

Design Technology: The Balanced Plate Challenge

Learning objective: To understand the principles of a healthy, balanced diet and apply this knowledge to design a nutritious meal.

Read each question carefully and use your knowledge of the Eatwell Guide to design a meal that provides a balance of nutrients. Remember to include a variety of food groups.

Word bank: carbohydrates · protein · nutrients · fibre · saturated fat · vitamins · minerals · balanced · portion · energy

1. Max is planning a meal for our friends. He wants to include a source of energy. Explain why carbohydrates are an essential part of a healthy, balanced diet for a Year 4 pupil. (2 marks)

2. Compare and contrast the nutritional benefits of a piece of fresh fruit versus a sugary snack bar. Why is fruit a better choice for sustained energy? (3 marks)

3. Bea the honeybee is choosing a healthy lunch. If she selects a portion of grilled chicken, which food group does this belong to, and why is it important for her body? (2 marks)

4. Justify your answer: Why is it recommended that we eat a 'rainbow' of different coloured vegetables in our daily meals? (3 marks)

5. What might happen if a person's diet contained high amounts of saturated fat and sugar, but very little fibre or protein? Explain the impact on their health. (3 marks)

Draw: Draw a 'Balanced Plate' for an active child. Divide your plate into sections to show the correct proportions of carbohydrates, protein, and fruit/vegetables. Label your ingredients clearly.



Extension challenge: Design a three-course menu for a school canteen that costs under £5.00 per person. Write a paragraph explaining how your menu meets the government's nutritional standards for school food, and calculate the total cost of the ingredients for one meal.