Max’s Magnificent Square Number Challenge

Learning objective: To identify, calculate, and apply knowledge of square numbers up to 12 x 12.

Join Max the monkey as he hunts for square numbers hidden in the jungle! Read each question carefully and select or write the correct answer. Remember: a square number is the result of multiplying a whole number by itself.

Answer Key: 1. C (16), 2. True, 3. 49, 4. B (144), 5. False (81 is 9x9), 6. 100, 7. A (25), 8. True, 9. 1, 10. 121. Max's tip: Always check if the number can be made by an equal-sided array!

Word bank: Product · Square · Multiply · Integer · Array · Dimension

1. Max finds 4 rows of 4 bananas. What is the square number of bananas he has? A) 8, B) 12, C) 16*, D) 20 (1 mark)

2. True or False: 36 is a square number because 6 x 6 = 36. (1 mark)

3. What is 7 squared (7^2)? (1 mark)

4. Which of these is the square of 12? A) 120, B) 144*, C) 140, D) 124 (1 mark)

5. True or False: 80 is a square number. (1 mark)

6. If a square garden has a side length of 10 metres, what is the total area in square metres? (1 mark)

7. Which calculation shows a square number? A) 5 x 5*, B) 5 x 4, C) 5 x 6, D) 5 + 5 (1 mark)

8. True or False: The number 1 is a square number because 1 x 1 = 1. (1 mark)

9. Max bought 9 square tiles to make a pattern. What is the side length of the square shape he made? (1 mark)

10. What is the square of 11? (1 mark)

Draw: Draw a 5x5 grid of squares and color them in to show why 25 is a square number.

Extension challenge: Max has £64 to spend on square-shaped stickers. If each sticker costs £1, and he wants to arrange them in a perfect square grid, what is the largest square grid he can make with his money?