Max’s Logical Deduction Challenge

Learning objective: To structure an explanation of a verbal reasoning solution using clear, step-by-step logical steps.

Read the logic puzzle below. Use the writing frame to explain how you worked out the answer. Focus on using connectives to show the order of your thoughts. Max the monkey needs your help to prove his maths-puzzle-solving logic is correct!

Max has three wooden blocks labelled A, B, and C, and he knows that block A is heavier than block B, but lighter than block C.

Word bank: consequently · therefore · initially · furthermore · this implies that · deducing · on the other hand · subsequently · as a result

1. Step 1: Identify the facts. Start by listing the information we know for certain about the blocks. Begin with: 'Initially, we are given the following facts: ...' (2 marks)

2. Step 2: Analyse the relationships. Explain how the weight of the blocks compares to one another. Start with: 'By comparing the blocks, it is clear that...' (2 marks)

3. Step 3: Make a deduction. Based on your analysis, which block is the heaviest? Start with: 'Therefore, I can conclude that the heaviest block is... because...' (2 marks)

4. Step 4: Verify your answer. How do you know your answer is correct? Start with: 'This is verified because if we look at the original statement...' (2 marks)

5. Step 5: Final summary. Write a concluding sentence to solve the puzzle for Max. Start with: 'In conclusion, the final order of weight from lightest to heaviest is...' (2 marks)

Extension challenge: Imagine Max adds a fourth block, 'D', which is lighter than 'B'. Write a short paragraph explaining how this changes your final order using at least two new connectives.