

Learning objective

QCA Unit 5B 'Life cycles'

- That plants produce flowers which have male and female organs, seeds are formed when pollen from the male organ fertilises the ovum (female).

Resources

'Parts of a flower' Notebook file; large flowers for dissection, such as tiger lilies or gladioli; plastic knives; chopping boards; heavyweight paper for mounting; glue; magnifying glasses; sticky tape.

Links to other subjects

Design and technology

PoS (4c) How mechanisms can be used to make things move in different ways.

- Design a flower bud that opens, using cam mechanisms to create movement.

History

PoS (11a) To study the impact of significant individuals.

- Link this work to the drawings of flowers made by Charles Darwin.

Parts of a flower

Starter

Display your bouquet of flowers. Ask the children what purpose flowers have, other than for our enjoyment. Draw out some of the typical characteristics of flowers (scent, colour, different sizes and shapes). Record the children's responses on page 2 of the Notebook file.

Whole-class shared work

- Hand out the flowers for the children to study, with the naked eye as well as with magnifying glasses. Encourage the children to handle and examine the flowers carefully, without damaging them or removing any of their parts.
- Ask them to identify any distinctive parts that the flowers have, and to suggest possible functions for those parts.
- Go to page 3 and tell the children that you are going to dissect a flower and describe each part and its function. (See page 4 for a simple description of these functions.)
- Remove the stem and explain its function. Highlight the appropriate words on the board.
- Repeat the activity for the sepals and petals.
- Repeat the activity for the stamen, separating the anther and filament. Touch the anther and show how the pollen has rubbed off on your finger tip. Show the children how to collect a sample of pollen from the anther using a piece of sticky tape.
- Repeat the activity for the pistil, separating the stigma, style and ovary. Make a careful lengthways cut down the ovary to reveal the ovules (eggs), which should be visible with a magnifying glass.

Independent work

- Tell the children to dissect their flowers in a similar manner. They should stick each part (including a sample of pollen) onto their mounting paper, and label each part accurately using the terms on page 3.
- Less confident learners could identify and name each part orally and then in writing. Reinforce understanding of the different functions of each part.
- Extend more confident learners by asking them to think up ways of remembering the names of the different parts, such as through rhymes or mnemonics.

Plenary

- Invite the children to display their mounted flower parts.
- Using page 5, ask the children to think of ways of remembering the names and functions of the parts of a flower, such as through rhymes and mnemonics. For example, *stamen* contains the word 'men', and *stigma* contains the word 'ma' (as in *mother*), or *sepals keep flower buds safe*.
- Without reference to their work, use the 'Parts of a flower' labelling activity on page 6 to test the children's recall of the names and functions of the parts of a flower.

Whiteboard tools

Use a Pen from the Pen tray to write on the page.



Pen tray



Select tool