

MATHS





Lesson 23

Prep

Topic: Data representation and interpretation

Interpreting data displays

Lesson concepts

-  **Data collection** — Questions
-  **Data representation** — Concrete representations
-  **Data representation** — Drawings
-  **Data interpretation** — Descriptions

Today students will:

- ▶ interpret simple data displays.

Resources

Find and prepare

Examples of data displays (for example: in newspapers or information texts)

Key terms

represent

For definitions and explanations of terms, please see the [Glossary](#).

Lesson

Introduce the lesson

Note

It is important to highlight and develop the following vocabulary throughout this lesson.

locate, describe, predict, questions, answers,
yes, no, information, represent, display

Interpret a data display

- Have students show the information they collected by asking a question about porridge (or cereal) in prior lesson.
- Explain that another word we can use for information collected this way is 'data'.

Focus questions

We can gather 'data' or information by asking questions and we can share that information in a display.

When you ticked in the 'yes' or 'no' columns, you created a display to show how people answered your question.

Q: *What did the data on your display tell you?*

Q: *How many people liked hot porridge (or cereal)? How do you know?*

A: For example: Seven people liked their porridge hot. There are seven ticks in the 'Yes' column.

Q: *How does [persons name] like his/her porridge (or cereal)? Can you tell that by looking at the display?*

A: For example: I don't know. I can't tell from this display.

Q: *Which was the most popular way to have breakfast? What information did you use to work that out?*

A: For example: Hot was the most popular way to eat porridge. There are seven ticks in the 'Yes' column.

Q: *If you were to set up a cafe, which way would you choose to serve porridge (or cereal)? Why?*

Explore real life contexts where data is displayed and interpreted

- Explain to students that they are going to look at some real-life situations where data displays are used. For example:

Say to students

‘ Have you ever seen other types of data displays?

We might find data displays in the newspaper, in information books or on a score sheet for a game.

In this lesson, we will see what data displays we can find. ’

- Help students to complete at least one of the following activities:
 - do an internet exploration, visiting sites such as the Bureau of Meteorology
 - search newspapers and look for weather charts, television guides and other data displays on topics of interest to students
 - repeat the following focus questions for a few different styles of data displays.

Focus questions

Q: *What does this display tell you about? How do you know?*

Q: *Who might use this information? Why do you think that?*

Q: *What did you learn by looking at this display?*

Q: *Have you seen something similar to this before? Where?*

Plan and interpret simple data displays requiring a ‘yes’ or ‘no’ response

With students:

- discuss other questions or situations that could have ‘yes’ or ‘no’ responses
- choose an area of interest to design a data investigation, for example:
 - Does your house have a red roof?
 - Do you own a pet?
 - Have you flown on a plane?
 - Do you like broccoli?
- design a way to record the data from the investigation
- complete the investigation by asking questions
- discuss the information the investigation provided.