Max’s Mental Maths Strategy Journal

Learning objective: To apply mental arithmetic strategies to solve multi-step calculations including addition, subtraction, multiplication, and division.

Help Max the monkey solve his jungle puzzles! Choose three different maths challenges you have faced today. For each challenge, write down the calculation, explain the mental strategy you used (such as partitioning, rounding, or adjusting), and calculate the final total. Use the space provided to show your working out clearly.

Word bank: partitioning · rounding · inverse operation · estimate · calculation · factor · multiple · difference · product · quotient

1. Challenge 1: Describe a calculation involving a large number addition or subtraction. Which mental strategy did you use to solve it? (2 marks)

2. Challenge 2: Max has £45.60 and spends £12.75 on supplies. Show how you would use rounding to estimate the remaining amount before finding the exact answer. (3 marks)

3. Challenge 3: Choose a multiplication problem involving a 2-digit number multiplied by a 2-digit number. Show how you partition the numbers to solve it mentally. (3 marks)

4. Challenge 4: Explain the inverse operation you would use to check if your answer for Challenge 3 is correct. (2 marks)

5. Challenge 5: Create your own word problem involving division and money. Write the problem and then solve it using a mental method. (3 marks)

Extension challenge: Challenge a partner! Write down three 'quick-fire' mental maths questions for a friend to solve. Include one involving decimals and one involving factors. See how many they can answer in under 60 seconds.