Max’s Magnificent Maths Challenge: Subtraction Station

Learning objective: To solve multi-step subtraction problems involving large numbers and decimal values in the context of money.

Join Max the monkey in his jungle laboratory! Help him solve these subtraction puzzles. Work through the questions carefully, paying close attention to place value and decimal points.

Answer Key: 1. C (£4.75), 2. False (The difference is 1,245), 3. £12.50, 4. B (2,845), 5. True, 6. 7,450, 7. A (15.55), 8. 892, 9. False (It is 4,111), 10. 1,675. Explanations for teachers: Encourage pupils to use formal column subtraction methods for questions 3, 6, 8, and 10 to ensure accuracy with regrouping/exchanging.

Word bank: Difference · Remainder · Decimal · Borrowing · Exchange · Total · Value

1. Max has £10.00. He buys a notebook for £5.25. How much change does he receive? A) £5.75 B) £4.25 C) £4.75* D) £5.25 (1 mark)

2. True or False: The difference between 5,678 and 4,433 is 1,245. (1 mark)

3. Calculate: £25.00 - £12.50 = ? (1 mark)

4. Max is counting his collection of 5,000 shiny pebbles. He gives away 2,155 to his friends. How many does he have left? A) 2,955 B) 2,845* C) 3,155 D) 2,855 (1 mark)

5. True or False: When subtracting decimals, you must always align the decimal points. (1 mark)

6. Subtract 2,550 from 10,000. (1 mark)

7. What is 45.00 - 29.45? A) 15.55* B) 16.55 C) 14.45 D) 24.45 (1 mark)

8. If a farmer has 1,500 apples and sells 608, how many are left? (1 mark)

9. True or False: 8,222 - 4,111 = 4,011. (1 mark)

10. Max has 5,000 bananas. He eats 1,250 and gives 2,075 away. How many are left? (1 mark)

Draw: Draw a picture of Max the monkey sitting in his treehouse, surrounded by stacks of items he is counting and subtracting to keep his jungle inventory organised.

Extension challenge: Greater Depth Challenges: 1) Explain why it is vital to keep your columns perfectly aligned when performing subtraction with decimals. 2) Compare the method of counting up (finding the difference) to the formal column subtraction method—which is more efficient when the numbers are very close together, and why? 3) Justify your answer: If you subtract a number from itself, the result is always zero. Does this hold true for all numbers, including negative ones? 4) What might happen if you forget to 'exchange' when the top digit is smaller than the bottom digit in column subtraction? 5) Create your own multi-step word problem involving a budget of £50.00 and at least three different items. 6) If Max has 10,000 items and gives away 1/4 of them, how many remain? Show your working.