HOW DOES YOUR GARDEN GROW?



LESSON 8: WHAT DO FLOWERS HAVE IN COMMON?

Key vocabulary:

flower, bud, petal, sepal, carpal, stamen, pollen, reproduce

Resources:

Three different types of flowers (such as snowdrop, peony, wallflower, sweet pea, lily, foxglove, two of each type per group of six pupils), magnifiers, 'sticky cards' (see preparation notes), tweezers, if available

Preparation notes:

Prepare a sticky square using several strips of double-sided Sellotape

LESSON SUMMARY:

In this lesson children will dissect a flower in order to make a close observation of the different parts. They will also compare different flowers. By the end of the lesson children will be able to identify the parts of flowers and describe the function of each part.

National curriculum links:

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

Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

Learning intention:

To identify and compare the parts of flowers and describe their functions

Working scientifically links:

Identifying differences, similarities or changes related to simple scientific ideas and processes

Success criteria:

- I can make careful observations of parts of a flower.
- I can compare different flowers.
- I can label the parts of a flower.
- I can describe the functions of the different parts.

Scientific enquiry type:

Grouping and classifying

Health and safety: Grasses, catkins and many other plans produce wind-borne pollen which can cause hay fever and trigger an asthma attack. Avoid working with these plants inside the classroom if there is a risk of the release of large amounts of pollen.

EXPLORE:

Children work in groups of six. Provide three different types of flower for each group, preferably two of each kind. Children look closely, comparing the different flowers.

Ask: What is similar about them? Do they all have the same parts? Can you name any of the parts? What differences can you see?

ENOUIRE:

You can approach this section of the lesson in a variety of ways. Either show the video Parts of a flower Video 1 or show slide 1 of Slideshow 1 and explain the functions of the different parts of the flower; or use a digital presenter/microscope to show a real flower while explaining the functions of the parts. Encourage children to look for those parts in their flowers.

Ask: What is the same about all the stems/petals/stamens/carpals? How does that feature help them to do their job? Why might there be differences?

Explain to the children that you are going to show them a slideshow of a flower dissection and that they should watch carefully as next they are going to dissect a flower themselves in order to look closely at its parts. Show Slideshow 2.

Each child dissects a flower, placing each part onto their pre-prepared sticky card and then sticking it into their book or onto a sheet of paper. As children dissect each part, ask them to consider these key questions each time: What is this part? What is its function? They then complete either Challenge 1, 2 or 3.

Display slide 2 of Slideshow 1 so that children have access to the key vocabulary.

Challenge 1 Children label parts of a flower and complete a resource sheet.

Children label the parts of their dissected flower and copy and complete the paragraphs on Resource sheet 1.

Challenge 2 Children label a flower and complete a resource sheet.

Children label their dissected flower. They then add the descriptions of the functions of the different parts from Resource Sheet 2. Children can copy or cut and stick the vocabulary.

Challenge 3 Children label a flower and describe functions of the parts.

Children label their dissected flower using both key and extension vocabulary. They use annotations to describe the functions of the parts.

REFLECT AND REVIEW:

Ask: What is the role of the flower? Ensure that children understand that it is for reproduction.

Ask: What would happen to a plant with no flowers? What would happen if none of the plants produced flowers?

EVIDENCE OF LEARNING:

Listen carefully as children compare the flowers in different plants.

Can they identify all the parts? Can they identify them in different flowers?

Review the children's labelled dissected flowers.

Can the children name the main parts of the flower? Can they label them on their dissected flower? Can they describe their functions? Do children understand (in simple terms) that the flower is important for the survival of the species, not the individual?

Key information:

Children should understand that a plant which did not produce flowers would not be able to produce seeds to grow into a new generation of plants. It would not cause the individual plant to die but if no plants of that type produced flowers there would be no new plants and eventually that type of plant would die out.