

Max's Market Stall: Mastering Percentages

Learning objective: To identify, calculate, and compare percentages as fractions and decimals to solve real-world problems.

Help Max the monkey organise his market stall by calculating the costs and discounts using your knowledge of percentages. Show your working out clearly for every question.

Max the monkey is running a fruit stall. He sells apples, bananas, and bunches of grapes. To encourage his friends, he offers special discounts on certain items. Remember: $50\% = \frac{1}{2}$ or 0.5, $25\% = \frac{1}{4}$ or 0.25, and $10\% = \frac{1}{10}$ or 0.1.

Word bank: percentage · fraction · decimal · equivalent · discount · proportion · value · hundredth

1. Max has a basket of 100 apples. He sells 35% of them in the morning. How many apples does he have left? Explain your method. (2 marks)

2. A bunch of grapes costs £4.00. Max offers a 25% discount. What is the new price of the grapes? Justify how you found your answer. (2 marks)

3. Max has 200 bananas. He notes that 10% are too green to sell and 5% are too soft. How many bananas in total are not suitable for sale? (3 marks)

4. If a punnet of strawberries costs £6.00 and Max increases the price by 50% for the weekend, what will the new price be? Show your calculation. (2 marks)

5. Compare and contrast: Why is it easier to calculate 10% of a number compared to 15%? What steps would you take to find 15% of £80.00? (3 marks)

6. What might happen if Max decided to offer a 100% discount on all his fruit? Discuss the impact this would have on his market stall. (2 marks)

Draw: Draw a sign for Max's stall that advertises a '25% Off' sale on a specific item, _____ including the original price and the discounted price to help his customers.



Extension challenge: Design a loyalty card for Max's customers. Create a rule where they receive a percentage-based reward after buying a certain amount of fruit. Write a short paragraph explaining the maths behind your reward system and why it is fair.