

Max's Market Challenge: A Maths Investigation

Learning objective: To solve multi-step word problems involving addition, subtraction, multiplication, and division, applying mathematical reasoning to real-world currency contexts.

Max the monkey has been tasked with helping the forest animals at the local market. Below are the prices for the goods on sale. Read each problem carefully, show your working out, and justify your final answer. Remember to use the 'Greater Depth' reasoning steps to explain your methodology.

Word bank: Calculate · Difference · Total · Estimate · Remainder · Multi-step · Value

1. The forest café sells bags of organic hazelnuts for £2.45 and jars of wildflower honey for £3.70. If Max buys 4 bags of hazelnuts and 2 jars of honey, what is the total cost? Show your calculation. (2 marks)

2. Pip the caterpillar has a budget of £20.00. She wants to buy 6 bookmarks priced at £1.85 each. How much change will she have left? Explain how you arrived at your answer. (2 marks)

3. A crate of 12 apples costs £4.80. If the store sells the apples individually for 50p each, how much more profit do they make by selling them individually compared to selling the whole crate? Justify your calculation. (3 marks)

4. Compare and contrast the cost of buying 5 notebooks at £1.25 each versus buying a bundle of 5 notebooks for £5.75. Which is the more economical choice? Explain your reasoning. (3 marks)

5. What might happen if the price of honey increased by 20%? If the current price is £3.70, calculate the new price. (2 marks)

6. If Max has £50.00 and needs to buy as many items as possible from a selection of goods priced at £3.50, £4.25, and £5.90, how would you strategise to maximise the number of items purchased? Explain your logic. (3 marks)

Draw: Draw a sketch of Max the monkey standing behind a market stall displaying the items mentioned. Label the items with their prices using clear, decorative tags.



Extension challenge: Design your own complex multi-step word problem involving at least three different prices and a budget constraint. Swap with a partner and challenge them to solve your problem using a formal written method.