

TOPIC	NATIONAL CURRICULUM	KEY VOCABULARY	POSSIBLE TRIP
ANIMALS INCLUDING HUMANS	- Describe the simple functions of the basic parts of the digestive system in humans. - Identify the different types of teeth in humans and their simple functions. - Construct and interpret a variety of food chains, identifying producers, predators and prey.	TIER 2 (Academic): Describe, identify, function, process, compare, construct, interpret. TIER 3 (Topic Specific): Digestive system, mouth, teeth, tongue, oesophagus, stomach, liver, gallbladder, anus, large intestines, small intestines, stool, rectum, salivary glands, pancreas, duodenum, molars, canines, premolars, incisors, milk teeth, adult teeth, food chain, herbivores, omnivores, carnivores, food source, prey, predator, consumer, producer, food web.	Centre of the Cell (Whitechapel): Located inside working medical research laboratories, offering immersive interactive pod shows detailing human organ systems, teeth types, and digestive pathways. Garden Museum (Lambeth): KS2 hands-on workshops where pupils construct habitat food webs, examine minibeast diets, and analyse energy transfer between producers and consumers. Dental hygiene visit/demonstration or interactive human biology body exhibit.
PRIOR LEARNING	Y2 & Y3: Human nutrition, basic food groups, simple food chains, and skeletal structures.		

	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
ENQUIRY QUESTION	What are the different types of human teeth and what jobs do they do?	How do the teeth of carnivores, herbivores, and omnivores differ?	What happens to food in our mouth, oesophagus, and stomach?	How do the small and large intestines extract nutrients and water?	How do nutrients move from producers to consumers in food chains?	How do complex food chains operate across different global biomes?
LEARNING OBJECTIVES	To identify incisors, canines, and molars and describe their functions.	To compare animal dentition and link tooth shape to diet.	To describe initial human digestion processes (mechanical and chemical breakdown).	To describe nutrient absorption in the intestines and waste elimination.	To construct and interpret food chains with producers, predators, and prey.	To construct habitat food chains (coral, polar, savannah) and analyse nutrient flow.
ACTIVITY WORKING SCIENTIFICALLY SKILLS	CLASSIFYING: Use dental mirrors/models to identify incisors, canines, molars; test chewing actions on different food textures.	CLASSIFYING: Compare skull replicas of lions (large canines), cows (large molars), and humans (mixed teeth).	MODELLING: Model mechanical/chemical breakdown using crushed crackers, banana, orange juice (acid), and tights (oesophagus).	MODELLING: Squeeze digested mixture through tights/stockings to demonstrate nutrient absorption into blood and solid waste removal.	MODELLING: Construct food chains using local organism cards; label producer (plant), primary consumer, predator, and prey.	RESEARCHING: Research food web connections in polar, coral reef, or savannah habitats using secondary sources.

ASSESSMENT	State functions: incisors (biting), canines (tearing), molars (crushing/grinding).	Connect tooth structure directly to herbivore, carnivore, or omnivore diets.	Trace food path through mouth, salivary glands, oesophagus, and stomach.	Detail roles of small intestine (nutrient absorption) and large intestine (water removal).	Correctly sequence producer → primary consumer → secondary consumer.	Interpret predator/prey roles and energy transfer across biomes.
END POINT ASSESSMENT	Pupils can identify human teeth types and their functions, trace the path of food through the digestive organs, explain nutrient absorption into the blood, and construct habitat food chains labelling producers, consumers, predators, and prey.					
HIGHER ORDER QUESTIONS	Why do human children lose their milk teeth and get a set of adult teeth?	Why would a cow struggle to eat its diet if it had teeth like a tiger?	Why does stomach acid not dissolve the stomach lining itself?	What would happen to human health if the small intestine could not absorb nutrients?	Why are plants always called 'producers' in every food chain?	How does removing an apex predator impact the entire habitat food chain?
FURTHER OPTIONAL QUESTIONS/BIG QUESTIONS FOR DISPLAY	Why do humans have different shaped teeth while a tiger only has long pointed teeth? What happens to an apple after you bite, chew, and swallow it? Why are green plants essential for every food chain on planet Earth?					
INCLUSION & ADAPTATION	Mouth model showing color-coded teeth types (Blue=Incisors, Red=Canines, Yellow=Molars).	Skulls visual match cards: Meat eater vs Plant eater dentition.	Hands-on tights digestive simulation with step-by-step visual picture card sequence.	Organ diagram puzzle template (Mouth → Oesophagus → Stomach → Intestines).	Jigsaw food chain cards with pre-printed directional energy arrows.	Color-coded biome mats (Blue=Coral, White=Polar, Yellow=Savannah).
GREATER DEPTH	Investigate eggshell erosion in acidic liquids (vinegar, cola) to model dental decay.	Analyse evolutionary tooth adaptations in extinct hominids and megafauna.	Research liver, gallbladder, and pancreatic enzyme contributions to digestion.	Measure intestinal surface area optimizations (villi micro-structures).	Construct complex habitat food webs containing interconnected trophic levels.	Predict ecological consequences of invasive species introductions on local food chains.