

Success criteria: (1) I can extract the maths from the question. (2) I can set up a logical answer using the correct units.
(3) I can check my answer and make sure it's realistic. (4) I understand how to score full marks on a question.

Task 1 -

- (1) A recipe for 8 cakes requires 200g of sugar. Find how many cakes you can make with 80g of sugar. You must show your workings. (3 marks)
- (2) Kevin works for £6.85 an hour. How many hours will he have to work until he earns at least £120? (2 marks)
- (3) Kate has 0.2 of £40 in her pocket. If she spends £3.60 on a magazine how much does she have left? (3 marks)
- (4) Helen is p years old. Sam is two years older than Helen. Given their combined age is 24:
(a) Set up and solve an equation to find p . (2 marks)
(b) Find the age of Helen and the age of Sam. (2 marks)
- (5) Laura knows she can buy 8 identical pens for 96p. Given that she has £1.77, how many pens can she buy? (3 marks)
- (6) John is having an argument with Sue. John says 15% of £50 is more than $\frac{3}{4}$ of £12. Sue says he is wrong. Who is right? You must show your workings. (3 marks)
- (7) Annie has a pay reduction of 8%. Given that she originally earned £240 a week, find out what she now earns each week. (3 marks)

Task 2 -

- (1) Jenny and Tim work at the same shop. Tim works 42 hours and is paid £322.56. Jenny is paid £251.72 for 31 hours work. Find out how much more Jenny will be paid than Tim if they both work 25 hours at the shop. (4 marks)
- (2) A rectangular field has side lengths of 18m and 24m. James wants to put up a fence around the entire perimeter of the field. Fencing usually costs £12 a meter but any order over £750 receives a 10% discount and any order over £1000 receives a 12% discount at the local fencing store. Find the total cost James will have to pay to fence the field. (5 marks)
- (3) Some money is shared between Ahmed, Betty and Cathy in the ratio 3:4:2. Given that Ahmed has £36, find $\frac{3}{4}$ of the amount of money Cathy received. (4 marks)
- (4) Kevin has n coins. Jo has twice as many coins as Kevin and Kylie has 3 less than Kevin. Given that they have a total of 37 coins, find how many coins each person has. (4 marks)
- (5) Tina is following a recipe for some cakes. She needs 200g of flour, 4 eggs, 160g of sugar & 100g of butter to make **4 cakes**. Tina has 350g of flour, 6 eggs 225g of sugar & 1kg of butter at home. How many cakes can Tina make? (5 marks)
- (6) Freda buys a car with 32613 miles on the clock. When she sells the car it has 41789 miles on the clock. Given that a litre of petrol does 9 miles, find out how many litres of petrol Freda used whilst she owned the car. (3 marks)
- (7) It takes 8 men 5 days to build a wall. How long would it take 4 men to build half a wall if they worked at the same rate? (3 marks)
- (8) A car can do 12 miles on a litre of petrol. Given that petrol costs £1.10 a litre, find the cost of a journey of 132 miles. (3 marks)
- (9) John is thinking of a double digit prime number. If he halves it the answer will be more than 5. If he doubles it the answer will be less than 25. Write down the number John is thinking about. (3 marks)

Task 3 -

- (1) A tank has 42lts of water in and is $\frac{3}{4}$ full. If water pours into the tank at 500ml a minute, find the time the tank will take to fill up completely from empty. (4 marks)
- (2) A school has 200 students in total spread over years 7, 8, 9, 10 and 11. In the school 0.2 of the students are in year 7 and $\frac{3}{8}$ of the students are in year 8. The remaining students are spread across year 9, 10 or 11 in the ratio 6:4:7. How many students are in year 11 at the school? (5 marks)
- (3) Rob has some marbles. Dianne has three times as many as Rob and Petra has one less than twice as many as Rob. Given that they have 89 marbles in total, find out how many more marbles Dianne has than Petra. (5 marks)
- (4) Jessie has a collection of coins. She knows that 75% of her coin collection is in her loft.
(a) Given there are 36 coins in her loft, work out many coins does Jessie have in total in her collection. (2 marks)
(b) Explain why she can't reduce her coin collection by 10%. (2 marks)
- (5) Money is shared in the ratio 2:3:5 between Jane, Kelly and Bill. Given that Kelly had £16, find 30% of Bill's share. (4 marks)