

St. Veronica's Primary School – Science Knowledge Organiser

Topic: Animals including humans

Year: 4

Strand: Biology

What should I already know?

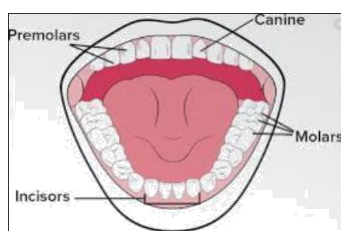
The parts of the human body and what they do.
All animals need water, air and food to survive.
The different ways in which humans are healthy.
Animals get **nutrition** from what they eat.
Humans and some animals have skeletons and **muscles** for support, protection and movement.
What **carnivores**, **omnivores** and **herbivores** are.
Excretion is one of the seven living processes.

What will I know by the end of the unit?

What is the role of our **teeth** and how do we look after them?

Teeth are used for cutting and chewing food.
They start the **digestive process** which gives us the energy we need to live.
Humans look after their teeth by brushing and flossing and ensuring that they do not eat foods high in sugar.
Not looking after teeth can lead to an increase in **plaque** and **tooth decay**.

What are the different names and functions of human **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 cutting food.
Premolars and **molars** are flat and they grind and crush food.

Investigate!

Investigate the amount of sugar in drinks and learn how sugar leads to an increase in **plaque** and how this destroys tooth **enamel**.
Compare the teeth of **carnivores**, **omnivores** and **herbivores**. What do you notice? Match animals to their teeth and explain your reasons for this.
Identify the parts of the **digestive** system and explain their functions Create a presentation to show how our food is **digested**.

Vocabulary

absorb	soak up or take in
canine	pointed teeth near the front of the mouth of humans and of some animals
carnivore	an animal that eats meat
decay	gradually destroyed by a natural process
digestion	breaking down ingested food material
enamel	the hard white substance that forms the outer part of a tooth
excretion	the process of eliminating faeces , urine, or sweat from the body
faeces	the solid waste substance that people and animals get rid of from their body by passing it through the anus
herbivore	an animal that only eats plants
incisor	the teeth at the front of your mouth which you use for biting into food
ingested	When animals or plants ingest a substance, they take it into themselves, for example by eating or absorbing it
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
muscles	something inside your body which connects two bones and which you use when you make a movement
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 eats all kinds of food, including both meat and plants
organ	a part of your body that has a particular purpose
plaque	a substance containing bacteria that forms on the surface of your teeth
premolar	two situated on each side of both jaws between the first molar and the canine
process	a series of actions used to produce something or reach a goal.
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

The Digestive System

The smell of food triggers **saliva** to be produced.

The **digestive** system begins with the mouth and teeth where food is **ingested** and chewed.

Saliva is mixed with the food which helps to break it up.

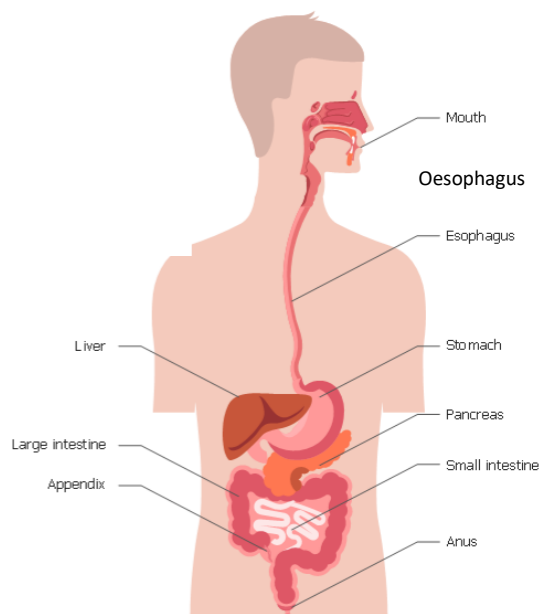
When the food is small enough to be swallowed, it is pushed down the **oesophagus** by **muscles** to the **stomach**.

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**.



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Question 1: Place these in order of what happens in the digestive system.	Start of unit:	End of unit:
teeth chew food and saliva helps the food to break down.		
any final nutrients are absorbed before waste is pushed out by the anus.		
in the stomach the food is mixed further and then sent to the intestines		
the food is pushed down the oesophagus to the stomach.		

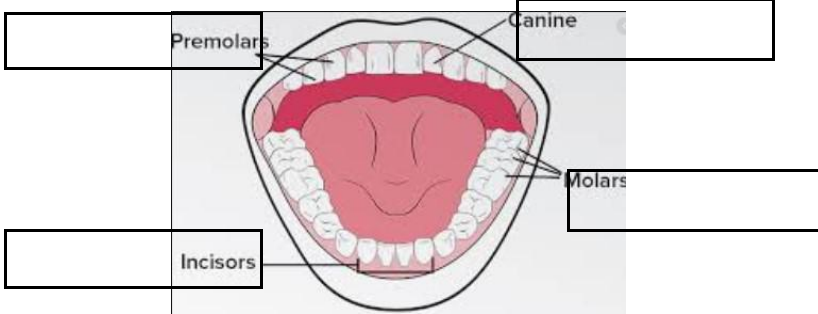
Question 2: Which of these life processes takes place when waste is pushed out?	Start of unit:	End of unit:
respiration		
reproduction		
excretion		
growth		

Question 3: The substance that contains bacteria on the surface of your teeth is called...	Start of unit:	End of unit:
plaque		
canines		
molars		
incisors		

Question 4: The substance that helps break down food in the mouth is...	Start of unit:	End of unit:
oesophagus		
saliva		
nutrients		
stomach		

Question 5: What carries food from the mouth to the stomach?	Start of unit:	End of unit:
blood		
oesophagus		
tongue		
teeth		

Question 6: Tooth decay is when..	Start of unit:	End of unit:
teeth are used to chew		
teeth are kept healthy		
teeth are destroyed and damaged		
teeth are brushed twice a day		

Question 7: Label the types of teeth: incisors, molars, premolars, canines	Start of unit:	End of unit:
		

Question 8: Name two ways in which we can look after our teeth.	Start of unit:	End of unit:

Question 9: Is this the skull of a carnivore, omnivore or herbivore? Explain how you know.



Start of unit:

End of unit:

Question 10: Is this the skull of a carnivore, omnivore or herbivore? Explain how you know.



Start of unit:

End of unit: