

Year 4 Science Assessment: Animals Including Humans

Learning objective: To demonstrate understanding of the human digestive system, the function of teeth, and food chains.

Read each question carefully. Ensure your answers are clear and use scientific vocabulary where appropriate. You have 45 minutes to complete this assessment.

Max the monkey is helping his friends learn about how their bodies work. He has been studying how humans eat food, how they use their different teeth to process it, and how energy moves through nature in food chains. Nova the owl is observing the forest floor to see how energy transfers from plants to predators.

Word bank: incisors · canines · molars · oesophagus · stomach · small intestine · herbivore · carnivore · omnivore · digestion

1. Max is eating a piece of crunchy fruit. Name the type of teeth he uses to bite into the fruit and explain their specific function. (2 marks)

2. Trace the path of food through the human digestive system. List the following organs in the correct order: stomach, mouth, small intestine, oesophagus. (2 marks)

3. Explain why humans need both incisors and molars. How would eating change if a human only possessed one type of tooth? (3 marks)

4. Define the terms 'herbivore', 'carnivore', and 'omnivore'. Give one example of an animal for each category. (3 marks)

5. Nova observes a food chain: Grass -> Rabbit -> Fox. What might happen to the fox population if a disease caused the rabbit population to decrease significantly? Justify your answer. (4 marks)

6. Compare and contrast the digestive process of a human with that of a simple food chain. Why is energy transfer important in both systems? (3 marks)

7. Design a new food chain involving at least four organisms. Label the producer and the primary, secondary, and tertiary consumers. Explain why the producer is essential for the rest of the chain. (8 marks)

Draw: Draw a diagram of the human digestive system and label the mouth, oesophagus, stomach, and small intestine.



Extension challenge: Total: /25. Greater Depth Task: If the sun were to stop providing energy for plants, predict the long-term effects on a complex woodland food web. Discuss which organisms would be affected first and explain your reasoning.