

# The Potato Story

This information sheet gives guidance on how to take your pupils through the presentation in Module 1 of the Student Section.

See resources PDF for plant diagrams.

## Introduction:

Tell the children that today they will be thinking about the following questions to do with plants and plant growth:

- How do plants grow?
- What job does each part of the plant have?
- Why are plants important to humans?
- Why is it important to find out about the food that we eat?

Hand out the labeled picture of the plant. See resources PDF for plant diagrams.

As you show the class the hand-outs of the plant, go through each part one by one and explain its function as follows:

- **The sepals** – these are the special leaves that protect the flower while it is still a bud.
- **The nectaries** – these make nectar – they are right at the centre of the flower so the insect has to climb right in, brushing against the pollen as it does so.
- **The carpel** – is the female part of the plant, where the seeds are made. It is made up of three parts:
  1. The stigma – is sticky and catches the grains of pollen.
  2. The style – a stalk which holds the stigma up.
  3. The ovary – contains the eggs. After fertilisation, the ovary becomes the fruit.
- **The stamen** – is the male part of the plant. Its job is to make the pollen and it is made up of two parts:
  1. The anther – contains the pollen.
  2. The filament – holds up the anther.
- **The receptacle** – is the top part of the flower stalk. All parts of the flower are attached to it.
- **The petal** – sometimes brightly coloured to attract insects to the plant.

Tell the children that all living things change through their lives and this is what we call a lifecycle.

Germination happens when the seed starts to spread out new shoots and a new plant is made. It grows from a young plant to an adult plant with flowers.

When the plant flowers, pollen is made in the male part of the plant. This pollen is then carried by insects or blown by the wind to a new flower. In the new flower, the pollen fertilises the egg cells in the ovary to make seeds.

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When the time is right, the seeds are then dispersed in a number of ways. Explain how the wind can disperse them (show sycamore helicopter seeds and conkers). Birds and insects might eat them and the seeds come out in their droppings (show strawberries or raspberries). Sometimes they can be sticky or have hooks that catch onto animals.

Lots of seeds are lost but many will find a place that has enough light, water, nutrients and warmth to begin germination and then become a new plant. The lifecycle starts again.

## Discussion Break:

Take a Discussion Break with your class.

Ask the children to talk with their partner / group about what they think a plant will need to grow well.

Take time to share the children's ideas within the class.

### Plant Growth:

Return to the image of the plant that you used in the introduction and tell the class that to grow well plants need the right amount of light and warmth, water and nutrients, usually from the earth.

Show each of the above on the picture while you are presenting it.

Explain that with too much or too little of these the plant will not grow well and could die.

## Discussion Break:

Take a Discussion Break with your class.

Ask the children to discuss what plants are grown for people to eat and name some fruits and seeds that they like to eat.

Take time to share the children's ideas within the class.

Encourage the children to think of fruit, vegetables or seeds that they have eaten or like to eat. You could ask them to think about what part of the plant they eat – the root (eg potato, carrot), the fruit (tomato, apple, etc), the stem (rhubarb, celery), the leaf (cabbage, lettuce) or the seed (bread, pasta). Ask them to think of favourites or ones that they hate!

Use the potato as an example to illustrate how vegetables can be versatile in the way that they are prepared, but that the way in which food is prepared makes a big difference to how healthy they are. For example you can boil, roast, bake, sauté, mash or fry potatoes.

### The importance of our diet:

Now ask the children if they know why it is important to think about the foods that we eat and discuss any ideas with the class.

Explain that we should always think about what we eat in order to stay healthy and that it is important for everyone to have a balanced and varied diet.

**Hand out Activity Sheet 2a or 2b and explain how to fill it in.**