

Max's Market Multiplication

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

Help Max the monkey calculate the total costs for his market stall. Remember to use your place value holders (zeroes) when multiplying by the tens digit. Show all your working out clearly.

Max the monkey is helping the local village market. He has been busy organising his produce so that everyone can have fresh food for the week. He has 14 crates of apples, and each crate costs £23. He also has 22 bags of flour, which cost £35 each. Max needs to calculate the total cost for his customers so he can keep his accounts tidy. He always uses the formal written method to ensure his math is perfect, making sure he adds his two partial products together at the end.

Word bank: multiplicand · multiplier · product · place value · exchange · column

1. Max has 14 crates of apples. If each crate costs £23, what is the total cost of all the crates? Show your long multiplication method. (2 marks)

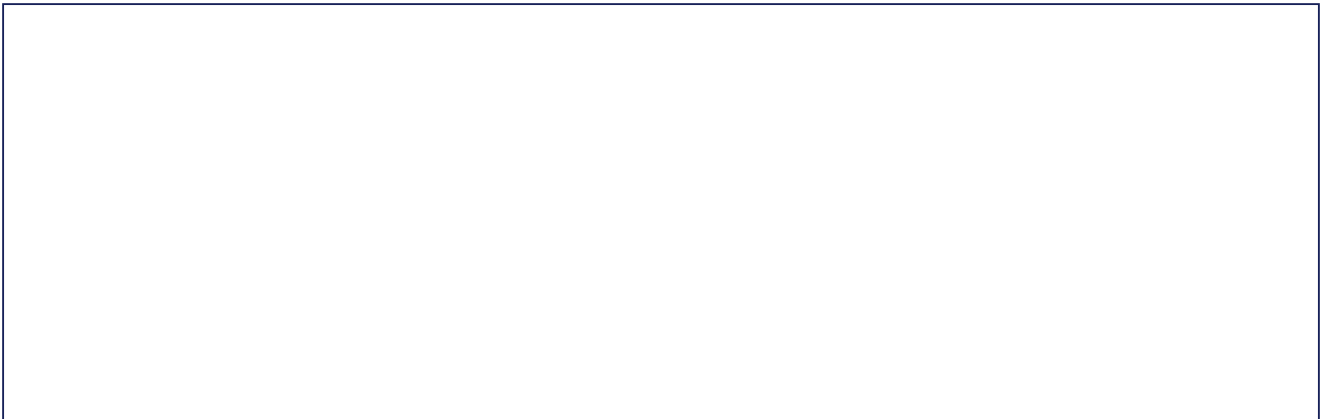
2. The village bakery buys 22 bags of flour from Max. If each bag costs £35, how much does the bakery pay in total? (2 marks)

3. Max sells 18 punnets of strawberries for £42 each. Calculate the total value of the strawberry sales. (2 marks)

4. A customer buys 25 jars of honey. Each jar costs £12. What is the total cost for the customer? (2 marks)

5. Explain why it is important to put a zero in the ones column when you begin multiplying by the tens digit in the multiplier. (2 marks)

Draw: Draw a picture of Max the monkey standing at his market stall, surrounded by crates of apples and bags of flour, with a chalkboard showing a long multiplication sum.



Extension challenge: Max has 125 boxes of oranges. Each box costs £32. Can you calculate the total cost using the formal long multiplication method for a 3-digit number by a 2-digit number?