Max’s Mathematical Maze: The BIDMAS Challenge

Learning objective: To understand and apply the order of operations (BIDMAS) to multi-step calculations.

Max the monkey has hidden the keys to his jungle treasure chest behind six locked doors. To open each door, you must use the BIDMAS rule (Brackets, Indices, Division, Multiplication, Addition, Subtraction) to calculate the correct answer. Write the steps you took to solve each puzzle in the space provided to help Max unlock the path.

Word bank: Brackets · Indices · Division · Multiplication · Addition · Subtraction · Order · Operations

1. Door 1: 5 + (12 - 4) x 2 = ? (2 marks)

2. Door 2: 20 - 3^2 + 5 = ? (2 marks)

3. Door 3: (15 + 5) ÷ 4 + 7 = ? (2 marks)

4. Door 4: 10 x 3 + 12 ÷ 2 = ? (2 marks)

5. Door 5: 50 - (2 x 6) + 4 = ? (2 marks)

6. Door 6: Max wants to buy 3 bananas at £1.20 each and 2 apples at £0.80 each. Write a single calculation using BIDMAS to find the total cost, then solve it. (3 marks)

Draw: Draw a picture of Max the monkey holding a sign that explains the BIDMAS acronym to his friends in the jungle.

Extension challenge: Create your own BIDMAS challenge for a friend. Write a calculation that includes brackets, an index (squared number), and at least two different operations. Ask your friend to solve it, then check their work to see if they followed the BIDMAS order correctly.