Nova’s Digestive System Challenge

Learning objective: To identify and explain the functions of the main organs in the human digestive system.

Read each question carefully and use your knowledge of the digestive system to provide clear, scientific answers. Write in full sentences where appropriate.

Nova the owl is curious about how humans get energy from their food. She is observing the journey food takes from the moment it is eaten until the waste is removed. Use your scientific knowledge to help Nova map out this complex process.

Word bank: oesophagus · stomach · small intestine · large intestine · nutrients · saliva · rectum · absorption

1. Describe the role of saliva in the mouth at the start of the digestive process. (2 marks)

2. Name the muscular tube that carries food from the mouth to the stomach. (1 mark)

3. Explain why the small intestine is a vital part of the digestive system. What happens to the food here? (2 marks)

4. What is the primary function of the large intestine in terms of water and waste? (2 marks)

5. If a person has a stomach ache, why might they feel unwell after eating a heavy meal? Connect your answer to the function of the stomach. (3 marks)

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

Extension challenge: Nova wants to know what happens if the small intestine stops absorbing nutrients properly. Research or infer how this would affect a person's energy levels and write a short paragraph explaining your thoughts.