

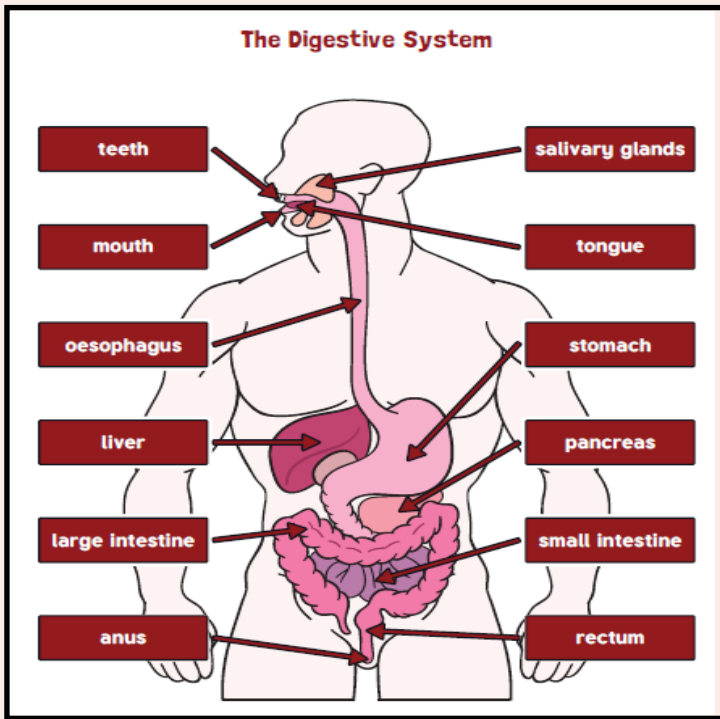


Year 4 - Animals Including Humans

Digestion is important for breaking down food into nutrients, which the body uses for energy, growth and cell repair. Food and drink must be changed into much smaller pieces of nutrients before the blood absorbs them and carries them to cells through the body. There are many organs in the digestive system, each with a particular job that is crucial for the digestive system to function properly and effectively.

Key Vocabulary

Word	Definition
absorb	to soak up liquid
digest	to break food down into smaller pieces so it can be used by the body
egest	to get rid of waste material (food)
produce	to make
acid	a sour liquid that causes a chemical change
bolus	a ball of chewed food
contraction	tightening of the muscle
enzyme	a protein that speeds up digestion by breaking down food
function	the job it does
stool	another word for faeces or poo!
chemical digestions	to break down food using enzymes and acid
mechanical digestion	to break down food using movement



Digestive Organs and their Functions

Word	Definition
mouth	where food enters the digestive system
teeth	tear, rip and chew food
salivary glands	produce saliva
tongue	moves the food into a bolus and pushes it to the oesophagus
oesophagus	a muscular tube which uses contractions to move the bolus from mouth to stomach
stomach	mixes acid and enzymes to turn food into a paste
liver	produces bile to break down fat
pancreas	produces enzymes which break down fats, proteins and carbohydrates
small intestine	absorbs nutrients from the food
large intestine	helps absorb water from the food
rectum	hold the stool until you go to the toilet
anus	where the stool is released

Fascinating Facts

Our salivary glands produce 1.5 litres of saliva a day!

It takes 7 seconds for food to travel to the stomach once you have swallowed it.

Food will reach your stomach even if you eat upside-down!

Our stomach can stretch. An adult's stomach can hold approximately 1.5 litres of food and drink.

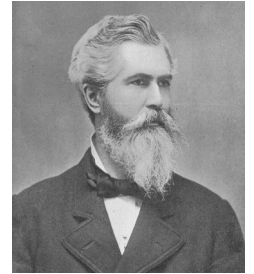


Year 4 - Digestive System and Teeth

The teeth are an important part of the digestive system and every tooth has a special job to do. The teeth are responsible for crushing and grinding the food we eat into smaller pieces so the food can move along in the digestive process. To ensure we prevent tooth decay and cavities, we need to think about our diet and food choices we make to keep our teeth clean and healthy.

Scientist Spotlight

Washington Sheffield was the inventor of toothpaste as we know it today. Dr Sheffield was a skilful American dental surgeon, who was born on the 23rd of April 1827.



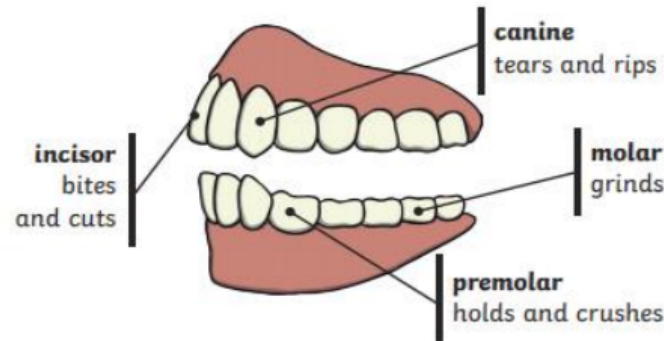
Dr Sheffield created his own tooth powder to use on his patients. In 1875, he developed a ready-made 'Tooth Crème' with mint flavourings and, thanks to his son, was the first to package it in a tube.

Dr Sheffield began to make and sell his tooth crème to his patients. Due to the popularity of his product, Dr Sheffield and his son built a laboratory and factory behind his house!

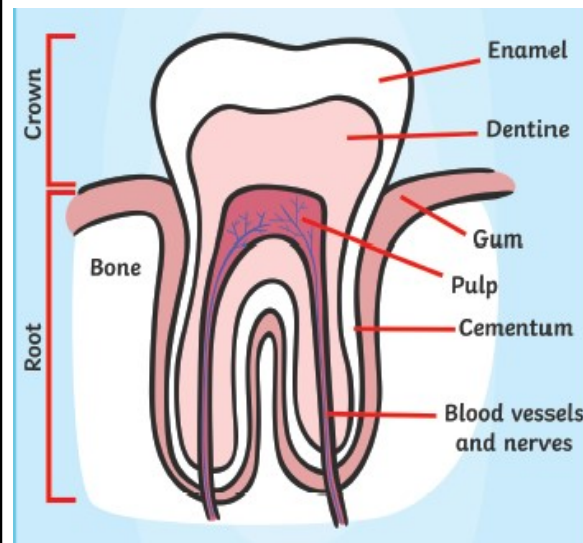
Key Vocabulary

Word	Definition
incisors	a type of tooth at the front of the mouth used for biting and cutting
canines	next to the incisors, they are sharp for tearing and ripping
premolars	flat, wide teeth towards the back of the mouth used for chewing, holding and crushing
molars	tooth type at the back of the mouth used for grinding and crushing
wisdom	a third molar that we no longer really need
enamel	hard, white outer layer of tooth
root	anchors the permanent tooth into the gum
tooth decay	damage to the tooth
herbivore	animal that only eats plants
omnivore	animal that eats both meat and plants
carnivore	animal that only eats meat

Types of Teeth and their Functions



The Structure of a Tooth



Key Facts

Tooth decay is damage to your tooth enamel. It can be a problem for people of all ages.

Plaque, a sticky film of bacteria, constantly forms on your teeth. When you eat or drink foods containing sugars, the bacteria in plaque produce acids attack the tooth enamel.



Toothache and bad breath are symptoms of tooth decay. It can lead to problems such as holes in the teeth and gum disease, which can result in the removal of teeth.