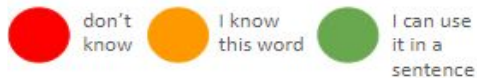




Science – Year 3
Plants
Summer 1

Vocabulary

| Tier 1 | Tier 2 | Tier 3 |
|--------|-------------|----------------|
| Stem | Reproduce | Germination |
| Roots | Flowering | Photosynthesis |
| Leaves | Pollination | Disperse |
| Bulb | Glucose | Chloroplasts |
| Flower | Pollen | Chlorophyll |



Useful Resources

<https://www.bbc.co.uk/bitesize/articles/zdxkcmn#z6v27yc>
<https://www.bbc.co.uk/bitesize/articles/z28cpbk>

Key Questions/Facts

What are the parts of a plant and their function?

- Stem: carries water and nutrients from the soil to the flower.
- Roots: absorb water/nutrients from the soil.
- Flower: attract insects and birds to help spread the seeds (pollination).
- Leaves: use sunlight and carbon dioxide from the air to make energy.
- Bulb: A bulb, mostly under the dirt, stores food while the plant is resting from growing.

How is water transported around a plant?

- The roots absorb water from the soil.
- The stem transports water to the leaves.
- Water evaporates from the leaves.
- This evaporation causes more water to be sucked up the stem.
- The water is sucked up the stem.

What is the lifecycle of a flowering plant?

- Germination is when a seed begins to grow.
- The plant grows bigger and then forms flowers.
- Pollination occurs when pollen from the anther is transferred to the stigma, often by an insect.
- Fertilisation happens when pollen travels from the stigma down the style to the ovary.
- The pollen forms a seed inside the ovary.
- Once the seeds are fully formed, the plant needs to disperse them.
- There are lots of different ways that seeds can be dispersed: in water, by the wind, by animals, dropping, shaking and bursting.

Photosynthesis

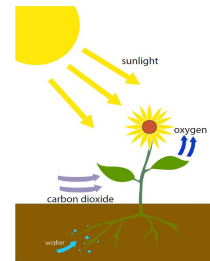
Plants use light energy to make their own food! This process called photosynthesis.

These are the things that plants need for photosynthesis:

- carbon dioxide
- water
- light

These are the things that plants make by photosynthesis:

- glucose (sugar)
- Oxygen



Photosynthesis takes place inside chloroplasts which are small objects inside plant cells. Chloroplasts contain a green substance called chlorophyll. This traps the light energy needed to make photosynthesis happen.

Scientific Enquiry Skills

- Asking questions**
Asking questions that can be answered using a scientific enquiry.
- Making predictions**
Using prior knowledge to suggest what will happen in an enquiry.
- Setting up tests**
Deciding on the method and equipment to use to carry out an enquiry.
- Observing and measuring**
Using senses and measuring equipment to make observations about the enquiry.
- Recording data**
Using tables, drawings and other means to note observations and measurements.
- Interpreting and communicating results**
Using information from the data to say what you found out.
- Evaluating**
Reflecting on the success of the enquiry approach and identifying further questions for enquiry.