

Unit rates and best buys

Pearson Edexcel GCSE Mathematics 1MA1

L015 • Foundation and Higher

60 minute lesson | learner resources

The goal and the evidence

Connect & Check → Share → Present → Apply → Recall & Review

Compare prices using a common unit. Interpret the best buy in terms of cost, quantity needed and waste.

Explain, apply and check independently.

Starting-point diagnostic

R1–R3 • Attempt without notes

Convert 750 g to kg.

Share £3 equally across 6 items.

Find 20% of £4.

Worked example and your turn

D1 • Explain each step

Model: £3 for 6 apples gives $3 \div 6 = \text{£}0.50$ each. Now find the unit price of 8 apples for £4.80.

Try the paired problem; check independently.

Worked example and your turn

D2 • Explain each step

Model: 500 g for £2 gives £4/kg. Now find £/kg for 750 g costing £3.60.

Try the paired problem; check independently.

Worked example and your turn

D3 • Explain each step

Model: 250 g for £1.20 is £4.80/kg; 1 kg for £4.50 is cheaper per kg. Compare 500 g for £2 and 1 kg for £4.20.

Try the paired problem; check independently.

Worked example and your turn

D4 • Explain each step

Model: 3 items at 50p each cost £1.50. A pack of 4 costs £1.80. If you need exactly 3, which costs less?

Try the paired problem; check independently.

A method you can explain

Name what changes at each step.

Check against the original question.

Diagnostic pause

Choose and explain before moving on.

A: 4 pens for £2; B: 10 for £6. Lower unit price? A A,
B B, C equal.

Use your explanation to decide the next step.

Careful variation

A1 • Show your reasoning

Find £/kg: 250 g for £1.50; 500 g for £3; 750 g for £4.50. What stays constant?

Explain your decisions and check the result.

Independent application

A2 • Show your reasoning

Compare 400 g for £1.80 with 600 g for £2.40. State each unit price and the better value.

Explain your decisions and check the result.

Use the method in context

A3 • Show your reasoning

You need at least 12 identical notebooks. Packs: 5 for £3 or 8 for £5. Buy only one pack size. Find the cheaper purchase.

Explain your decisions and check the result.

Intentional practice feedback

Read after attempting A3

Three packs of 5 cost £9; two packs of 8 cost £10.
Choose packs of 5.

Correct one step and explain the change.

A claim to test

C1 • Show your reasoning

A larger pack always has the lower unit price. Give a numerical counterexample.

Explain your decisions and check the result.

Deepen the reasoning

C2 • Show your reasoning

A costs £3.60 for 600 g. B costs £5 for 1 kg with 20% off. Compare unit prices and explain the discount base.

Explain your decisions and check the result.

Retrieval without notes

Q1–Q6 • Numeric answers; units as requested

Q1–Q3

Pence per item: 6 for £3

£/kg: 500 g for £2

Kilograms in 750 g

Q4–Q6

Cost in £ of 3 packs at
£2.40

20% off £5: final price in
£

First share of 48 in ratio
1:3

Independent exit evidence

P1 • Without notes • Teacher review

Find £/kg for 800 g costing £3.20. Show a method.
[2]

Show working and check your answer.

Independent exit evidence

P2 • Without notes • Teacher review

Compare 6 items for £3.60 and 10 for £5. Give both unit prices and identify the better value. [2]

Show working and check your answer.

Feedback and next steps

P3 • Completion is not mastery

Explain one error you have corrected.

Set a fresh question and a delayed check.

Before the next lesson

L016: Proportion problems and repair

Complete F1 tomorrow without notes.

Attempt F2 and bring one question.

Optional stretch

A 750 g pack costs £2.40 and a 1.2 kg pack costs £3.60. Which is better value per kg?

Show a method. Explain a check or counterexample.

Optional deep challenge

A 20% discount applies to the 750 g pack. Does the best buy change?

Show a method. Explain a check or counterexample.

L015 Recall & Review



Unit rates and best buys

Fresh evidence: prove the objective

Solve a new question without prompts. Explain one check, then correct one error in your working.

Objective: Compare prices using a common unit. Interpret the best buy in terms of cost, quantity needed and waste.

Write the next practice step before you leave. It must test the method again, not simply copy today's example.

Feedback language

Use the full phrases before the abbreviations.

What Went Well (WWW)

I selected a suitable representation or multiplier and kept the reference amount clear.

Point to the method, representation, reasoning or check that improved.

Even Better If (EBI)

I will state the whole/part, show each operation and check that the size of my answer is reasonable.

Set one precise next-step action and test it on a fresh question.

Extension route

Choose this route only after the core evidence is secure.

Stretch

A 750 g pack costs £2.40 and a 1.2 kg pack costs £3.60. Which is better value per kg?

Deep challenge

A 20% discount applies to the 750 g pack. Does the best buy change?

Explain your reasoning clearly enough that another learner could check it.