

Science Knowledge Organiser

Year 4 Autumn 1

Animals including humans

Year 4

Main Foci:

Biology

What should I already know from Year 3

- identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- identify that humans and some other animals have skeletons and muscles for support, protection and movement

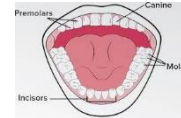
Vocabulary

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 <u>process</u>
digestion	breaking down <u>ingested</u> food material
enamel	the hard white substance that forms the outer part of a tooth
excretion	the process of eliminating <u>faeces</u> , 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 <u>ingest</u> a substance, they take it into themselves, for example by eating or <u>absorbing</u> it
intestines	the tubes in your body through which food passes when it has left your <u>stomach</u>
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 <u>bones</u> and which you use when you make a movement
nutrition	the process of taking food into the body and <u>absorbing</u> the <u>nutrients</u> in those foods
oesophagus	the part of your body that carries the food from the throat to the <u>stomach</u>
omnivore	person or animal eats all kinds of food, including both meat and plants
organ	a part of your body that has a particular <u>purpose</u>
plaque	a substance containing bacteria that forms on the surface of your <u>teeth</u>
premolar	two situated on each side of both <u>jaws</u> between the first <u>molar</u> and the <u>canine</u>
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 <u>organ</u> inside your body where food is <u>digested</u> before it moves into the <u>intestines</u>

What will I know by the end of the unit?

What are the different types of teeth and their functions?

I will know:



1. We use our teeth to bite things and stop us from choking. These are our **incisors**.
2. We have sharp teeth that help us tear at food. They are called **canines**.
3. We have teeth called **molars** at the back of our mouth. These are used to chew our food.

What is tooth decay?

I will know:

1. That **enamel** protects our teeth and must be taken care of.
2. I know that food and drinks containing acid can damage this enamel and cause **decay**.
3. I know how acid can effect teeth and what I need to do to prevent this.



How do different drinks effect our teeth?

I will know:

1. I understand the difference effects different drinks have on our teeth.
2. I know how to compare different drinks through fair testing and investigations.
3. I know how to draw conclusions from the investigation and can explain my results.
4. I know which drinks are more likely to affect my teeth and cause tooth **decay**.



What does toothpaste do?

I will know:

1. I know how to set up a comparative test.
2. That different toothpastes have different effects on our teeth.
3. How effective different toothpastes can be at stopping **tooth decay**.



What is the digestive system?

I will know the basic steps of digestion:



1. **Digestion** starts when the teeth start to break the food down.
2. **Saliva** is added and the tongue rolls the food into a ball.
3. The food is swallowed and passes down the **oesophagus** to the stomach
4. In the stomach the food is broken down by chemicals in the stomach
5. The food passes through the **small intestine**
6. The food passes through the **large intestine**
7. The waste leaves the body through the **rectum/anus**

I know that we eat to ensure our body gets enough energy and **nutrients** to survive
I know that the food we eat is too big to travel through our body so needs to be broken down by the **digestive system** to be absorbed by the body

What are the functions of the different parts of the digestive system?

I will know:

1. How to make a model of the different stages of the **digestive system**.
2. The different stages of the digestive system and explain them to others using the model and key vocabulary.
3. The function of each organ of the digestive system.



How do I explain the digestive system in humans to others?

I will know:

1. The functions of each organ of the **digestive system** from the start of the process until the end.
2. How to present and identify key information by explaining the functions of the **digestive system**.

Science Knowledge Organiser		
	Year	Main Foci: