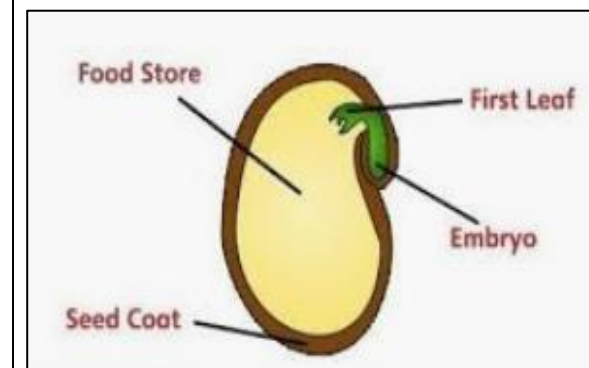
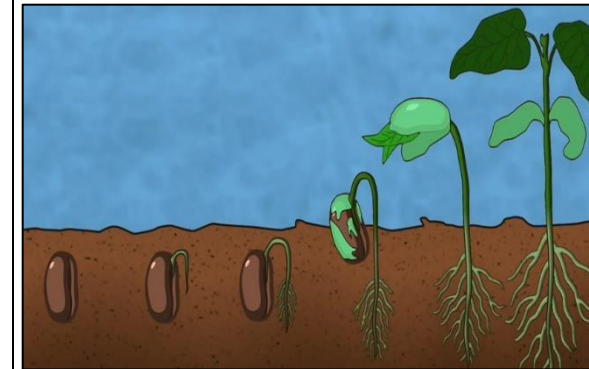


What you should already know...



- 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, for example stems, leaves and roots.
- Some trees lose their leaves in the winter (deciduous). Some keep their leaves through the year (evergreen).
- Some plants are 'flowering plants' – they grow flowers on them.

Growth from Seeds/Bulbs into Mature Plants







-Germination is the name for when a plant starts to grow. A plant is germinating when its seed begins to sprout.

-Inside a seed/bulb is the baby plant (an embryo). Seeds have a tough layer on the outside to protect the plant (the seed coat).

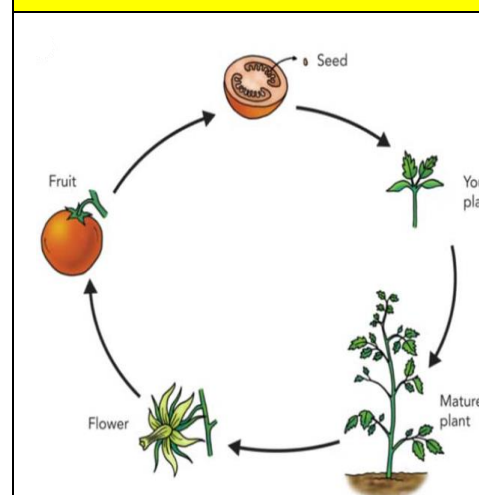
-Seeds and bulbs do not need sunlight in order to grow. They already have their own food store inside them!

-However, they do need the right conditions to grow. Normally, they need water, air and the right temperature. This can often be found in well-watered soil!

What Plants Need to Grow

Water and Nutrients	Light
 <p>Like animals and humans, plants need water and nutrients to survive.</p> <ul style="list-style-type: none"> -Plants are able to get water from the soil through their roots. -They can also catch water on their leaves. 	 <p>Plants need lots of sunlight to help them grow.</p> <ul style="list-style-type: none"> -Plants do not eat food. They instead use sunlight to make their own food. -Too little light will leave plants weak.
Temperature	Space and Time
 <p>-Plants need the temperature to be just right for them to grow properly.</p> <p>-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 less plants at the poles and the deserts.</p>	 <p>-Plants need room for their roots and stems to be able to grow. Without enough room, they may not grow large enough.</p> <p>-Plants also need time – it can take days, months or even years for them to grow.</p>

Plant Life Cycle



Plants have a clear life cycle that helps them to keep reproducing:

Seeds/bulbs – Plants begin life as seeds or bulbs. They need soil, air and water to grow.

Seedling – Plants grow into young plants. They now need light, temperature, water, space and time to keep growing.

Flowering/Fruit – Plants grow flowers and fruits. These produce seeds. When the plant dies or is pollinated, the seeds find their way to the soil. The process starts again!

Smaller Plants

Dandelion – about 25 centimetres

Dwarf Evergreen Shrub – about 1 metre

Sunflower – 1-3 metres

Taller Plants

Titan Arum Flower – up to 3.5 metres

Spruce (Christmas Tree) – up to 30 metres

Giant Redwood Tree – 100 metres +

Key questions

1. Can you name some of the key parts of a plant?

2. What do plants need to grow?

3. What is germination?

4. Can you describe the life cycle of a plant?