

Max's Market Challenge: A Mental Maths Adventure

Learning objective: To solve multi-step mental arithmetic problems involving addition, subtraction, and multiplication of currency.

Read the following scenario carefully. Use your mental maths strategies to calculate the totals. Show your working out where possible to explain your reasoning.

Max the monkey is helping at the community fruit stall. He loves finding patterns in numbers! Today, he is pricing items for the local fair. A bunch of bananas costs £1.20, a punnet of strawberries costs £2.50, and a bag of crunchy apples costs £1.80. Max has a crate of 50 apples to sell in bags of five. He also needs to calculate the change for customers who pay with a £10 note. Max knows that being quick and accurate with his mental maths makes him the best helper in the orchard!

Word bank: calculate · strategy · total · remainder · product · estimate · operation · efficient

1. If a customer buys two bunches of bananas and one punnet of strawberries, what is the total cost? Explain how you calculated this mentally. (2 marks)

2. Max has 50 apples to put into bags of five. How many bags will he have in total? If each bag sells for £1.80, what is the total value of all the apple bags? (3 marks)

3. A customer buys a bag of apples (£1.80) and pays with a £5 note. Calculate the change. Justify why counting up from £1.80 is an efficient strategy for this subtraction. (2 marks)

4. Max decides to offer a 'Fruit Bundle' containing one of each item (bananas, strawberries, and apples). What is the total price of the bundle? (1 mark)

5. Compare and contrast the cost of buying three punnets of strawberries versus buying three bunches of bananas. What is the difference in price? (2 marks)

6. What might happen to Max's total profit if he decided to increase the price of every item by 20p? Explain your reasoning. (2 marks)

Draw: Draw a colourful display of Max's fruit stall, showing the prices clearly labelled on small chalkboards next to the baskets of fruit.



Extension challenge: Imagine you are Max. Create your own 'Market Day' challenge involving at least four different items and a multi-step problem that requires your classmates to use two different operations (e.g., multiplication and subtraction) to solve it.