

Year 2 Knowledge Organiser Science: Plants



ALL SAINTS
MULTI ACADEMY TRUST
BIRMINGHAM
GOD'S LOVE IN ACTION

What do I already know?

Plants are a large group of living things that use sunlight to make their own food. There are many, many different kinds of plants, including trees, vines and Grasses.

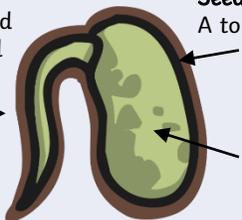


Plants have lots of different parts such as stems, leaves and roots. Some trees lose their leaves in the winter (deciduous). Some keep their leaves all through the year (evergreen). Some plants are 'flowering plants' – they grow flowers on them.

How do seeds grow?

Every single seed has the beginnings of a new plant inside it, along with a little store of food to help it grow. When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called germination.

Embryo:
The tiny root and shoot which will grow into the adult plant.



Seed Coat:
A tough outer covering

Food Store:
A store of food for the young plant to use until it has grown enough to make its own food

What do plants need to grow well?

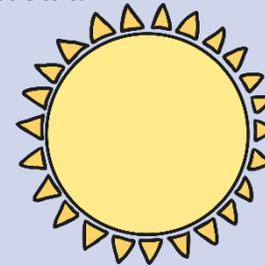
Water

Like animals and humans, plants need water to survive. Plants are able to get water from the soil through their roots. They can also catch water on their leaves.



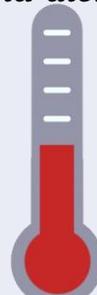
Sunlight

Plants need lots of sunlight to help them grow. Plants do not eat food. Instead they use sunlight to make their own food. Too little light will leave plants weak.



Temperature

Plants need the temperature to be just right for them to grow properly. If it is too hot, they may burn and wilt. If it is too cold, they may freeze and die. This is why there are fewer plants at the poles and the deserts.



Nutrition

Plants take nutrients from the soil.



Key Vocabulary

Germination

The stage of plant growth where the seeds begins to sprout.

Sprout

When a plant sprouts, it grows new shoots.

Seed dispersal

Seed dispersal is when the seeds move away from the plant. They can be moved by the wind or animals.

Shoot

A shoot grows upwards from the seed or plant to find sunlight.

Absorb

To take in or swallow up.

Seeds and bulbs

Some plants grow first from a seed, and then develop a bulb that helps them to grow back year after year.

A bulb lets the plant rest underground over the winter when it is too cold, then grow back later in the year when conditions are right.

Flower Bud:

Future flower stored inside the bulb for protection.

Tunic:

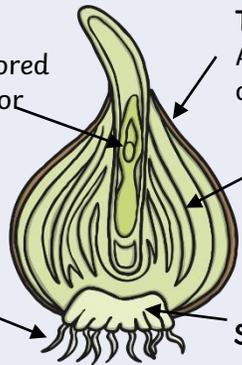
A papery outer covering.

Scales:

Thick leaves that store the food.

Roots

Stem



Some common plants that grow from bulbs



daffodils



allium



snowdrops

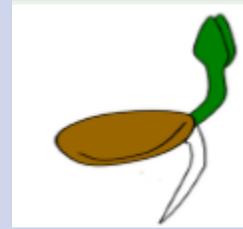


tulips

Life cycle of a plant

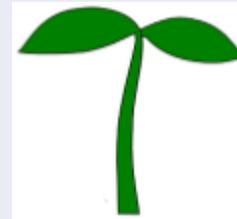
Germination

The seed begins to grow when the conditions are right. This is called germination. It puts out roots and shoots and starts to turn into a young plant.



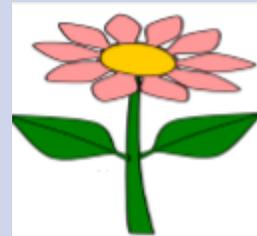
Growth

The young plant produces leaves in order to get energy from the Sun. It will need a lot of energy in the next stage of its life cycle.



Flowering

The plant creates flowers to help it to reproduce. The flower needs pollen from another flower in order to do this. This is called pollination. Some flowering plants attract insects to help them.



Seed

When a flower has been pollinated, it produces seeds, which are capable of growing into new plants. Sometimes the seeds have a fruit around them.

