

HOW DOES YOUR GARDEN GROW?



LESSON 12: AM I THE PERFECT PLANT?

Key vocabulary:

plant, root, stem, trunk, leaf, flower, leaflet, stalk, veins, surface, edge, lobes, bud, petal, sepal, carpal, stamen, pollen, function, water, nutrients, anchor, support, germination, seedling, flowering, pollination, seed formation, reproduce, dispersal

Resources:

KWL display, large piece of paper, coloured pens and pencils, sticky notes, collage materials (optional)

LESSON SUMMARY:

This lesson provides an opportunity to assess whether children know what parts a plant has, can name them and can describe their functions. In this lesson children will design flowering plants, labelling and annotating their drawings. By the end of this lesson children will have demonstrated what they have learned about the parts of a flowering plant.

National curriculum links:

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

Working scientifically links:

Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions

Learning intention:

To demonstrate what children have learned about plants by designing a flowering plant

Success criteria:

- I can design a flowering plant.
- I can label its parts, features and functions.

Scientific enquiry type:

Technology

Note: This lesson can be done simply with drawings or could be extended over two lessons to allow children to produce 3D posters and to provide more time for peer assessment. This would also permit revisiting of learning if the activity shows knowledge to be not yet secure.

EXPLORE:

Before the lesson, encourage children to look at the KWL display. Reflect on what has been learned. What did they know at the start of the module? Have they changed their mind about anything they thought they knew? What have they learned? Which of their questions do they now know the answers to? Draw attention in particular to information about the key features plants need in order to survive and reproduce. If there are questions that have not been answered, decide whether they can be used for enrichment lessons, covered in the ongoing 'Our Changing World' module, researched outside school or be answered during modules in later year groups.

ENQUIRE:

Explain that for this challenge, children should draw on what they have learned to design a plant. Using the seed they designed in lesson 10 as a starting point, challenge them to imagine and draw the plant that it would grow into. They will name it, if they did not choose a name when they designed the seed, and present it as a picture or collage with labels and annotations. Through pair-share or group discussion, draw up success criteria against which the designs will be evaluated. These would be based around the results of the challenges.

Challenge 1 Children imagine, draw and label plant.

All main parts of the plant are shown. Most parts should be labelled by name and some information included about function.

Challenge 2 Children imagine, draw and label a plant with annotations.

Children imagine, draw and label a plant using annotations. All parts (including parts of flower) should be drawn and named, with annotations to describe functions

Challenge 3 Children imagine, draw and label a plant with descriptive details.

These children will present their work with more descriptive detail (drawn and written), for example, for flower and leaf as in an identification guide. All parts (including parts of flower) should be drawn and named with annotations to describe functions. Annotations include information about how those parts are suited to their functions.

REFLECT AND REVIEW:

You may wish to use video, interactive activities or images from previous lessons as a reminder before the review of the posters if they show gaps in children's knowledge.

Display the posters on tables or walls. Each group moves to another group's posters and peer assesses them against the agreed success criteria. Working in pairs they write comments on sticky notes and stick them to the posters. Repeat for another group if time permits.

EVIDENCE OF LEARNING:

Review children's posters.

Can the children identify what they have learned? Can they design a plant which has all the main parts, correctly named? Can they include details such as the parts of the flower? Can they describe the functions of the parts – main ones/all parts? Do they describe any adaptations, such as colouring and patterns on the flowers, large leaves to get lots of sunlight, juicy fruits to attract animals?