



Year 4 Science Knowledge Organiser: teeth and the digestive system



Key vocabulary

canine	pointed teeth near the front of the mouth in humans and some animals.
carnivore	an animal that eats meat.
decay	natural process of slowly losing health or strength.
digestion	the breaking down of food that is eaten.
enamel	The hard white substance that forms the outer layer of the tooth.
excretion	Process of getting rid of faeces, urine or sweat through the body.
faeces	the solid waste substance that people and animals get rid of from their body by passing it through the anus.
food chain	the order in which living things depend on each other for food.
incisor	the teeth at the front of your mouth which you use for biting into food.
intestines	the tubes in your body through which food passes when it has left your stomach.
molar	the large, flat teeth towards the back of your mouth that you use for chewing food.
nutrition	the process of taking food into the body and absorbing the nutrients in those foods.
oesophagus	the part of your body that carries the food from the throat to the stomach.
omnivore	person or animal that eats both meat and plants.
predator	an animal that hunts, catches and eats other living things.
prey	An animal that is hunted, caught and eaten by other living things.
producer	a plant that produces its own food.
rectum	part of the digestive system where stools are stored before leaving the body through the anus.
saliva	the watery liquid that forms in your mouth and helps you to chew and digest food.
stomach	the organ inside your body where food is digested before it moves into the intestines

Focus scientists

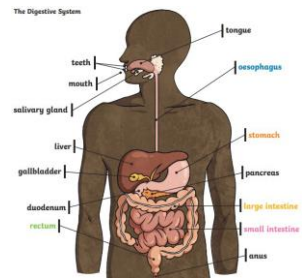
Pierre Fauchard (1679-1761) wrote the first complete scientific description of dentistry. The book described basic function of teeth and removing decay and restoring teeth.

William Beaumont, (1785 - 1853), an army surgeon, was the first person to observe and study human digestion as it occurs in the stomach.



Digestive system

- The smell of food triggers **saliva** to be produced.
- The digestive system begins with the mouth and teeth where food is chewed. **Saliva** is mixed with the food which helps to break it up.
- When the food is small enough to be swallowed, it is pushed down the **oesophagus** by muscles to the **stomach**.
- In the **stomach**, food is mixed further.
- The mixed food is then sent to the small **intestine** which absorbs nutrients from the food.
- Any leftover broken down food then moves on to the large **intestine**.
- The food minus the nutrients arrives in the **rectum** where muscles turn it into **faeces**. It is stored here until it is pushed out by the **anus**. This is called **excretion**.



Key Knowledge

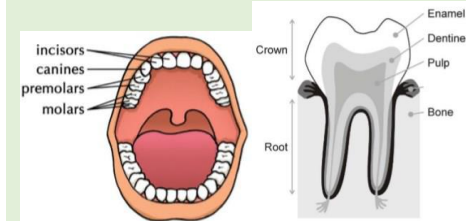
Teeth

What is the role of our teeth? for cutting and chewing food. They start the digestive process .

What are the different names and functions of our teeth?

Canines are pointed for tearing and ripping food - these are usually used when chewing meat.

- Incisors** are shovel shaped and help bite lumps out of and cut food.
- Premolars** and **molars** are flat and they grind and crush food.

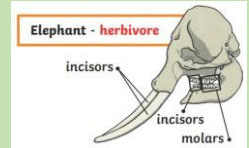


How do we look after them? by brushing and flossing and ensuring that they do not eat foods high in sugar. Not looking after teeth can lead to an in-crease in plaque and tooth **decay**.

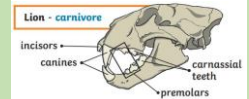
Teeth in other animals

The teeth of an animal are designed to eat different foods depending on the diet of the animal. Examples of the types of teeth of a **herbivore**, a **carnivore** and an **omnivore** are below:

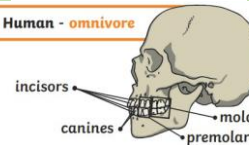
Herbivore



Carnivore



Omnivore



Food Chains

Food chains are the connections between **producers**, **prey** and **predators**. All the living things in a food chain rely on each other. A food chain describes how different organisms eat each other, starting out with a plant and ending with an animal.

An Example of a Food Chain
The arrows in a food chain show the flow of energy.

