Year 6 Maths: Mastering Percentages Assessment

Learning objective: To solve problems involving the calculation of percentages and the use of percentages for comparison, and to recall and use equivalences between simple fractions, decimals, and percentages.

Read each question carefully. Show all your working out in the space provided to ensure you gain method marks. You have 30 minutes to complete this assessment.

Max the monkey is organising a fruit festival. He has a crate containing 200 pieces of fruit. 25% of the fruit are apples, 0.4 are bananas, and the rest are pears. Meanwhile, Bea the honeybee is calculating the cost of honey jars for the festival shop. A jar usually costs £5.00, but there is a 20% discount today.

Word bank: percentage · fraction · decimal · equivalent · proportion · total · calculate

1. Using the information about Max's fruit crate, calculate how many apples are in the crate. (2 marks)

2. Convert the 0.4 bananas into a percentage. How many bananas are in the crate? (3 marks)

3. What is the total number of pears in the crate? Show your method. (4 marks)

4. Bea the honeybee is selling jars for £5.00. If there is a 20% discount, how much money is taken off the price? (3 marks)

5. After the 20% discount is applied to the £5.00 jar, what is the new sale price of the honey? (3 marks)

6. Max wants to increase his apple order by 10% next year. If he currently has 50 apples, how many will he have after the increase? (5 marks)

7. Explain why 50% is equivalent to 0.5 and 1/2 using a real-world example of sharing food. (5 marks)

Draw: Draw a pie chart representing Max's fruit crate: 25% apples, 40% bananas, and 35% pears. Label each section clearly.

Extension challenge: Total: /25. Challenge: If Max increases his total fruit order of 200 items by 15%, what will his new total number of fruit pieces be?