Year 3 – Plants – How does each part of the plant fulfil its function? Lesson 1

Lesson	1 of 6

Learning objective

I can identify the parts of a plant and explain what each part does.

National Curriculum links

NC Year 3:
Children will:

- identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers

Working scientifically:

- making systematic and careful observations
- recording findings using simple scientific language, drawings, keys, bar charts and tables

Key lesson question	How does each part help a plant to survive?

Resources

- lesson presentation (PPT)
- activity 1 word building cards
- activity 2 worksheets (one for each part of the plant observed)
- activity 3 worksheet
- a plant with roots, stem and leaves for close observation (mint would be a good choice), one per table.

Teaching input

- **Scientific enquiry –** Review the 'scientific enquiry types' and 'working scientifically' skills the children will use in this lesson.
- **How does each part of the plant fulfil its function? –** The slide shows the lesson questions the children will answer in this unit. The current lesson's question is highlighted on the slide.
- **Key vocabulary for this lesson –** Go through the key vocabulary for this lesson and their definitions. Have any of the children heard these words before? Did they already know their meanings?
- **Identifying and classifying –** Introduce Rupert and the enquiry type for the lesson "Identifying and classifying".
- **Activity 1 –** Children will look at the word building cards with their learning partner or table group. They match the word, icon and definition for all six words. This activity will recap key vocabulary and check the understanding of prerequisite knowledge for this lesson.
- **Identifying the parts of a plant –** Read the information on the slide to introduce the learning for the lesson. Allow children to observe and identify the parts of the plant.
- **Observing –** This slide introduces ways which scientists might observe things more closely. Children should use at least one of these as we work through the subsequent slides to look at the details for each part of the plant.
- **Activity 2 (roots) –** Read the information and then allow children time to study the structure of the roots. They should make a drawing (either on the activity 2 observation worksheet or in their sketch book) of the root system and then 'zoom in' on one detail. They should annotate their drawings with observations and labels.
- **Let's watch –** Read the information and then watch the clip to see how roots develop and spread through the soil. Ensure the children understand the function of the roots.
- **Roots –** Read the information and discuss how roots vary from plant to plant. They should be familiar with some roots that we eat e.g. carrots.
- **Activity 2 (stem) –** Read the information and then allow children time to study the structure of the stem. You could cut the stem so that the children can look at a cross section. They should make a drawing (either on the activity 2 observation worksheet or in their sketch book) of the stem and then 'zoom in' on one detail. They should annotate their drawings with observations and labels.
- **Stems –** Read the information and discuss the function of the stem on these two slides. How does this link to what they observed? Ensure they understand the function of the stem. The following slide gives information about variations between stems. Use this opportunity to talk about stems of plants that we eat and also stems which climb.
- **Activity 2 (leaves) –** Read the information and then allow children time to study the structure of the leaves. They should make a drawing (either on the activity 2 observation worksheet or in their sketch book) of the leaves and then 'zoom in' on one detail. They should annotate their drawings with observations and labels.
- **Leaves –** Read the information on these two slides and talk about the function of leaves which is to produce food (children do not need to know about photosynthesis). Discuss that leaves vary greatly and the following slide shows some variations. Read the information and get children to talk about all the different leaf shapes they have seen in plants.
- **Activity 3 –** This activity consolidates the learning from the lesson. On their activity 3 worksheet, children should annotate a drawing for each part of the plant and explain how it helps the plant to survive.
- **Challenge –** Children are to discuss and answer the challenge question with their learning partner. Sentence starters are provided. Take feedback from the class before revealing the answers on the following slide.

Main activity

Activity 2 – children complete one observation worksheet for each part of the plant. They will draw a picture of the overall structure for each part and then look more closely at the details using a hand lens or other equipment. Model how to annotate and label the drawings.
Activity 3 – the aim of this activity is to consolidate learning from the lesson. Children use their earlier sketches to annotate a clear, detailed drawing for each part of the plant and explain the function on their activity 3 worksheet.

Challenge

Children consider the challenge question and discuss with their partner.
What might happen if a part of the plant didn't function properly?
Children should use the sentence starters to answer the question.

Cumulative quiz questions

1. What is the function of the roots? Pick two answers.
2. Use the key words to complete the sentences.
3. What will happen if the stem of a plant is damaged?

Self-assessment

- I can observe closely using simple equipment.
- I can record observations using labelled drawings.
- I know the functions of the parts of a plant.

Key vocabulary

plant – a living thing that often has roots, stem and leaves
identify – to say what something is
observe – to look carefully at something