Max’s Market Stall Challenge

Learning objective: To recall and use division facts for the 3, 4, 6, 8, and 12 multiplication tables and solve division problems involving remainders.

Help Max the monkey organise his market stall. Use your knowledge of times tables to solve these division puzzles. Show your working out clearly.

Max is running a fruit stall at the local village fair. He has 86 crisp red apples that he needs to pack into bags. Each bag can hold exactly 6 apples. Max wants to know how many full bags he can make, and how many apples will be left over for his own snack. Later, he has 95 golden pears to share equally amongst 8 wooden crates. Max needs your help to calculate exactly how many pears will go into each crate and if there will be any spare pears remaining.

Word bank: dividend · divisor · quotient · remainder · partition · calculate · grouping

1. Max has 86 apples and puts 6 in each bag. How many full bags of apples can Max make? How many apples remain? (2 marks)

2. Using your answer from the previous question, write the calculation as a division sentence including the remainder (e.g., 20 ÷ 3 = 6 r 2). (2 marks)

3. Max shares 95 golden pears equally into 8 crates. How many pears will be in each crate, and how many are left over? (2 marks)

4. If Max decides to sell each bag of 6 apples for £4, how much money will he make from the full bags only? (2 marks)

5. Explain why it is important to include the remainder when solving real-life division problems like Max's apple bags. (3 marks)

6. Max finds a box of 144 plums. If he puts them into groups of 12, how many groups does he have? Is there a remainder? Justify your answer. (3 marks)

Draw: Draw Max the monkey standing by his market stall. Show the crates of pears and the bags of apples, and label them with the correct number of items you calculated.

Extension challenge: What might happen if Max decided to change his bag size to 9 apples instead of 6? Compare the number of full bags and the size of the remainder. Create a new division word problem for a friend to solve using the number 127.