

Year 4 Maths: Problem Solving Challenge

Learning objective: To solve addition, subtraction, multiplication, and division word problems involving money, measures, and real-life scenarios.

Read each question carefully. Show your working out clearly in the space provided. If you get stuck, remember to identify the key information before deciding which operation to use. Good luck!

Max the monkey is organising a jungle fair to raise money for new books. He has a stall selling fruit skewers, a game of 'Guess the Shells', and a raffle. Ellie the elephant is helping him keep track of all the maths involved.

Word bank: operation · calculate · total · difference · product · quotient · remainder · partition

1. Max has 144 exotic fruits to put onto skewers. If each skewer needs 6 pieces of fruit, how many full skewers can Max make? Show your method. (2 marks)

2. Ellie sells 35 tickets for the raffle at £4 each. How much money has Ellie collected in total? (2 marks)

3. The 'Guess the Shells' jar contains 462 seashells. A visitor guesses there are 700. What is the difference between the actual number and the visitor's guess? (2 marks)

4. Max spends £12.50 on wooden sticks and £8.75 on ribbons for his stall. He started with £30.00. How much change does he have left? Justify your answer by showing how you partitioned the amounts. (3 marks)

5. Bea the honeybee brings 4 jars of honey to sell. Each jar costs £3.40. If Max sells all 4 jars and then gives a £2.00 discount to a friend, what is the final amount of money he makes from the honey? (3 marks)

6. Explain why it is helpful to round numbers to the nearest 10 or 100 before performing a calculation. Give an example of when this might be useful during the jungle fair. (3 marks)

7. Kit the fox decides to set up a snack bar. He buys 8 packs of nuts for £2.25 each and 5 bottles of water for £1.10 each. He sells the nuts for £4.00 a pack and the water for £2.00 a bottle. Calculate the total profit Kit makes after he has paid for all his supplies. (5 marks)

8. Compare and contrast the strategies you used for the multiplication problem in Question 2 and the division problem in Question 1. Which was more efficient and why? (3 marks)

Draw: Draw a sketch of Max's stall, including labels showing the prices of three different items you might find there (using £ and p).



Extension challenge: Imagine you are planning a school event with a budget of £100. Write a short plan detailing three items you would buy, their individual costs, and how much would remain in your budget. What might happen if the cost of one item increased by 20%? Total: /25