SCIENCE

Lesson 6

Year 1

Topic: Habitats and living things

Analysing data about a local habitat

Lesson concepts

- Living things live in different places where their needs are met
- Science involves asking questions and describing changes
- People use science in their daily lives
- Questions can be responded to and posed
- Information can be sorted
- Observations can be compared with others
- Observations and ideas can be represented and communicated

Today students will:

► understand that a habitat can provide for the needs of living things.

Resources

Digital

Video — Create a picture column graph (0:31)

Sheets

Sheet 11 — Field study record: Healthy habitats (saved copy from previous lesson)

Sheet 12 — Symbols and graphing (cut out)

Sheet 13 — Picture column graph: Healthy habitat

Find and prepare

Photos taken of healthy habitats during field walk in previous lesson

Ruler

Glue

Key terms

data

For definitions and explanations of terms, please see the Glossary.

Learning alerts

Be aware of students thinking that plants are part of a habitat rather than living things in a habitat.

Suggested next steps for learning

Explain that plants are living things that exist within a habitat, as well as helping to create the habitat.

Lesson

Review observations

1. Display the photographs of healthy habitats taken during the field walk in the previous lesson.

Focus questions

Q. *What were some of the habitats we observed in the previous lesson?*

A. For example: a log, a cabbage, a bush

Q. *Why were these habitats healthy?*

A. For example: They provided for the needs of living things.

Q. *What living things did we see in these habitats?*

A. For example: plants, insects, lizards

Remind students that they were using their science knowledge when observing and learning how to care for habitats.

Represent data

2. Ask students to review page 2 of **Sheet 11 —** Field study record: Healthy habitats and their observations made in the previous lesson.

Say to students

"Tell me about the different types of living things you observed in the habitat."

a. Display the pictures cut from **Sheet 12 —** Symbols and graphing.

Say to students

"Select the pictures that show living things observed in the habitat. (**Note:** Students may also draw pictures to represent some living things observed but not represented in the pictures.)"

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b. Explain to students that they will now make a picture column graph to represent the data, or information, collected about the habitat.

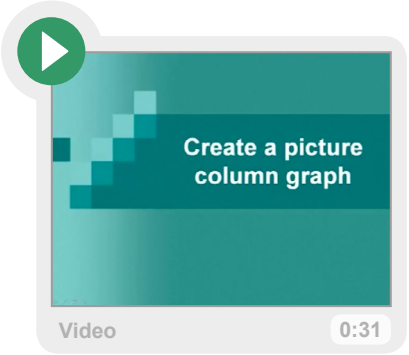
c. Ask students to sort the pictures into groups in order to make the graph (for example: animals and plants).

Say to students

"Now we'll watch a video that show how to create a picture column graph."

3. Watch the **Video — Create a picture column graph**.

   This video demonstrates how to make a picture column graph out of the pictures you have sorted, using animals and plants as the two categories. It includes instructions for labelling the categories on the horizontal axis and giving the graph a title.



4. Review with students the steps they will take to make a picture column graph:
   - Rule a line at the bottom of the page (horizontal axis).
   - Sort pictures and glue them into columns.
   - Label the categories along the bottom of the page (horizontal axis).
   - Give the graph a title.

   a. Give students **Sheet 13 —** Picture column graph: Healthy habitat and guide them to follow the instructions to create a picture column graph.

   b. Invite students to explain information shown in their graph.

Focus questions

Q. *How many plants were in the habitat you observed?*

A. Personal response required.

Q. *How many animals were in the habitat you observed?*

A. Personal response required.

Q. *Were there more plants or animals in the habitat you observed?*

A. Personal response required.

5. Ask students to refer to the 'Plant and animal parts' and 'Other' sections on **Sheet 11** (page 2).

Focus questions

Q. *Would the plant and animal parts you observed help the living things? Why?*

A. For example: Sticks and feathers could be used to build nests; seeds could be eaten.

Q. *Would the other things you observed help or harm the living things? Why?*

A. For example: Rubbish would pollute the area or contain items that may harm animals, such as the plastic ring from a milk bottle top getting caught on an animal or bird.

Q. *What could we say about the habitat we studied?*

A. For example: It is clean and healthy, and provides for the needs of living things.

Q. *What things show us that a habitat is healthy?*

A. For example: lots of animals, bushy plants, no rubbish

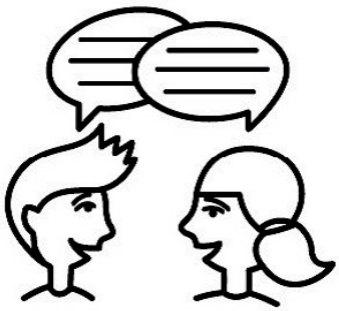
Analyse data

6. Ask students to look at page 3 of **Sheet 11**. Read the title 'Our conclusion' with students.

Focus question

Q. *Why do you think the habitat is healthy?*

A. For example: There are sticks for birds to build their nests; there is food for the birds to eat; there isn't any rubbish.



Instruct students to complete the sentence: 'I think this is a healthy habitat because …' by writing a reason related to the needs of living things, for example: *there is shelter for the lizards, and food and light.*

Use knowledge about healthy habitats

Say to students

People's science knowledge about what makes a habitat healthy helps them make decisions in their everyday lives, for example: choosing which vegetables to plant in a particular location and how to care for them, or knowing how to make the environment safe for animals such as birds and lizards.

People, such as farmers and ecologists, use science knowledge to identify and care for healthy habitats.

7. Invite students to ask questions about changes that could occur in the habitat they observe, for example: What could happen if the water dried up?

Focus question

Q. *What knowledge do you need in order to care for environments and living things?*

A. I need to know about healthy environments and the needs of living things.