

Slide by slide delivery map

Pearson Edexcel GCSE Mathematics 1MA1 • L015

20 slides • 60 minutes • Teacher use only • Lesson resources

REACH FOR THE STAR | GCSE MATHEMATICS

01 Unit rates and best buys 1 min Recall

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

02 The goal and the evidence 1 min Recall

L013 ratio; L014 unitary method; decimal division and grams to kilograms.

03 Starting-point diagnostic 5 min Recall

If quantity is divided by price, read the resulting units aloud. If g and kg are mixed, convert first. Recheck 500 g for £2.20 as £4.40/kg. Separate lowest unit price from lowest total spend.

04 Worked example and your turn 3 min Discover

£0.60 per apple. $4.80 \div 8 = 0.60$; $8 \times 0.60 = 4.80$.

05 Worked example and your turn 3 min Discover

£4.80/kg. $3.60 \div 0.75 = 4.80$.

Delivery continued

06 Worked example and your turn 3 min Discover

500 g pack is cheaper per kg: £4 versus £4.20. Compare equal masses, not ticket prices.

07 Worked example and your turn 3 min Discover

Three loose items cost less: £1.50. The pack has a lower unit price but a higher bill.

08 A method you can explain 2 min Discover

Choose a common unit and label it. Divide each cost by its quantity, compare unrounded results, then consider the amount actually needed. Multiply back to check.

09 Diagnostic pause 3 min Apply

A: 4 pens for £2; B: 10 for £6. Lower unit price? A A, B B, C equal. Answer A: 50p compared with 60p.

10 Careful variation 4 min Apply

All £6/kg. Quantity and cost scale together.

Delivery continued

11 Independent application 6 min Apply

£4.50/kg and £4/kg; 600 g is better value. Both prices use one kilogram.

12 Use the method in context 4 min Apply

Three packs of 5 cost £9; two packs of 8 cost £10. Choose packs of 5. Round pack counts up; leftovers are allowed.

13 Intentional practice feedback 2 min Apply

Round pack counts up; leftovers are allowed. Calculator check after A2: enter $1.80 \div 0.4$ and $2.40 \div 0.6$. Expect 4.5 and 4. Keep unrounded values when comparing; money answers use pounds and pence.

14 A claim to test 4 min Challenge

Example: 500 g for £2 is £4/kg; 1 kg for £5 is £5/kg. One valid counterexample disproves always.

15 Deepen the reasoning 4 min Challenge

A £6/kg; B £4/kg. B is cheaper per kg. 20% is applied to the £5 price, not to the mass.

Delivery continued

16 Retrieval without notes 4 min Prove

Answers: 50, 4, $\frac{3}{4}$, 7.2, 4, 12. Completion is not mastery.

17 Independent exit evidence 2 min Prove

$3.20 \div 0.8$ M1; £4/kg A1. Accept scaling 800 g to 1000 g.

18 Independent exit evidence 3 min Prove

60p and 50p per item B1 both; 10-item pack B1. Compare the same units.

19 Feedback and next steps 2 min Prove

If quantity is divided by price, read the resulting units aloud. If g and kg are mixed, convert first. Recheck 500 g for £2.20 as £4.40/kg. Separate lowest unit price from lowest total spend.

20 Before the next lesson 1 min Recall

A ratio shares a total into equal parts. Proportion scales corresponding amounts by the same factor. Decide whether the given number is a total, one share or a difference before calculating.

Recall & Review: feedback and extension integration

Source-integrated WWW/EBI and extension page

Lesson L015: Unit rates and best buys

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

Timing for a 60-minute lesson

0-7 Connect & Check; 7-14 Share; 14-25 Present/model; 25-44 Apply route choice/practice; 44-52 independent exam-style check; 52-60 Recall & Review, WWW/EBI and next step.

Recall & Review evidence

At the end of the lesson, solve a fresh question without prompts, explain a check, correct one error and record the next practice step.

What Went Well (WWW)

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

Even Better If (EBI)

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

Integrated stretch and deep challenge

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?

Teacher use

Use the WWW/EBI prompts to write mathematics-specific feedback linked to the objective. Do not accept generic praise; feedback should identify the method, representation, reasoning or checking step that improved, then set a fresh next-step question.

Assessment evidence to inspect: Check the formative mini-test and independent workbook response against the objective. Use the teacher answers or mark guidance; group errors for reteaching. Non-calculator core; optional calculator check.