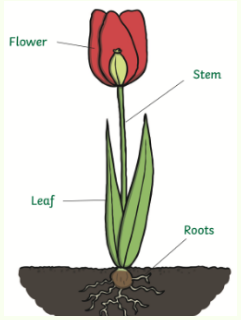
Year 3/4 Plants Knowledge Organiser

What do I know ?

- I know that seeds and bulbs grow into mature plants (Y2).
- I know that plants need light, water and a suitable temperature to grow and stay healthy (Y2).
- I know that a plant is a living thing (Y2)
- I can identity and describe the basic structure of a variety of common flowering plants, including trees. (Y1).

What will I know?

- Many plants (but not all) have roots, stems/trunks, leaves and flowers/blossom. Each part of the plant has a specific function.



- Some plants have flowers which allow the plant to reproduce (make copies of themselves). This happens through the processes of pollination and fertilisation.

- Plants need air, light, water, nutrients from the soil and space to grow. However, different plants require different conditions for growth. For example. cacti can survive with little water whereas lilies need to live in water.

How will this learning help me?

- It will help me to describe the life process of reproduction in some plants and animals (Y5).
- It will help me to investigate reproduction in plants in KS3.

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How will you work scientifically?

Y3- I will make systematic and careful observations using scientific equipment. With support, I will take accurate measurements using standard units, where appropriate.

Y4- I will make systematic and careful observations using a range of equipment. I will take accurate measurements using standard units, where appropriate.

Y3/Y4- I will use straightforward scientific evidence to answer questions or to support my findings.

Common misconceptions

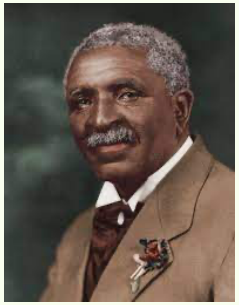
Some children may think that ...

- Plants eat food.
- Food comes from the soil via the roots.
- Flowers only have a visual purpose.
- Plants only need sunlight to keep them warm.
- Roots suck in water which is then sucked up the stem.

Key vocabulary

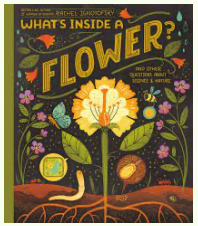
Function	The purpose of a person of thing.
Nutrients	Substances needed by living things to grow and survive.
Minerals	A naturally occurring nutrient found in the soil (for a plant).
Absorb	To take in or soak up.
Transport	To take or carry from one place to another.
Seed dispersal	A method of moving the seeds away from the parent plant so that the seeds have the best chance of survival.
Photosynthesis	Where plants use sunlight to make their own food.
Pollination	When pollen is moved from the male anther of a flower to the female stigma.
Observe	To watch closely.
Enquiry	A scientific investigation. There are 5 different types of enquiry.

Significant Scientist



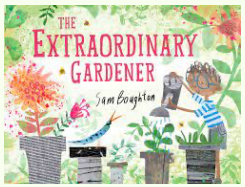
George Washington Carver discovered that planting certain crops could increase the nutrients in the soil and keep it healthy. This was significant because it meant that farmers could grow more crops successfully. This system is called crop rotation.

Read me!



What's Inside a Flower **by Rachel Ignotofsky.**

The Extraordinary Gardener by Sam Boughton.



Both available to listen to on YouTube.