

Max's Magnificent Maths Division Challenge

Learning objective: To solve division problems including multi-digit numbers, remainders, and practical money-based calculations.

Join Max the monkey as he organises his jungle supplies! Use your knowledge of times tables and formal written methods to help Max solve these division puzzles. Good luck!

Answer Key: 1. C (14); 2. True; 3. 12; 4. B (£15.50); 5. False (7 r 2); 6. 104; 7. D (24); 8. 4; 9. True; 10. 15 r 3. Max's division strategy: Always check if your remainder is smaller than your divisor!

Word bank: Quotient · Remainder · Divisor · Dividend · Calculation · Partitioning

1. 1. Max has 84 bananas to share equally among 6 monkeys. What is the quotient? A) 12 B) 13 C) 14* D) 15 (1 mark)

2. 2. True or False: When dividing 45 by 5, the remainder is 0. (1 mark)

3. 3. What is $144 \div 12$? (1 mark)

4. 4. Max has £62 to buy 4 identical notebooks for his friends. How much does each notebook cost? A) £14.50 B) £15.50* C) £16.00 D) £15.00 (1 mark)

5. 5. True or False: $30 \div 4 = 7$ remainder 3. (1 mark)

6. 6. Calculate $520 \div 5$. (1 mark)

7. 7. If a bag of 120 marbles is shared between 5 children, how many marbles does each child get? A) 20 B) 22 C) 26 D) 24* (1 mark)

8. 8. What is the remainder when you divide 39 by 7? (1 mark)

9. 9. True or False: Division is the inverse operation of multiplication. (1 mark)

10. 10. Calculate $123 \div 8$ (give your answer as a quotient and remainder). (1 mark)

Draw: Draw a scene where Max the monkey is sharing a large pile of fruit equally between four different jungle animal friends. Show the piles clearly on the forest floor.



Extension challenge: Greater Depth Challenges: 1. Explain why a remainder can never be equal to or greater than the divisor. 2. Compare and contrast the methods of 'bus stop' division and 'partitioning'. Which do you find more efficient for larger numbers and why? 3. Max has £200. He wants to buy as many books as possible at £7 each. How many can he buy, and how much change will he have? Justify your answer. 4. What might happen if you reversed the divisor and the dividend in a division calculation? Give an example. 5. Create your own word problem involving a three-digit number divided by a one-digit number that results in a remainder. 6. If you divide a number by 10, then divide the result by 2, how is that different from dividing the original number by 20?