

Mastering Division with Max the Monkey

Learning objective: To develop fluency in dividing 4-digit numbers by 1-digit numbers and understanding remainders and factors in a real-world context.

Use these flashcards to test your knowledge of division. Max the Monkey has prepared these challenges to help you become a division expert!

What is the Dividend in the calculation $1,250 \div 5$?

1,250. The dividend is the total amount being divided.

Define the term 'Quotient'.

The quotient is the result obtained after dividing one number by another.

If Max has £1,440 to share equally among 6 friends, how much does each receive?

£240.

What is a 'Remainder'?

The amount left over after performing a division calculation that does not divide exactly.

Calculate $2,845 \div 4$. Include the remainder.

711 remainder 1.

Is 7 a factor of 84? Justify your answer.

Yes, because $84 \div 7 = 12$ with no remainder.

Explain why 0 is not a possible divisor in a division problem.

Dividing by zero is mathematically undefined because you cannot partition a quantity into zero groups.

Compare and contrast 'short division' and 'long division'.

Short division is a mental or written method for small divisors; long division is typically used for larger divisors to show the full process of repeated subtraction.

What might happen if you calculate $500 \div 8$ incorrectly?

You would end up with an inaccurate quotient and potentially an incorrect remainder, which would affect any further calculations or real-world budgets.

Justify why $1,200 \div 3$ is equivalent to $120 \div 0.3$.

Both expressions result in 400 because multiplying both the dividend and divisor by the same factor (10) maintains the same quotient.

If you divide a 4-digit number by 1, what is the quotient?

The quotient is equal to the original 4-digit number (the dividend).

Max has £2,500. If he divides it by 5, then divides that result by 2, what is the final amount?

£250.