

GRADE 4 LEARNING PACK

Multiplication Strategies & Partial Products

Use place-value reasoning, known facts and partial products to multiply larger numbers accurately.

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 place-value reasoning, known facts and partial products to multiply larger numbers accurately.

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 Multiplication can be decomposed using place value and the distributive property.

2 Known facts support larger calculations.

3 Area models and partial products make the structure visible.

Talk about it

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

Solve 7×36 by splitting 36 into 30 and 6.

Represent 24×13 with an area/box model.

Explain why 8×49 can be thought of as $8 \times 50 - 8$.

Compare two correct strategies for 125×4 .

Estimate 38×21 before exact calculation.

Try it beyond the page

Real-world / hands-on connection

Model a real array or seating arrangement and calculate the total using two different strategies.

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 multiplication strategy poster showing an area model and partial products for one example.

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

CHALLENGE

Think deeper

1. What property allows $7 \times 36 = 7 \times 30 + 7 \times 6$?

2. Why estimate a product?

3. Is there only one correct multiplication strategy?

Quick review

1. In one sentence, explain the big idea of “Multiplication Strategies & Partial Products”.

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

The distributive property.

2. Suggested response

To judge approximate size and catch unreasonable answers.

3. Suggested response

No.

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:

Print. Learn. Grow.