

Max's Magnificent Mental Math Challenge

Learning objective: To improve mental arithmetic fluency, including multiplication, division, addition, and subtraction, in line with Grade 3 expectations.

Help Max the Monkey solve these tricky puzzles! Use your mental math skills to find the answers quickly. Remember, for the 'Greater Depth' questions, you must explain your reasoning clearly.

Answer Key: 1) C (48), 2) True, 3) 7, 4) B (600), 5) 8, 6) 9, 7) False, 8) 12, 9) 36, 10) £4.50. Reasoning for Q10: £10 - £5.50 = £4.50.

Word bank: Product · Quotient · Difference · Estimate · Strategy · Operation

1. Max has 6 bunches of bananas with 8 bananas in each bunch. How many bananas does he have in total? A) 42 B) 54 C) 48* D) 56 (1 mark)

2. True or False: 12×4 is the same as 16×3 . (1 mark)

3. What is the quotient when 56 is divided by 8? (1 mark)

4. Which is the best estimate for $312 + 289$? A) 500 B) 600* C) 700 D) 550 (1 mark)

5. If Pip the caterpillar eats 9 leaves a day, how many days will it take for her to eat 72 leaves? (1 mark)

6. What is the missing number in this sequence? 81, 72, 63, 54, ... (1 mark)

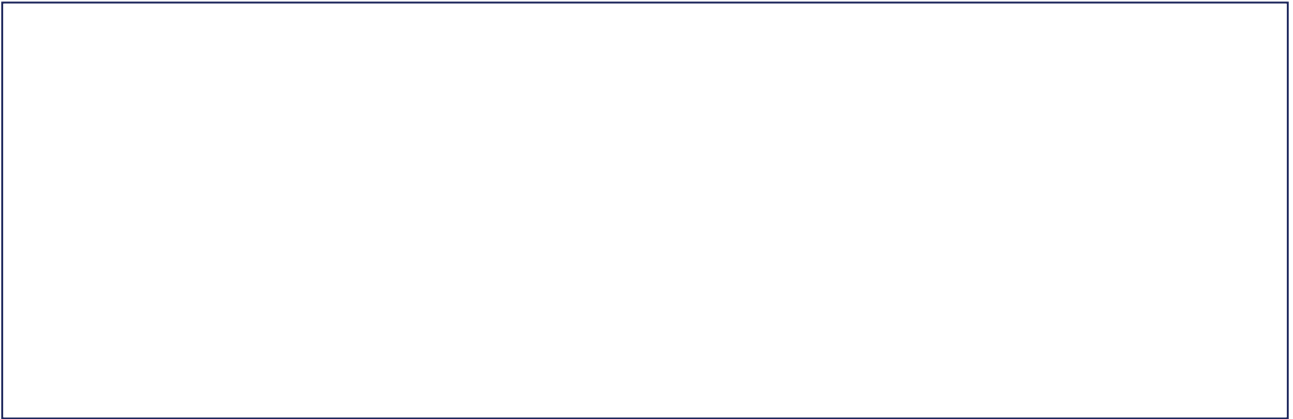
7. True or False: The difference between £10.00 and £6.50 is £4.50. (1 mark)

8. Max bought a notebook for £3.00 and a pen for £9.00. What is the total cost? (1 mark)

9. Calculate 6×6 . (1 mark)

10. If you have a £10 note and spend £5.50 on snacks, how much change should you receive? (1 mark)

Draw: Draw Max the monkey holding a sign that shows a complex math equation, surrounded by jungle leaves that each have a number on them.



Extension challenge: 1. Explain why knowing your times tables helps you solve division problems faster. 2. Compare and contrast the methods used for adding three-digit numbers mentally versus using written column addition. 3. Justify your answer: Is it always better to round to the nearest 10 or the nearest 100 when estimating? 4. What might happen if you forgot to use place value when subtracting two-digit numbers? 5. Create your own word problem involving money that results in an answer of £2.25. 6. Describe a strategy you could use to multiply any single-digit number by 11 in your head.