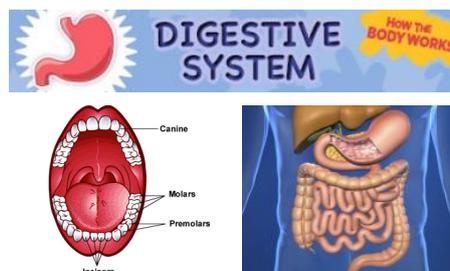


Knowledge Organiser Year 4: Science – Animals including Humans

Pupils will learn:

- About parts of the digestive system and to describe the simple functions of the basic parts of the digestive system in humans.
- To identify the different types of teeth in humans and their simple functions.
- Why animals have different types of teeth.
- To construct and interpret a variety of food chains and webs, identifying producers, predators and prey.

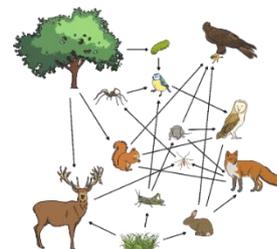


Did you know...?

- The human digestive system is approximately 9 metres long, with the small intestine making up 7m of it.
- Our salivary glands produce around 1.5 litres of saliva each day!
- The adult stomach has a very small volume when empty but can expand to hold up to 1.5 litres of food when full.
- Stomach rumblings are caused by wave-like muscular contractions at the walls of the stomach and small intestine and are louder and more noticeable when the stomach is empty as the sound is not muffled.
- A newborn baby has teeth in her gums. We have two sets of teeth in our lifetime. The first or baby set starts to appear at about six months and is complete when we are about three years old. These 20 teeth are small and will start to fall out from about six years of age. They are replaced by a permanent set of up to 32 larger adult teeth.
- Inside your teeth are blood vessels and nerves.

Key Questions

- What is the digestive system and what does it play in the process of turning food into energy?
- How does food travel through the body?
- Why are teeth different shapes?
- How long does it take for food to get to the stomach once you have chewed it?
- If you are upside down does it take longer for food to reach the stomach?
- What part do the small and large intestine play in digesting food?

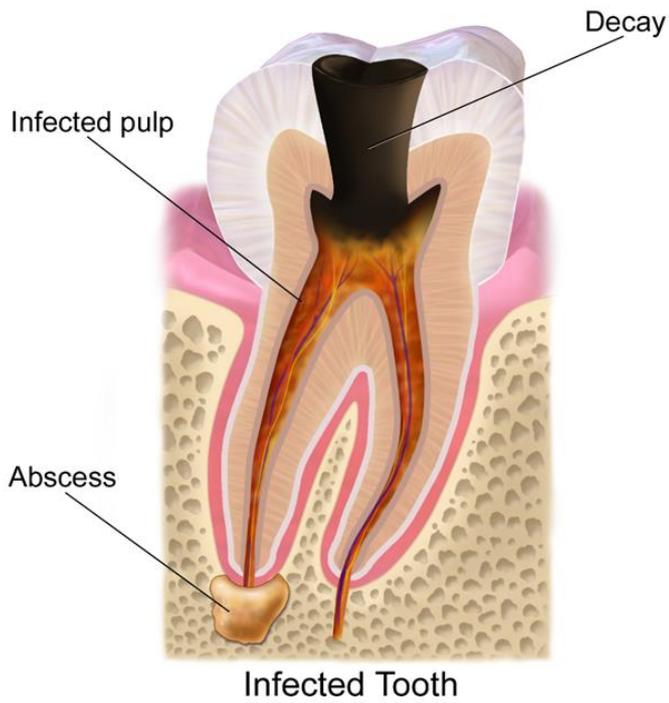
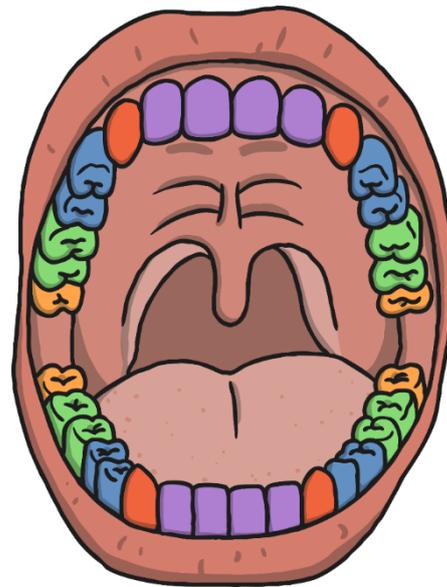


Key Vocabulary

Digestive system	This is designed to extract the goodness from food and get rid of the leftovers.	Stomach	An organ in the body where food is digested.
Nutrition	The substances that you take into your body as food and the way that they influence your health.	Intestine	A long tube through which food travels from the stomach and out of the body while it is being digested.
Muscle	One of many tissues in the body that can tighten and relax to produce movement.	Oesophagus	The tube in the body that takes food from the mouth to the stomach.
Saliva	Saliva is mostly made of water and it helps you to chew, taste and swallow food. It contains enzymes which start to break down the food we eat.	Enzymes	Special molecules in the body which act to create a chemical reaction. In the digestive system the reaction they produce breaks down food.
Incisor	Eight teeth at the front of the mouth which have a straight, sharp edge and help cut up the food.	Premolars	Eight teeth behind the canines and are lower and bumpy and help to grind food.
Canines	Four teeth which are tall and pointed and are used to hold and tear food.	Molars	Twelve molars at the back of the mouth are big, flat teeth that also help to grind and chew.
Enamel	Yellowish-white hard material covering a tooth.	Tooth decay	When bacteria in the mouth begin to eat away at teeth.
Food chain	Shows how the lives of organisms are linked in natural communities made up of a series of organisms that eat each other. It shows how energy is transferred from one organism to another via food.	Herbivores	An animal that eats only plants.
		Omnivore	An animal that eats both plants and meat.
		Carnivores	An animal that eats meat.
Consumer	Animals that eat plants in a food chain.	Producer	Plants in a food chain.
Predators	An animal that hunts, kills, and eats other animals.	Prey	An animal that is hunted and killed by another for food.

Some Useful diagrams

- Canine
- Molars
- Premolars
- Incisors
- Wisdom Teeth



The Human Digestive System

