

Max's Market Stall Challenge

Learning objective: To solve division problems with remainders, using knowledge of multiplication tables and partitioning.

Max the monkey is helping at the local village market. He has a pile of fresh fruit and needs to pack them into punnets to sell. Use your knowledge of division to help Max work out how many full punnets he can make and how many pieces of fruit will be left over (the remainder). Show your working out for each calculation.

Word bank: Dividend · Divisor · Quotient · Remainder · Partitioning · Multiples

1. Max has 47 strawberries. He puts them into punnets of 5. How many full punnets does he have, and how many strawberries are left over? Justify your answer by showing the nearest multiple of 5. (2 marks)

2. Max has 74 plums. He packs them into bags of 8. How many bags can he fill completely? Explain why there are 2 plums remaining. (2 marks)

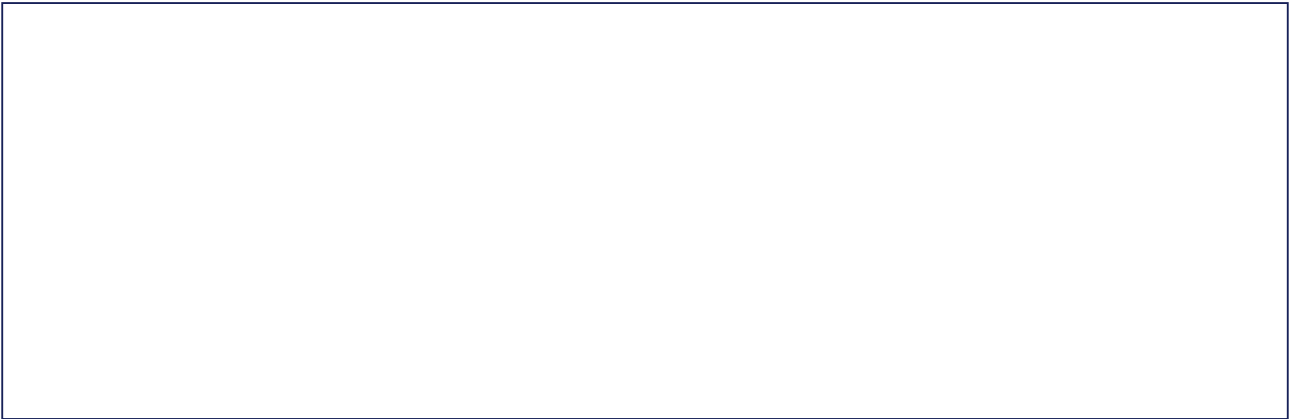
3. There are 59 blackberries. Max needs to share them equally between 6 small baskets. How many blackberries go into each basket, and what is the remainder? (2 marks)

4. Compare and contrast: If Max had 60 blackberries instead of 59, how would the number of full baskets and the remainder change? Explain your reasoning. (3 marks)

5. Max has 83 cherries. He wants to put them into punnets of 9. Is it better to have 9 full punnets with a remainder, or 8 full punnets with a larger remainder? Justify your choice. (3 marks)

6. What might happen if Max decided to change his punnet size to 4 instead of 5 for his 47 strawberries? Calculate the new quotient and remainder. (2 marks)

Draw: Draw a picture of Max the monkey standing at his market stall, showing one of the fruit problems solved with baskets of fruit and the remaining pieces sitting on the counter.



Extension challenge: Design your own 'Market Challenge' for a friend. Choose a total number of items (between 50 and 100) and choose a punnet size (between 3 and 9). Write out the division equation, calculate the remainder, and write a sentence explaining why it is important for Max to know the remainder when selling fruit.