



CAMBRIDGE
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CAMBRIDGE Primary Science

Workbook 5

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How to use this book

This Workbook provides questions for you to practise what you have learned in class. There is a unit to match each unit in your Learner's Book. Each topic is divided into three parts:

Focus: these questions help you to master the basics.

Focus

- 1 Match each word about how seeds grow with its description.
Draw a line from the word to its meaning.

Word	Description
Germination	The first part that grows
Water	Grows upwards
First root	When a seed starts to grow
First shoot	Makes the seed swell

Practice: these questions help you to become more confident in using what you have learned.

Practice

- 3 Identify and colour in the different parts of the flower.

Use these colours:

- green – sepals
- blue – petals
- orange – anther
- black – filament
- yellow – stigma
- brown – ovary

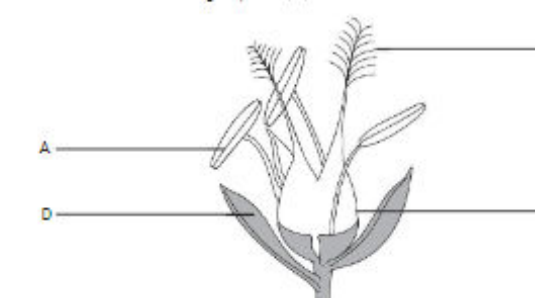


Challenge: these questions will make you think very hard.

Challenge

Look at the drawing of a flower.

- 5 Write labels on the drawing for parts A, B, C and D.



1

Life cycles of flowering plants

> 1.1 Flowering and non-flowering plants

Focus

- 1 Look at the pictures of plants. Which plants are flowering plants and which plants are non-flowering plants? Write 'flowering' or 'non-flowering' in the space below each picture.



A _____



B _____



C _____



D _____



E _____



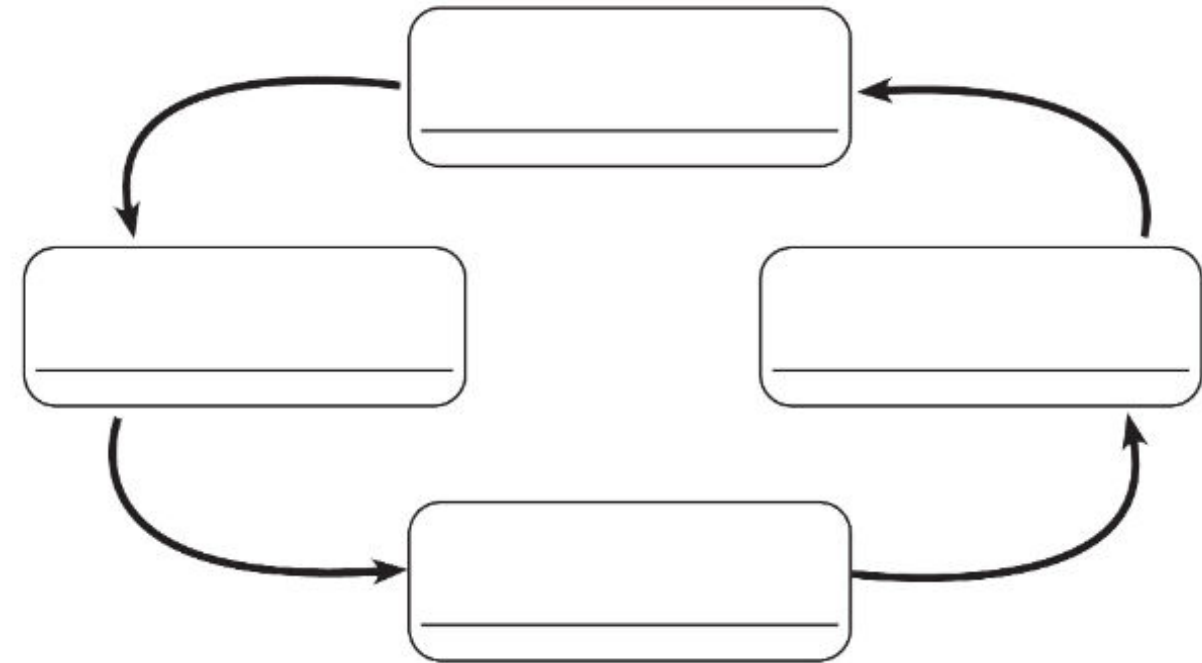
F _____

1.1 Flowering and non-flowering plants

- 2 The diagram shows the life cycle of a flowering plant.

