

Grade 3 Mathematics: Mastery of Division

Learning objective: To recall and use division facts for the 3, 4, 6, 8, and 12 multiplication tables and solve problems involving remainders and multi-step calculations.

Read each question carefully. Show your working out clearly, as method marks may be awarded even if your final answer is incorrect. Ensure all currency answers include the £ symbol.

Max the monkey is helping his friends organize their supplies for a woodland picnic. He has 144 acorns to share equally among 8 squirrels, and he is helping Ellie the elephant sort her collection of 96 historical tokens into bags of 6.

Word bank: dividend · divisor · quotient · remainder · partition · inverse · calculate · estimate

1. Calculate the quotient: $72 \div 6 = ?$ (1 mark)

2. Max has 144 acorns to share equally among 8 squirrels. How many acorns does each squirrel receive? (2 marks)

3. Ellie has 95 historical tokens. She puts them into bags of 8. How many full bags can she fill, and how many tokens will remain? (3 marks)

4. If a pack of 4 notebooks costs £12.00, what is the cost of one individual notebook? Show your division calculation. (2 marks)

5. Explain why the answer to $48 \div 4$ is the same as the answer to $48 \div 2 \div 2$. Provide an example to justify your reasoning. (4 marks)

6. Compare and contrast the methods of 'short division' and 'partitioning'. When might you choose to use one over the other? (4 marks)

7. Zara is arranging 128 colorful art tiles into rows of 8. She thinks she can create 15 rows exactly. Justify your answer by calculating the correct number of rows. What might happen if she decided to add 4 more tiles to her collection? (5 marks)

8. If you know that $8 \times 7 = 56$, write down two division facts you can derive from this multiplication fact. (4 marks)

Draw: Draw a diagram to represent $24 \div 3$ using groups of objects (like acorns or tokens) to visually demonstrate your division strategy.



Extension challenge: Total: /25. Challenge: Invent your own word problem involving division with a remainder using £50.00 and a divisor of your choice. Explain how you would check your answer using the inverse operation.