

GRADE 4 LEARNING PACK

Multi-Digit Addition & Subtraction

Use efficient written and mental strategies for multi-digit addition/subtraction and check answers for reasonableness.

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 efficient written and mental strategies for multi-digit addition/subtraction and check answers for reasonableness.

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 Place-value alignment is essential in written methods.

2 Compensation and decomposition can make some calculations easier.

3 Inverse operations and estimation help check results.

Talk about it

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

Calculate $4,786 + 2,957$ using a written method.

Solve $8,002 - 3,675$ and explain any regrouping.

Use compensation for $2,998 + 1,506$.

Estimate before solving $6,412 - 2,879$.

Check one subtraction using addition.

Try it beyond the page

Real-world / hands-on connection

Use a receipt or fictional budget to total several amounts and estimate the answer before exact work.

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 “find the error” addition/subtraction puzzle with a worked solution containing one deliberate mistake.

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

CHALLENGE

Think deeper

1. Why align place values?

2. What is compensation?

3. How can addition check subtraction?

Quick review

1. In one sentence, explain the big idea of “Multi-Digit Addition & Subtraction”.

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

So like units are combined or subtracted.

2. Suggested response

Adjusting numbers to make calculation easier, then compensating for the change.

3. Suggested response

Difference + subtrahend should equal the starting amount.

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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