

Max's Mathematical Market Challenge: Grade 3 Subtraction Assessment

Learning objective: To demonstrate proficiency in subtracting numbers with up to four digits, including money and word-based problems involving formal column methods.

Read each question carefully. Show your working out clearly, as marks are awarded for your method even if the final answer is incorrect. You may use the empty space on the page for your calculations.

Max the monkey is helping his friends at the community market. He needs to calculate the change from various transactions and ensure that the inventory counts are accurate. Use your mathematical skills to help Max solve these problems.

Word bank: difference · column subtraction · regrouping · exchange · remainder · total · calculate · value

1. Max has 4,528 wooden tokens. He gives 1,315 tokens to the stall holders. How many tokens does he have left? Show your column subtraction. (2 marks)

2. Calculate the difference between £87.50 and £43.25. (2 marks)

3. Solve: $6,000 - 2,437$. Explain why you must exchange across the columns to solve this. (3 marks)

4. Ellie the elephant has a collection of 3,250 historical stamps. She gives 1,462 to her friends. How many stamps does Ellie have remaining? (2 marks)

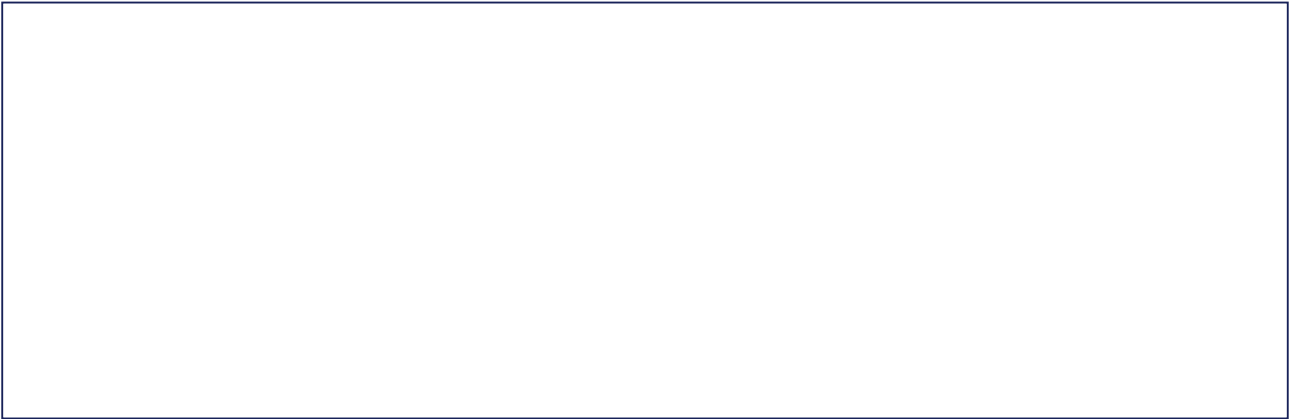
5. A crate of fruit costs £15.80. If Max pays with a £20 note, how much change should he receive? Justify your calculation. (3 marks)

6. Compare and contrast subtracting 400 from 1,250 versus subtracting 400 from 1,259. How does the 'ones' column affect your final answer? (3 marks)

7. Max says: 'If I subtract a 3-digit number from a 4-digit number, the answer will always be a 4-digit number.' Is he correct? Justify your answer with an example. (3 marks)

8. Max is organising the market stalls. He started with 5,000 items. During the day, 1,245 items were sold in the morning and 2,168 were sold in the afternoon. Write a step-by-step account of how you would calculate how many items are left, and provide the final total. (5 marks for clear working and logical explanation). (5 marks)

Draw: Draw a visual representation of Max the monkey using base-ten blocks or a number line to show the calculation $42 - 17$.



Extension challenge: Total: /25. Imagine you are running a store. Create your own multi-step subtraction word problem involving at least three items with different prices. Explain why estimating your answer first is a useful strategy for checking accuracy.