

A Smile for Science: Understanding Our Teeth

Learning objective: To identify, name, and describe the functions of different types of human teeth, and understand the importance of dental hygiene.

Read the text carefully and answer the questions below. Ensure you use full sentences and specific evidence from the passage where required.

Bea the honeybee loves to buzz around the garden, but today she is visiting a dental clinic to learn about human teeth. Humans are omnivores, meaning they have a specialised set of teeth to process both plants and meat. At the front of the mouth are the incisors, which are sharp and chisel-shaped, perfect for biting into a crisp apple. Beside them sit the pointed canines, designed for tearing food. Further back in the mouth, we find the premolars and molars. These have larger, flatter surfaces that act like little grinding stones to crush food before it is swallowed. Protecting these teeth is enamel, the hardest substance in the human body. However, even this tough layer can be damaged by sugar and bacteria, which form a sticky film called plaque. If we do not brush our teeth twice a day, this plaque can lead to decay. By maintaining excellent oral hygiene, we ensure our teeth remain healthy for a lifetime of eating and smiling. Nova the owl reminds us that just like a scientist's tools, our teeth must be cared for to function effectively.

Word bank: incisors · canines · premolars · molars · enamel · plaque · hygiene

1. Identify the two types of teeth that are primarily used for grinding or crushing food. (2 marks)

2. What is the name of the substance that acts as a protective shield for our teeth, and why is it important? (2 marks)

3. Explain why having different shapes of teeth is an evolutionary advantage for humans who are omnivores. (3 marks)

4. What might happen to a person's oral health if they frequently consume sugary snacks but do not brush their teeth? (2 marks)

5. Justify why it is essential to replace a toothbrush every three months. Do you think this is a necessary expense? Explain your reasoning. (3 marks)

Draw: Draw a diagram of the human mouth, labelling the incisors, canines, and molars, and add a small speech bubble for Bea the honeybee explaining one fun fact about teeth.



Extension challenge: Research the 'dental formula' for an adult human. Compare and contrast this with the teeth of a herbivore or carnivore of your choice. Justify why their tooth structure differs based on their typical diet.