Year 4

Animals including Humans Digestion and Teeth

The Big Questions

What if we had no teeth?

Why do different animals have different shaped teeth?

What if humans were not top of the food chain?

Why is the small intestine called that, when it is longer than the large intestine?

Core Knowledge

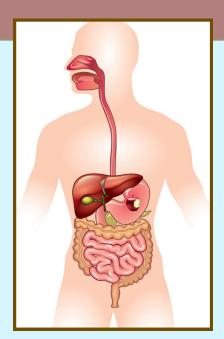
- Humans have four main types of teeth: incisors, canines, molars and pre-molars which each have different jobs.
- Incisors are used to bite and cut food.
- Canines are used to tear and rip food.
- Molars grind food down at the back of the mouth.
- Premolars hold the food in place and help to crush it.
- Some people have wisdom teeth which are believed to have been used by our Mesolithic and N eolithic ancestors, who you studied in Year 3, to break down rough foods like sticks and reed plants
- Wisdom teeth also provided replacement teeth for teeth that wore down or fell out as ancient tribes were not able to look after their teeth in the same way we can.
- With our modern lifestyle, wisdom teeth no-longer have a job in digestion and can be removed.
- To take care of our teeth we can try to limit the amount of sugary foods and drinks we eat, brush our teeth twice a day and visit the dentist regularly for check-ups.
- The mouth, teeth and tongue are the first parts of the digestive system.



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Core Knowledge

- Acids and enzymes in the stomach start to break down the food.
- The stomach also has muscles surrounding it which contract to help churn up the food.
- The partially digested food moves onto the small intestine next, which works hard to carry on the process of digestion and make sure all the nutrients and minerals are absorbed into the blood stream.
- The large intestine is the final stage of the digestive system where the last of the water is absorbed, and the waste from the food hardens and forms faeces (poo).



(https://lah.elearningontario.ca/CMS/public/ exported_courses/SNC2P/exported/SNC2PU01/ SNC2PU01/SNC2PU01A02/_content.html)

- The small intestine is around 7 meters long whereas the large intestine is only around 1.5 metres long but it is a lot wider.
- Scientists use food chains to show how energy from the sun is used by animals in a chain from plants through to animals and even humans.



(https://www.schoolsofkingedwardvi.co.uk/ks2-science-year-4-2c-animals-food-chains/)

- Food chains always start with a producer which is a green plant that converts the sun's energy into food. You learnt about the process of photosynthesis in Year 3.
- Animals then eat the producer and are called consumers.
- Some animals only eat plants and are called herbivores. Their teeth are designed for this diet.
- Some animals only eat meat (other animals) and are called carnivores they have teeth
 designed to help them tear and chew the meat.
- Animals that eat both plants and other animals are called omnivores.

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Key vocabulary

Incisors—a human's front teeth (usually the first four), used for biting and 'snipping' through food

Canines—the next teeth back. Humans have a pair of these on both the top and bottom jaw. These are used for tearing or ripping through foods such as meat

Premolars—behind the canine teeth, used for holding food steady in the mouth and helping crush and grind it

Molar—the largest teeth at the back of the mouth, used for crushing and grinding food.

Wisdom teeth—large, strong teeth that most adults develop (although not all as our diet does not require them)

Mouth, Tongue, Teeth—these are the first parts of the digestive system

Saliva—the liquid in your mouth (spit) which contains enzymes (chemicals) to start breaking down food

Oesophagus—the long, muscular tube that links your mouth with your stomach

Stomach—where food is mixed with more digestive juices and churned around

Ileum—(part of the small Intestine) lies between the stomach and the large intestine and is where most of the absorption of nutrients takes place.

Colon—(Large intestine) the longest part of the large intestine where water, electrolytes and some nutrients are removed from partially digested food.

Anus—is the opening where the gastrointestinal tract ends and where feaces are passed from your body..

Faeces—waste matter after food has been digested (the scientific word for poo).

Food Chains:

Producer—a plant, the first part of the food chain

Consumer—an animal that eats the plant or another animal

Herbivore—an animal that only eats plants

Carnivore—an animal that only eats other animals (meat)

Omnivore—an animal that eats both plants and meat – many humans are omnivores

As scientists we will

- 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.













