

Max's Mathematical Multiplication Marathon

Learning objective: To multiply numbers up to 4 digits by a 2-digit number using the formal written method of long multiplication.

Join Max the monkey as he tackles his jungle shopping list! Use your knowledge of long multiplication to solve these 10 challenges. Remember to use your place value holders carefully.

Answer Key: 1.C, 2.True, 3.False, 4.4920, 5.B, 6.True, 7.854, 8.B, 9.3240, 10.A. Teacher note: Remind students that when multiplying by the tens digit, they must place a zero in the ones column before they begin.

Word bank: product · multiplier · multiplicand · place value · formal written method · exchange · calculation · total

1. Max buys 24 bunches of bananas at £15 each. Which calculation represents this? A) $24 + 15$ B) $24 - 15$ C) 24×15 D) $24 \div 15$ (1 mark)

2. True or False: When multiplying by a 2-digit number, you must always add a zero placeholder before multiplying by the tens digit. (1 mark)

3. True or False: The product of 100×20 is 200. (1 mark)

4. Max finds 41 bundles of 120 twigs for his nest. Calculate 120×41 . (1 mark)

5. What is 32×14 ? A) 448 B) 428 C) 468 D) 348 (1 mark)

6. True or False: 55×20 is the same as $55 \times 2 \times 10$. (1 mark)

7. Calculate 61×14 . (1 mark)

8. If Max has 12 boxes with 25 mangoes in each, how many mangoes does he have? A) 250 B) 300 C) 325 D) 275 (1 mark)

9. Calculate 81×40 . (1 mark)

10. Which is the most efficient way to solve 400×25 ? A) Use long multiplication B) Add 400 twenty-five times C) Divide 400 by 25 D) Guessing (1 mark)

Draw: Draw Max the monkey sitting in a tree, surrounded by baskets of fruit labelled with multiplication problems like ' 12×15 '.



Extension challenge: 1. Explain why the zero placeholder is essential when multiplying by the tens column. 2. Compare and contrast using the grid method versus the formal long multiplication method. Which do you prefer and why? 3. Justify your answer: Is it easier to calculate 50×24 or 24×50 ? Does the order change the product? 4. What might happen if you forget to exchange numbers when multiplying? 5. Max has £500. He wants to buy 15 packs of nuts at £22 each. Does he have enough money? Show your working. 6. Design a multi-step word problem for a friend involving long multiplication and a total budget of £1000.