

Max's Mathematical Multiplication Challenge

Learning objective: To multiply multi-digit numbers using formal written methods (long multiplication) and solve multi-step problems.

Read each question carefully. Show your working out clearly, as Max loves to see the steps behind the solution! Remember to use your knowledge of place value when multiplying by tens.

Max the monkey is organising a feast for his friends. He needs to calculate the costs and quantities for his party supplies using his multiplication skills.

Word bank: product · multiplicand · multiplier · place value · long multiplication · calculation

1. Max is buying 24 bags of monkey nuts for his friends. Each bag costs £1.25. Calculate the total cost of the nuts. (2 marks)

2. Calculate the product of 456 and 32 using the formal long multiplication method. (2 marks)

3. Ellie the elephant needs 15 crates of fruit. Each crate contains 212 pieces of fruit. How many pieces of fruit are there in total? (2 marks)

4. A box of party hats costs £3.45. If Max buys 12 boxes, how much change will he receive from a £50 note? (3 marks)

5. Fill in the missing digit to make this calculation correct: $34 \times 1_ = 408$. (2 marks)

Draw: Draw a picture of Max the monkey sitting at a desk with a notepad and pencil, surrounded by piles of fruit and nuts, looking very pleased with his successful maths calculations.



Extension challenge: Max has £100 to spend. If he buys 18 packs of decorations at £4.60 each, can he still afford to buy a gift for Leo the lion that costs £18.50? Show your calculation to prove your answer.