

Max's Market Stall: A Decimal Investigation

Learning objective: To understand, compare, and order decimals with up to two decimal places, and to solve problems involving money using £ and p.

Max the monkey has opened a fruit stall! Use this fact-file to help Max organize his stock. You will need to convert prices, compare the costs of different fruits, and calculate the total value of his inventory. Read each section carefully and use your knowledge of tenths and hundredths to solve the puzzles.

Word bank: decimal point · tenths · hundredths · placeholder · equivalent · value · total · greater than · less than

1. The Fruit Price List: Choose three different fruits and write their prices in pounds (£) using decimals (e.g., £1.45). Explain how the digit in the tenths column represents the value of the fruit in pence. (3 marks)

2. Comparing Costs: Compare the price of two fruits from your list. Use the symbols $<$, $>$, or $=$ to show which is more expensive. Justify your answer by explaining the place value of the digits in the tenths and hundredths columns. (3 marks)

3. The Balanced Scale: Max has two bags of fruit that both cost exactly £2.50. One bag contains 2 items and the other contains 5 items. Explain why the total cost is the same despite the number of items being different. (3 marks)

4. Decimal Addition: If a bunch of bananas costs £1.20 and a bag of apples costs £0.85, calculate the total. Show your working out and explain the importance of the decimal point when aligning your numbers. (3 marks)

5. Greater Depth Challenge: Max wants to buy a new crate that costs £5.00. He has £2.75. How much more money does he need? Describe the method you used to find the difference. (4 marks)

6. Reflection: What might happen if we forgot to include the decimal point when writing the price of fruit? Provide an example of how this would change the value of the money. (2 marks)

Extension challenge: Design a 'Special Offer' sign for Max. Create a bundle of three fruits where the total price is a decimal number between £3.00 and £4.00. Write a short paragraph explaining how you calculated the price and why you chose those specific items.