# Max’s Market Stall: A Percentage Investigation

*Learning objective: To calculate percentages of amounts, solve missing value problems, and justify mathematical reasoning using real-world contexts.*

Max the monkey is helping at the local community market. Use your knowledge of percentages to help him calculate prices, discounts, and stock levels. Show your working out clearly for each calculation to demonstrate your method.

*Word bank: percentage · fraction · equivalent · decimal · discount · calculation · proportion · value*

**1. Max has 200kg of apples. He sells 25% of them before lunch. Calculate how many kilograms he sold and explain your method for finding 25%. (3 marks)**

**2. A basket of organic honey is priced at £40. Max offers a 10% discount to his regular customers. What is the new price of the honey? Show your calculation. (3 marks)**

**3. Max sold 60% of his 80 bunches of carrots. How many bunches does he have remaining? Justify your answer by showing the steps taken. (4 marks)**

**4. Compare and contrast: Why is it easier to calculate 50% of an amount compared to 15%? Describe the different strategies you would use for each. (4 marks)**

**5. Max wants to increase the price of his artisan bread, which currently costs £5.00, by 20%. What will the new price be? Explain why the price increases. (3 marks)**

**6. What might happen if Max accidentally calculated a 50% discount instead of a 5% discount on his items? Justify how this would impact his total profit for the day. (4 marks)**

*Extension challenge: Design your own market stall item. Create a problem where you must calculate a 75% increase in stock and a 20% discount on the selling price. Write your problem out and provide the solution for a partner to check.*