

Max's Magnificent Market Maths Challenge

Learning objective: To partition, compare, and order four-digit numbers within the context of money and place value.

Max the monkey is helping at the local fruit market. He has labelled all the produce with prices, but he has mixed up his place value charts! Your task is to act as the 'Market Auditor'. For each item, you must correctly partition the price, identify the value of the digits, and solve Max's tricky comparison puzzles to ensure the market accounts are balanced.

Word bank: Thousands · Hundreds · Tens · Ones · Partitioning · Value · Digit · Comparison

1. Max is selling a crate of prize-winning apples for £2,485. Partition this number into its thousands, hundreds, tens, and ones. Explain why the digit '4' in this price is worth more than the digit '4' in the price of a pear, which costs £1,042. (4 marks)

2. Compare these two prices using the symbols $<$, $>$ or $=$: £3,702 ____ £3,720. Justify your answer by explaining the value of the tens digit in both prices. (3 marks)

3. Max has a punnet of berries costing £1,009. Write this number in words and explain what happens to the value of the number if you swap the thousands digit with the tens digit. (3 marks)

4. A rare melon costs £4,650. What might happen to the total price if the digit in the hundreds column was increased by 3? Show your working. (2 marks)

5. Order these prices from the smallest to the largest: £5,432, £5,342, £5,423, £5,234. Explain your method for ordering these numbers quickly. (3 marks)

6. Max says: 'If I have £2,000 + £500 + £6, it is the same as £2,560.' Is Max correct? Justify your answer using your knowledge of place value placeholders. (2 marks)

Draw: Draw a 'Place Value Market Stall' where the items have prices written in expanded form (e.g., £3,000 + £200 + £50 + £1). Add a small picture of Max the monkey holding a calculator near the stall.



Extension challenge: Imagine you are designing a new fruit item for the market. Create a price for your item that is greater than £5,000 but less than £6,000, ensuring it has a zero in the hundreds column. Write a short paragraph explaining how you would use place value to teach a younger student how to read your price.