Use the words in the box to help you label the diagram.

flower new plant seeds fruit

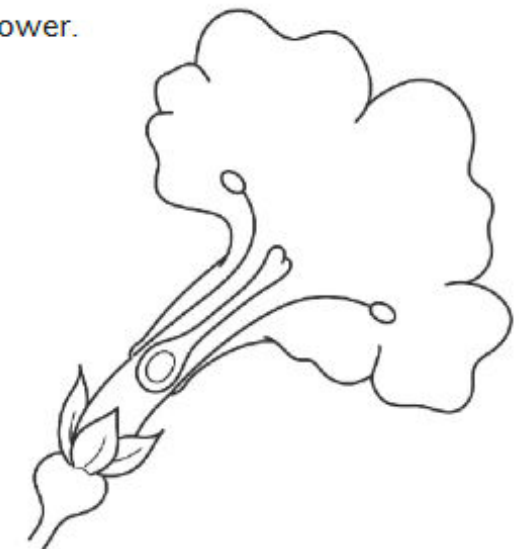


Practice

- 3 Identify and colour in the different parts of the flower.

Use these colours:

- green – sepals
- blue – petals
- orange – anther
- black – filament
- yellow – stigma
- brown – ovary



- 4 These sentences describe the different parts of a flower and their functions.

Use the words in the box to fill in the spaces below.

stigma ovary petals anthers stamens pollen carpel

The _____ often have bright colours to attract insects.

The male parts of the flower are the _____.

They make _____ in their tips, which are called _____.

The female part of the flower is the _____. It is made up

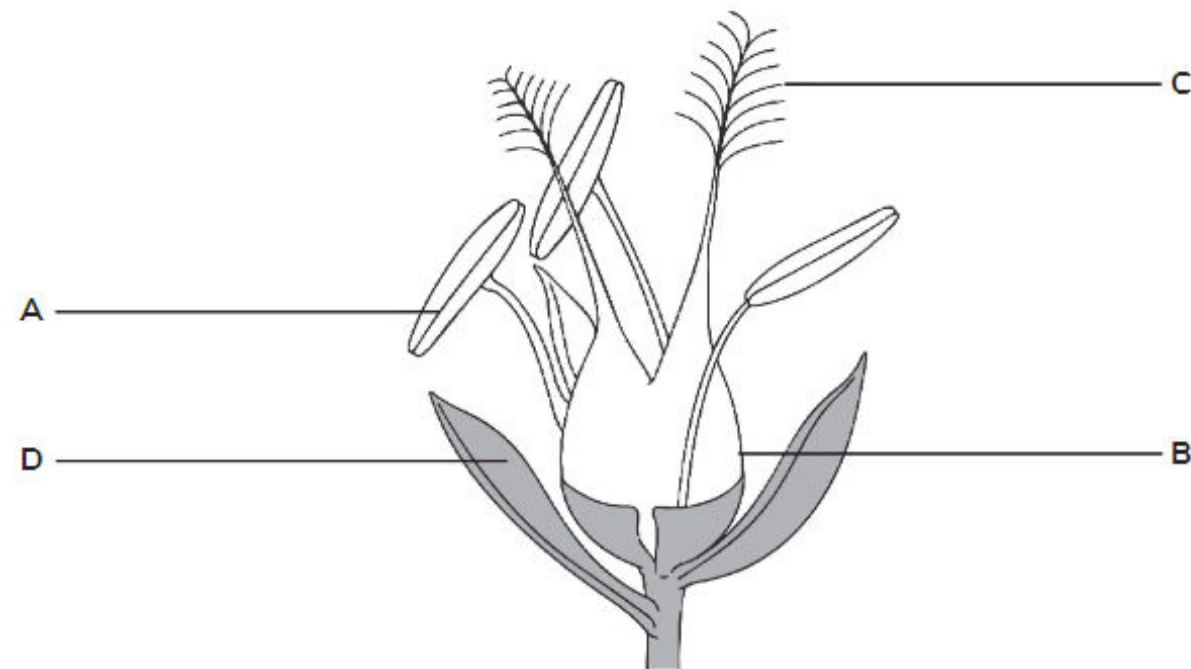
of the _____, which collects pollen, and the _____,

which contains the eggs.

