

Plant Challenge

Teacher Info Sheet

Curriculum Links: Living things and their habitats, Working Scientifically

- Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Part one:

An introduction to plants and their parts. Can the students name any parts of a plant? Sheet one allows students to match up the parts of a plant to their function.

Plants are made up of many different parts. Most plants have roots, leaves, stems and flowers. A flower is made up of an ovule, style, stigma, anthers, filaments, petals and sepals. Some plants have specially adapted parts that serve different purposes. For example, cactus spines are actually modified leaves.

Kew Gardens estimate there are over 390,000 different species of plants in the world!

Part two:

In this exercise students have the opportunity to grow their own plant from seed.

Can the students find any seeds outside? What plants are the seeds from?

Can the students find any seeds in their lunch, e.g. from a pepper or apple?

Long term students can monitor their plants and see which seeds germinate. This provides a chance to use the scientific method! Students could be encouraged to record their observations using the recording sheet.

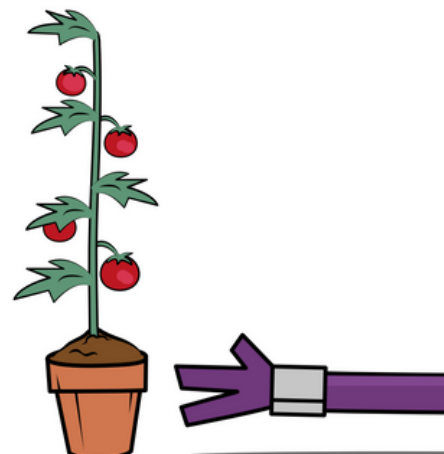
Further Information

The structure of plants:

<https://www.bbc.co.uk/bitesize/articles/z2d4g7h#zp6kkty>

Why are plants important:

<https://www.bbc.co.uk/bitesize/topics/zdqcqqt/articles/zss9msg>



Plant Challenge!

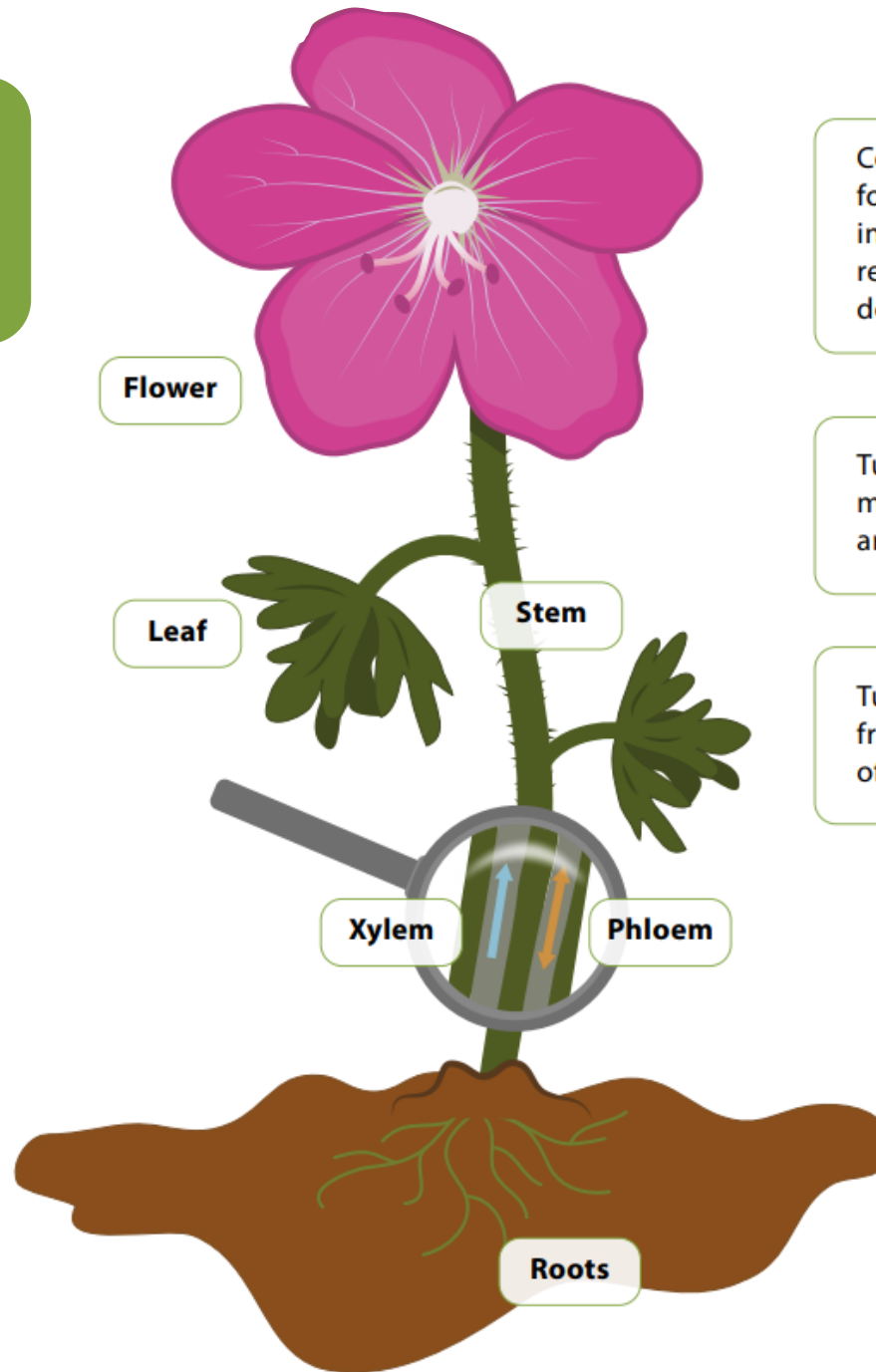
Step 1:

Draw a line to match the descriptions to the parts of the plant.

Gives the plant structure. Carries food and water. Helps support the plant as it grows towards the light.

Can be brightly coloured and scented to attract insects.

Grow downwards, anchoring the plant in the ground. Suck up water and nutrients from the soil.



Collects sunlight to make food for the plant. Takes in carbon dioxide gas and releases oxygen gas while doing this.

Tubes that take the food made in the leaves all around the plant.

Tubes that carry water **up** from the roots to the rest of the plant.

FACT

Creatures that carry pollen from flower to flower are called pollinators.

Bees, moths, flies, birds and even bats can be pollinators!

Step 2:

Seed hunting.

You will need:

- Plant pots (you could reuse yoghurt pots)
- Soil
- Seed labels

First, find five types of seed.

On the following page, award yourself one point for every different type of seed you find and two points if it's a seed found in your food.

Next, plant the seeds and wait to see how many grow.



1. Collect seeds.



2. Plant seeds.



2. Label them.



3. Water and put them on a sunny windowsill.



4. Wait for your seeds to grow.

Top Tip

You might need to keep watering your seeds for a few weeks to get your green shoot points!



Count how many have grown!



Award yourself five points for each type of seed that grows into a green shoot.

	Type of seed	From my food?	Points	When did it grow a green shoot	Points	Total points
Example	Tomato	Yes	2	1st August	5	7
1						
2						
3						
4						
5						
OVERALL TOTAL						