

Max's Market Stall Challenge

Learning objective: To solve division problems with remainders and interpret them in the context of money and grouping, meeting Year 5 curriculum standards.

Max the monkey is running a local produce stall. He needs your help to divide his stock into equal batches for his customers. Use your knowledge of division, including remainders, to solve these problems. Show your working out clearly, especially when converting your remainders into pence.

Word bank: remainder · dividend · divisor · quotient · partitioning · exchange · calculate · justify

1. Max has 145 organic apples. He wants to pack them into bags of 8. How many full bags can he make, and how many apples will be left over? (2 marks)

2. Max sells a punnet of strawberries for £3. If he earns £159 in total from strawberries, how many punnets did he sell? Explain your method. (2 marks)

3. Max has 234 plums. He wants to share them equally between 9 boxes. How many plums will be in each box? (2 marks)

4. Max has £85 to spend on new crates. Each crate costs £6. How many crates can he buy, and how much money will he have remaining? (2 marks)

5. Justify your answer: If Max has 100 pears and divides them by 7, why is the remainder not 0.2? Explain the difference between a decimal remainder and a remainder as a whole number. (3 marks)

6. What might happen if Max decided to increase his bag size from 8 apples to 12 apples? Compare and contrast how this changes the number of full bags and the number of left-over apples. (3 marks)

Draw: Draw a sketch showing Max's stall with 3 piles of fruit being grouped into baskets. Label the 'divisor' (baskets) and the 'dividend' (total fruit).



Extension challenge: Design a 'Market Price List' for Max. Create three items with prices that result in a remainder when divided into a £50 budget. Write a short paragraph explaining why remainders are important for a shopkeeper to track.