Challenge

Look at the drawing of a flower.

- 5 Write labels on the drawing for parts A, B, C and D.



- 6 a Which part of the flower is missing?

- b Add the missing part to the drawing.

- 7 What colour would you expect the following parts to be? Explain your answers.

- a Part A

- b Part D



1.2 Pollination, fruits and seeds

Focus

1 Use the words in the box to complete the sentences about pollination and fruit and seed formation. You will use some words more than once.

wind insects seeds eggs pollen stigma
anthers nectar ovary fertilisation

- a The _____ of flowers make a yellow powder. This is called _____.
- b Pollination happens when pollen moves from the _____ to the _____ of a flower of the same type.
- c Some plants use _____ to blow the pollen far away.
- d _____ visit flowers to feed on _____. They get _____ on their bodies at the same time.
- e The pollen and the _____ join together. This happens inside the _____ during _____. This is how _____ form.
- f The _____ becomes the fruit.

Practice

Aliyah's class investigated a scientific question. These are their results.

Colour of flower	Number of insects that visited flower
Red	3
Yellow	12
White	10
Blue	6



- 2 a Suggest the question that Aliyah's class investigated.

 - b Identify the type of scientific enquiry they used in their investigation. Choose from the following types: fair testing, research, observing over time, identifying and classifying, looking for patterns.

- 3 Draw a bar chart of the results.



- 4 a Which colour flower did the most insects visit?

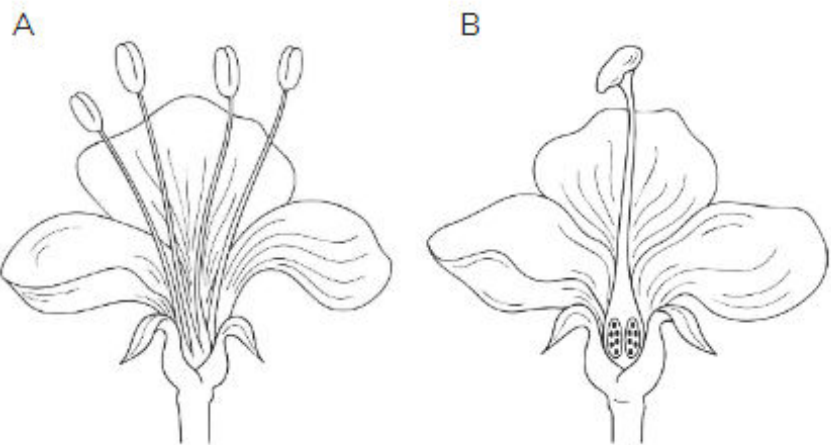
 - b Which colour flower did the fewest insects visit? Suggest a reason for your answer.

- 5 a What conclusion can you make from these results?

b What can you do to be sure your conclusion is correct?

Challenge

Some kinds of flowers have male parts or female parts only.
The flowers shown in the drawings only have male or female parts.



