

Max the Monkey's Mental Maths Challenge

Learning objective: To demonstrate fluency in mental arithmetic, including addition, subtraction, multiplication, division, and money calculations.

Read each question carefully. Show your working out where possible. You must use mental methods, but you can jot down notes to help you reach the final answer. Good luck!

Max the monkey is helping his friends at the jungle market. He needs to use his sharp maths skills to help them manage their fruit stall and calculate the costs of their supplies.

Word bank: Partition · Difference · Product · Quotient · Estimate · Inverse · Calculation

1. Max has 45 bananas. He sells 18 to a customer. How many bananas does he have left? Show your mental strategy. (2 marks)

2. Finn the dolphin buys 4 pineapples. Each pineapple costs £3.50. How much does Finn spend in total? (2 marks)

3. Calculate the product of 7 and 8. Then, use the inverse operation to check your answer. (3 marks)

4. Zara the zebra has £20.00. She spends £7.40 on art supplies and £4.60 on paintbrushes. How much change does she have remaining? (3 marks)

5. If 72 marbles are shared equally among 6 children, how many marbles does each child receive? (2 marks)

6. Explain why partitioning $56 + 37$ into $(50 + 30)$ and $(6 + 7)$ is a more efficient mental strategy than column addition. (3 marks)

7. Compare and contrast the methods used to calculate 12×4 and 12×8 . How can you use your knowledge of doubling to find the answer to 12×8 once you know 12×4 ? (5 marks)

8. Max says: 'If I have 100 and I subtract 42, I can find the answer by taking 40 away first, then taking away 2.' Justify why this is a correct mental method. (5 marks)

Draw: Draw a visual representation (such as a number line or an array) to show how you calculated the answer to question 5.

Extension challenge: Imagine you are Max the monkey. Write a short paragraph explaining to the other animals how to solve a mental maths problem involving money. Use at least three words from the word bank in your explanation. Total: /25