

GRADE 4 LEARNING PACK

Place Value, Large Numbers & Estimation

Represent, compare and estimate multi-digit whole numbers using place value and benchmark reasoning.

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

Represent, compare and estimate multi-digit whole numbers using place value and benchmark reasoning.

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 A digit's value depends on its position in the base-ten system.

2 Numbers can be decomposed and recomposed in equivalent ways.

3 Estimation uses benchmarks and rounding to judge approximate size and reasonableness.

Talk about it

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

Write 64,305 in expanded form.

Compare 58,920 and 59,082 using place value.

Round 7,648 to the nearest hundred and explain the benchmark decision.

Estimate $3,982 + 2,117$ before calculating exactly.

Give two different decompositions of 4,250.

Try it beyond the page

Real-world / hands-on connection

Find three large numbers in a newspaper, timetable, sports table or public sign and explain what each number represents.

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 place-value puzzle where clues lead to one five-digit number.

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

CHALLENGE

Think deeper

1. What is the value of 6 in 64,305?

2. Why estimate before exact calculation?

3. Can 4,250 be written as 42 hundreds and 5 tens?

Quick review

1. In one sentence, explain the big idea of “Place Value, Large Numbers & Estimation”.

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

60,000.

2. Suggested response

To anticipate scale and check reasonableness.

3. Suggested response

Yes.

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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