

Max's Healthy Menu Designer

Learning objective: To design a balanced meal by understanding nutritional groups and calculating costs for a budget-friendly, healthy recipe.

Welcome to Max's kitchen! Max loves solving maths puzzles through cooking. Use this template to plan a healthy, nutritious main meal. Consider the 'Eatwell Guide' principles: aim for plenty of vegetables, a portion of protein, and starchy carbohydrates. You must also calculate the total cost of your ingredients to ensure you stay within your budget.

Word bank: protein · carbohydrates · nutrients · balanced · fibre · budget · portion · sustainability · ingredients · vitamins

1. Recipe Title and Ingredients: Give your meal a creative name and list the key ingredients you will need to create a healthy, balanced plate. (3 marks)

2. Nutritional Breakdown: Explain why your chosen ingredients provide a healthy balance. Which food groups are represented and what do they provide for the body? (4 marks)

3. Cost Calculation: If your protein costs £2.50, your carbohydrates cost £1.20, and your vegetables cost £0.95, what is the total cost of one serving? Show your working out. (3 marks)

4. Justify your answer: Why is it important to consider the cost of ingredients when planning meals for a large group of people, such as a school canteen? (3 marks)

5. Compare and contrast: Compare your chosen meal to a typical 'fast food' meal. What are the key differences in nutritional value and preparation methods? (4 marks)

6. What might happen if: If you were to replace the fresh vegetables in your recipe with highly processed, tinned alternatives, how might this change the nutritional value and the final cost? (3 marks)

Extension challenge: Design a 'Meal Plan' for a whole day. How would you ensure that your breakfast, lunch, and dinner work together to meet the recommended daily intake of vitamins and minerals? Present your plan as a table and justify your choices for each meal.