

Nova's Dental Discovery Investigation

Learning objective: Identify the different types of human teeth and explain their specific functions in the digestive system.

Welcome, young scientist! Join Nova the Barn Owl on a mission to map out the human mouth. Use your knowledge of biology to complete this investigation record. Think carefully about how our teeth are adapted for different types of food. Use the word bank to help you label and explain your findings.

Word bank: incisors · canines · premolars · molars · mastication · digestive system · enamel · structure · function

1. Identify the four types of teeth found in the human mouth. For each type, describe its shape and explain what kind of food it is best suited to bite or crush. (4 marks)

2. Explain why humans have different shapes of teeth rather than having the same shape for every tooth. How does this help our digestive system? (3 marks)

3. Compare and contrast the teeth of a herbivore (a plant-eater) with those of a carnivore (a meat-eater). Why might their teeth look different? (3 marks)

4. Justify why it is important to look after our tooth enamel. What might happen to the digestive process if we lost our teeth? (3 marks)

5. Nova wants to know: If you were designing a new type of tooth for a human, what shape would it be and what specific job would it perform? (2 marks)

6. Evaluate the impact of high-sugar foods on dental health. What advice would you give to a friend to ensure their teeth remain healthy? (2 marks)

Extension challenge: Research and write a short report on how the teeth of a shark differ from the teeth of a human. Why do sharks have so many rows of teeth, and how does this support their lifestyle in the ocean? Compare your findings with Finn the Dolphin's knowledge of marine life.