too hot or too cold then they will die.
How does a plant get water?	The roots take up water from the soil. The water travels through the stem of the plant to the leaves.
The importance of flowers	
The job of the flower	The flower exists to make new plants. The flower contains the pollen and eggs which make seeds. The seeds grow into new plants.
Parts of the flower	Petal Stamen (The male part of a flower) Carpel (The female part of a flower) <b>(Look at the second diagram)</b>
Pollination and Fertilisation	For a plant to grow a new seed, Pollen needs to get to its Carpel from another plant.
How does Pollen get from one plant to another?	Insects: The insect goes to the first flower looking for Nectar. Pollen gets stuck to it. When it goes to another flower, the Pollen gets stuck to that flower. Wind: Pollen is blown from one flower to another.
Fertilisation	When the Pollen joins the Egg of the new flower a seed or many seeds are formed.
How do the new seeds get to the soil to grow?	The seeds are dispersed. This can be done in 3 main ways:  By wind, for example like Dandelion seeds. By animals, (they get eaten and pooped out). By explosion. Dry seed pods split open and shoot out the seeds.

What? (key vocabulary)	
Petal	One of the coloured segments of a flower.
Stamen	The male part of a flower containing Pollen.
Carpel	The female part of a flower containing an egg.
Fertilisation	When Pollen and an egg join together to make a seed.
Dispersal	Spreading things over a wide area.
Pollen	A powdery yellow substance from the male part of a flower.
Nectar	A sweet fluid in flowers that attracts insects.

**Diagrams and Symbols**

How a plant takes in water

The Structure of a Flower