Nutrition and the Healthy Body

Learning objective: To identify the main food groups, understand the importance of a balanced diet, and describe how nutrients are used by the human body.

Read each question carefully and use your scientific knowledge of nutrition to provide detailed answers. Remember to explain the 'why' behind your choices.

Word bank: Carbohydrates · Proteins · Fats · Vitamins · Minerals · Fibre · Hydration · Energy · Balanced diet

1. Max the monkey is preparing for a long day of climbing trees. Which food group should he prioritise to ensure he has enough energy, and why are these nutrients essential for his physical activity? (2 marks)

2. Bea the honeybee is teaching a class about growth and repair. Which food group is most important for building and repairing muscle tissue in the human body? Give an example of a food source for this nutrient. (2 marks)

3. Explain the difference between 'macronutrients' and 'micronutrients'. Provide one example of each to support your answer. (3 marks)

4. Nova the owl is researching diet. If a child eats a meal consisting only of sugary snacks and fizzy drinks, explain why this is not considered a 'balanced diet' in terms of long-term health. (3 marks)

5. Calculate the cost: A healthy school lunch costs £2.45. If a student buys this lunch every day for a 5-day school week, how much will they spend in total? Show your working. (2 marks)

Draw: Draw a 'Balanced Plate' illustration. Divide a circle into sections to represent the correct proportions of carbohydrates, proteins, fruits, and vegetables that make up a healthy, balanced meal.

Extension challenge: Research what 'hidden sugars' are. Write a short paragraph explaining why processed foods often contain more sugar than home-cooked meals and how this affects the body's energy levels throughout the day.