6 Which is the male flower and which is the female flower? Say how you know.

7 Describe the process of pollination in flowers like these.

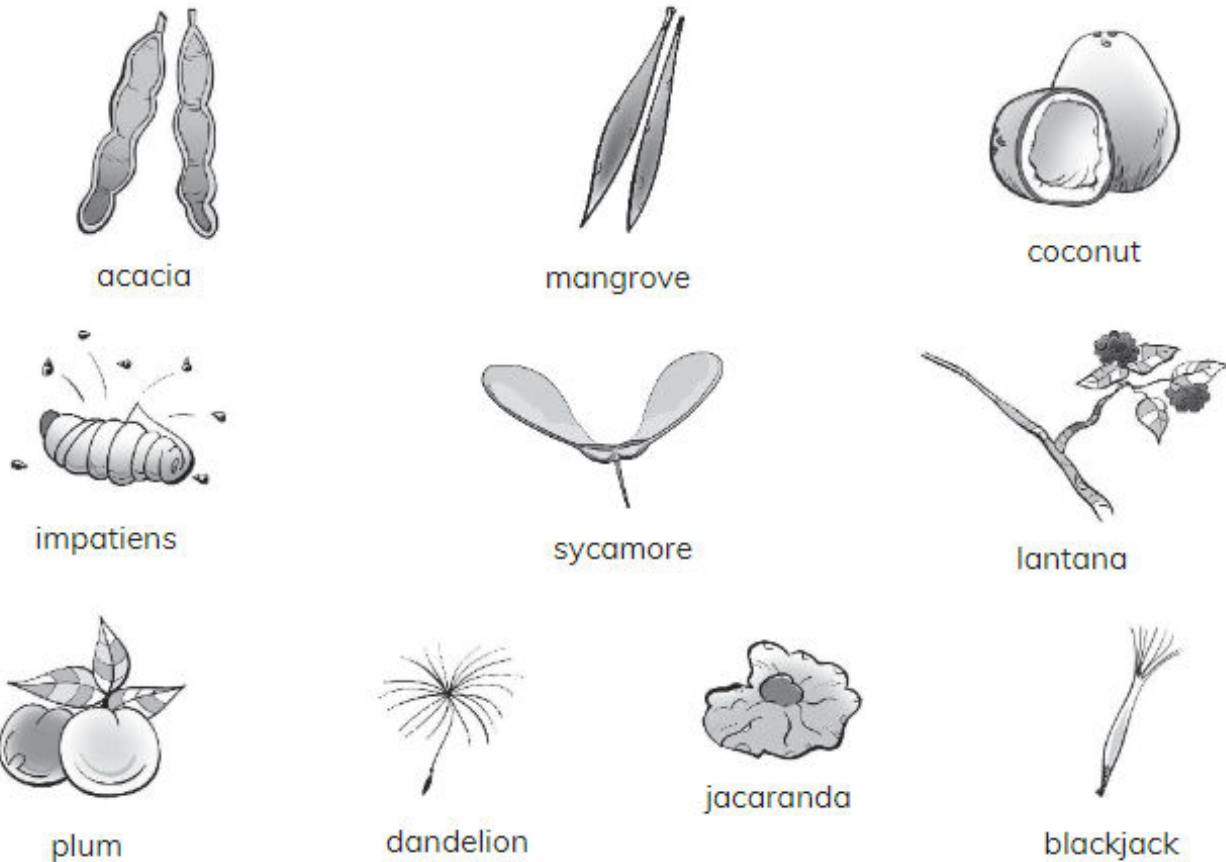
8 Draw arrows on the drawings to show how pollination happens.

> 1.3 How seeds are spread

Focus

1 What do we call the spreading of seeds away from the parent plant?

2 How are these seeds spread? Sort them into groups and write the names of the seeds in the table.



Eaten	Stick on	Fly away	Float	Explode

Practice

- 3 Match the way seeds are spread in the first column with the description of how the seed or fruit is adapted to the way it is spread in the second column.
Draw a line from the way the seed is spread to the description of the seed or fruit.




Way seed is spread	How seed or fruit is adapted to the way it is spread
By water	Seed has spines and hooks
By wind	Seed pods dry out and burst open
By animals	Seed has spongy covering that helps it float
By explosion	Seed is very light with thin papery wings

- 4 Describe another way in which plants are adapted to seed dispersal by animals.
Give an example.

- 5 Why must seeds be spread?

Challenge

Ahmed and Yaseen investigated seed dispersal. They collected three different seeds. They dropped each seed three times and measured how long it stayed in the air each time. These are their results.

Seed	Time in the air Reading 1 (seconds)	Time in the air Reading 2 (seconds)	Time in the air Reading 3 (seconds)	Average time in the air (seconds)
Seed 1  single sycamore	9	10	11	10
Seed 2  dandelion	20	22	24	22
Seed 3  helicopter	15	14	7	12

- 6 How were the seeds in the investigation dispersed?
Give a reason for your answer.
