

GRADE 4 LEARNING PACK

The Lost Decimal

Use narrative evidence to understand decimal place value, data checking and misleading displays.

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

Use narrative evidence to understand decimal place value, data checking and misleading displays.

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.

Read the story

PART 1

The eco-club recorded water used by a model system during five trials. One entry read 4.8 litres, but when Mei copied it onto a poster she wrote 48 litres.

PART 2

The giant number made the final graph stretch far above every other bar. At first the group wondered whether something unusual had happened in that trial.

PART 3

They returned to the original table before changing the graph. There was no unusual trial; the decimal point had been lost during copying.

PART 4

Mei corrected the value and added a data-check step to the poster process: compare every copied number with the source before publishing.

PART 5

The class kept a small screenshot of the incorrect graph in their project notes because it showed how one transcription error can change the story a graph appears to tell.

Read section 1: The eco-club recorded water used by a model system during five trials. One entry read 4.8 litres, but when Mei copied it onto a poster she wrote 48 litres.

Read section 2: The giant number made the final graph stretch far above every other bar. At first the group wondered whether something unusual had happened in that trial.

Read section 3: They returned to the original table before changing the graph. There was no unusual trial; the decimal point had been lost during copying.

Read section 4: Mei corrected the value and added a data-check step to the poster process: compare every copied number with the source before publishing.

Read section 5: The class kept a small screenshot of the incorrect graph in their project notes because it showed how one transcription error can change the story a graph appears to tell.

Try it beyond the page

Real-world / hands-on connection

Retell the story to a trusted adult in under one minute, then name the moment that changed the direction of the story.

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

Create a six-frame evidence storyboard showing setup, problem, evidence, turning point, decision and learning idea.

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

CHALLENGE

Think deeper

1. What caused the unusual graph?

2. Why did the group check the source table first?

3. What quality-control step did Mei add?

Quick review

1. In one sentence, explain the big idea of “The Lost Decimal”.

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

Use details stated or strongly supported by the story.

2. Suggested response

Equivalent evidence-based wording is acceptable.

3. Suggested response

Open responses should explain reasoning using story evidence.

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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