

Max's Dental Discovery Challenge

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

Max the monkey is investigating why humans have different shapes of teeth. Look at the three main types of teeth listed below. Your task is to match each tooth type to its specific function and its position in the mouth, then explain why this variety is essential for human survival.

Word bank: incisors · canines · molars · tearing · crushing · biting · grinding · digestion

1. Max found an incisor. Explain its shape and why it is perfectly adapted for its primary role in eating. (2 marks)

2. Compare and contrast the function of canines and molars. Why would a human struggle to eat a varied diet if they only possessed molars? (2 marks)

3. Justify your answer: Why do you think humans have molars at the back of the mouth rather than the front? (2 marks)

4. What might happen to the digestive process if our teeth could not grind food into smaller particles? (2 marks)

5. Explain why it is vital to brush these different types of teeth to prevent decay. How does plaque affect the structure of a tooth? (2 marks)

6. If you were designing a robot that needed to consume both plant-based leaves and tough, fibrous roots, which tooth types would you prioritise and why? (2 marks)

Draw: Draw a scientific diagram of a human mouth. Label the positions of the incisors, canines, and molars. Use different colours to represent how each tooth type interacts with different food groups (e.g., green for vegetables, brown for bread).



Extension challenge: Research the differences between human teeth and those of a herbivore (like a cow) or a carnivore (like a lion). Write a paragraph explaining how their teeth have evolved to suit their specific diets, using your best scientific vocabulary.