

Nova's Guide to Human Dental Anatomy

Learning objective: To identify and describe the functions of different types of human teeth in the digestive system.

Use this writing frame to construct a scientific report on human teeth. Ensure you use precise biological vocabulary and provide clear justifications for the role of each tooth type.

The human mouth is a sophisticated biological tool, containing a variety of teeth that have evolved to perform distinct roles in the initial stage of the digestive process.

Word bank: incisors · canines · molars · premolars · mastication · digestive system · specialised · consequently · furthermore · in contrast · essential · adaptation

1. Introduction: Describe the primary purpose of the digestive system and define the role of teeth within it. Start with: The primary function of the human digestive system is... (2 marks)

2. Incisors and Canines: Explain the physical differences between incisors and canines. Start with: Incisors are positioned at the front of the mouth and are designed to... (3 marks)

3. Molars and Premolars: Compare the function of molars to that of incisors. Start with: In contrast to the sharp edges of the incisors, molars possess a broad, flat surface which allows... (3 marks)

4. Scientific Justification: Explain why humans require different types of teeth rather than having only one uniform shape. Start with: It is advantageous for humans to possess heterodont dentition because... (4 marks)

5. Higher-Order Thinking: What might happen to the digestive process if an individual's molars were unable to function correctly? Start with: If the molars were ineffective, the digestive system would struggle because... (4 marks)

6. Conclusion: Summarise how oral hygiene impacts the efficiency of our teeth. Start with: Maintaining oral hygiene is essential for the long-term health of our teeth because... (2 marks)

Extension challenge: Nova the owl is curious about the teeth of other animals! Research an animal with a different diet (a herbivore, carnivore, or omnivore). Compare and contrast their dental structure with that of a human. Justify why their teeth have evolved to look that way based on their specific diet.