Caroline Haslett Primary School. Year 4 Science – Animals Including Humans (Humans – Spring 2)

What should I already know?

- The parts of the human body and what they do.
- All animals need water, ai 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.

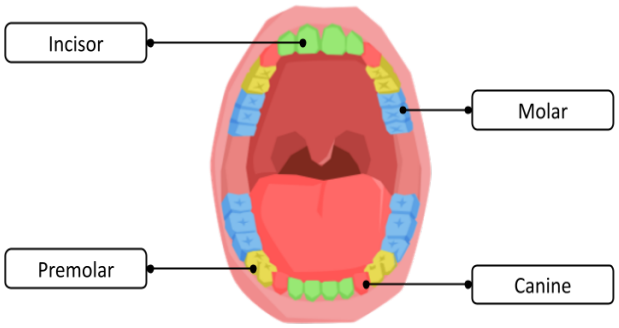
What I will know by the end of the unit?

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 them twice a day.
- If we don't look after our teeth it can lead to an increase in plaque and tooth decay.

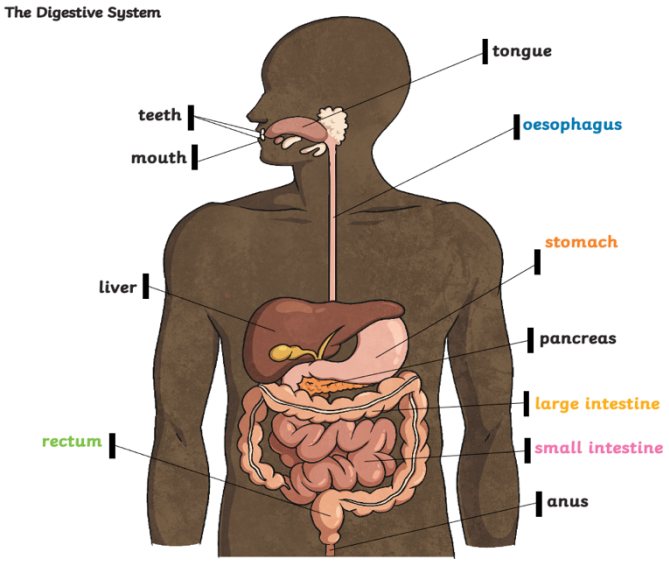
What are the different names and functions of the human teeth?

- **Canines** are pointed for tearing and ripping food. They are usually used when chewing meat.
- **Incisors** are shovel shaped and are used to bite and cut.
- **Premolars** hold and crush whilst **molars** grind.



The Digestive System

- The smell of food triggers the saliva to be produced.
- The digestive system begins in the mouth and teeth where food is ingested and chewed.
- Saliva is mixed with the food which helps us break it up.
- When the food is small enough to be swallowed, it is pushed down into the oesophagus by the muscles to the stomach.
- In the stomach, the 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 in to the large intestines.
- 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 Vocabulary

Canines – pointed teeth near the front of the mouth of humans and some animals.
Incisors – the teeth at the front of your mouth which you use for biting food.
Pre molars – two situated on each side of both jaws between the first molar and second.
Molars – the large, flat teeth towards the back of your mouth that you use for chewing food.
Plaque – a substance containing bacteria that forms on your teeth if they are not looked after.
Digestion – break down ingested food material.
Saliva – the watery liquid formed in your mouth that helps you to chew and digest food.
Oesophagus – a muscular tube which moves food from the mouth to the stomach.
Stomach – an organ where the food is broken down with stomach acid and before it moves into the intestines.
Small intestine – where nutrients is absorbed into the body.
Absorbed – to soak up or take in.
Large intestine – water is absorbed from remain waste and faeces are formed.
Rectum – faeces are stored here before leaving the body through the anus.
Faeces – the solid waste that people and animals get rid of from their body.

Working scientifically	An observation involves looking closely at objects, materials and living things. Ask relevant scientific questions, independently, about the world around them and begin to identify how they can answer them. Scientific enquiries can be set up and carried out by following or planning a method. Begin to independently plan, set up and carry out a range of comparative and fair tests, making predictions and following a method accurately. A prediction is a statement about what might happen in an investigation, based on some prior knowledge or understanding. A fair test is one in which only one variable is changed and all others remain constant. Observations can be made regularly to identify changes over time. Begin to choose which observations to make and for how long and make systematic, careful observations and comparisons, identifying changes and connections. Use scientific vocabulary to report and answer questions about their findings based on evidence collected. Draw simple conclusions and identify next steps, improvements and further questions. Results are information, such as data or observations, that have been found out from an investigation. A conclusion is the answer to a question that uses the evidence collected.
Animals including humans and evolution	The digestive system is responsible for digesting food and absorbing nutrients and water. Describe the purpose of the digestive system, its main parts and each of their functions. The main parts of the digestive system are the mouth, oesophagus, stomach, small intestines, large intestines and rectum. The mouth starts digestion by chewing food and mixing it with saliva. The oesophagus transports the chewed food to the stomach, where it mixes with stomach acid and gets broken down into smaller pieces. In the small intestine, nutrients from the food are absorbed by the body. In the large intestine, water is absorbed by the body. The remaining undigested waste is stored in the rectum before excretion through the anus. Identify the four different types of teeth in humans and other animals, and describe their functions. There are four different types of teeth: incisors, canines, premolars and molars. Incisors are used for cutting. Canines are used for tearing. Premolars and molars are used for grinding and chewing. Carnivores, herbivores and omnivores have characteristic types of teeth. Herbivores have many large molars for grinding plant material. Carnivores have large canines for killing and tearing meat.
Possible Activities	Investigate the amount of sugar in drinks and learn how sugar leads to an increase in plaque and how this destroys the tooth enamel. Compare the teeth of carnivores, omnivores and herbivores. What do you notice? Then match animals to their teeth given explanations for this. Identify parts of the digestive system and explain their functions. Create a model of the digestive system and how it works.