

Data: Tables, Bar Charts & Questions

Collect, represent and interpret simple data while asking questions the data can actually answer.

LEARN • PRACTISE • CREATE • REFLECT

Original BrightPencil Kids resource - adult-led where appropriate

A4 edition • 12 purposeful pages • review copy

Print. Learn. Grow.

Grown-up guide

Learning objective

Collect, represent and interpret simple data while asking questions the data can actually answer.

Use this pack well

- Model the first example aloud, then let the learner try.
- Ask “How do you know?” more often than “Are you finished?”.
- Use real objects, talk, movement or observation when the activity suggests it.
- Stop or shorten the session if attention or enjoyment drops.
- Open-ended pages can have many successful answers.

Quality note

This resource was written originally for BrightPencil Kids. Curriculum sources informed scope and progression only; no third-party worksheet or story text is reproduced.

Learn the idea

1 Data displays should match the recorded values.

2 Scale and labels affect how a graph is read.

3 A graph can support claims about the data but not unrelated conclusions.

Talk about it

Explain one idea in your own words. Give an example from real life, a drawing or an object if that helps.

Read values from a labelled bar chart.

Choose a suitable scale for data up to 40.

Write two questions answered by a table.

Spot a misleading graph with a missing scale or unequal intervals.

Collect a tiny non-personal dataset and display it.

Try it beyond the page

Real-world / hands-on connection

Record one week of weather symbols, reading minutes or plant measurements and choose an appropriate display.

Before you finish

What did you notice?

What evidence, object or example helped you?

What would you change if you tried again?

Create something

Your project

Design a bar chart plus three evidence-based statements and one question the chart cannot answer.

Use this space for planning, drawing, mapping, designing or notes.

CHALLENGE

Think deeper

1. Why must intervals be consistent?

2. Can a graph prove why something happened?

3. What makes a title useful?

Quick review

1. In one sentence, explain the big idea of “Data: Tables, Bar Charts & Questions”.

2. Draw or write one example that shows you understand.

3. Choose one activity from this pack and explain the strategy you used.

4. Write one question you still have.

Answer & discussion notes

Use these as guidance, not scripts. Open questions can have different successful responses when the reasoning is sensible and evidence-based.

1. Suggested response

For accurate comparison.

2. Suggested response

Not by itself.

3. Suggested response

It states what the data represent.

Review before publication

Check age fit, factual accuracy, clarity, accessibility, rights provenance and whether the activity works in practice. This file remains a review copy until those checks are signed off.

FINISH

My learning reflection

I finished this BrightPencil learning pack.

One thing I understand better now:

A strategy that helped me:

Something I created or noticed:

My next small question or goal:

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