

Max's Maths Challenge: Word Problem Mastery

Learning objective: To solve multi-step word problems involving the four operations, money, and measurement, following the Year 6 curriculum.

Read each flashcard carefully. Use the RUCSAC method (Read, Understand, Choose, Solve, Answer, Check) to help Max solve these tricky puzzles.

Max buys 3 notebooks at £2.45 each and a pen for £1.20. How much change does he get from a £10 note?

£1.45. ($3 \times £2.45 = £7.35$; $£7.35 + £1.20 = £8.55$; $£10.00 - £8.55 = £1.45$)

A school has 480 pupils. If $\frac{5}{8}$ of them walk to school, how many pupils do not walk?

180 pupils. ($480 \div 8 = 60$; $60 \times 5 = 300$ walk; $480 - 300 = 180$)

Pip the caterpillar reads 15 pages of a book every day. How many full weeks will it take to finish a 250-page book?

3 weeks. ($250 \div 15 = 16$ remainder 10; $16 \text{ days} \div 7 = 2$ weeks and 2 days, so 3 weeks to finish)

Zara paints 12 square canvases, each measuring 25cm by 25cm. What is the total area painted in square metres?

0.75m². ($25 \times 25 = 625\text{cm}^2$; $625 \times 12 = 7,500\text{cm}^2$; $7,500 \div 10,000 = 0.75\text{m}^2$)

Kit the fox has 4.5kg of puzzle pieces. He puts them into bags of 250g. How many bags can he fill?

18 bags. ($4.5\text{kg} = 4500\text{g}$; $4500 \div 250 = 18$)

What is the inverse operation to check if $156 \div 12 = 13$ is correct?

Multiplication ($13 \times 12 = 156$).

Ellie the elephant needs to travel 420 miles. If she travels at an average speed of 60 mph, how many hours will the journey take?

7 hours. ($420 \div 60 = 7$)

Bea the bee collects nectar from 4 flowers every minute. How many flowers will she visit in 2 hours and 15 minutes?

540 flowers. ($135 \text{ minutes} \times 4 = 540$)

If a shop offers a 'Buy One Get One Half Price' deal on items costing £8.00, what is the cost of two items?

£12.00. ($£8.00 + £4.00 = £12.00$)

Nova the owl sees 12 stars in a cluster. If there are 34 clusters in the sky, how many stars are there in total?

408 stars. ($12 \times 34 = 408$)