

Science Y4 Animals including humans/The Human Body

In this unit of work the children will take part in activities to explore the human digestive system and learn about how food is transported around the body. They will learn about different teeth and their functions in the human body and match teeth to different animals. They will construct and interpret a variety of food chains, identifying producers, predators and prey.

In this unit children will:

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions
- Construct and interpret a variety of food chains, identifying producers, predators and prey
- Name and label the body parts involved in the digestive system - mouth, tongue, teeth, oesophagus, stomach, small and large intestine.
- Use a diagram to describe the journey of food through the body explaining what happens in each part
- Identify the different types of teeth in humans and their simple functions through research
- Know the differences between teeth, compare and contrast - molar, incisors and canines of herbivores and carnivores.
- Understand the terms producer, energy, primary consumer, predator and tertiary consumer in a food chain.
- Know that a food chain is a simple way to show the direction in which energy moves from the producer to the various consumers to the top of the tertiary consumer.
- Understand that a food web shows the direction in which the energy travels when animals and producers are eaten by more than one thing.
- Know that a food web shows multiple food chains where there are multiple feeding relationships.
- Research into the teeth of different animals

Prior Learning

F.S Explore the natural world around them.

Y1 Naming common animals

Y2 Basic needs of animals

Y3 Nutrition comes from what we eat

Cross Curricular Links

Geography - Water cycle and rivers

Key Vocabulary

Canine - Pointed teeth near the front of the mouth of humans and some animals

Carnivore - An animal that eats meat

Digestive system - This is designed to extract the goodness from food and get rid of the leftovers

Energy - The ability and strength to do physical things

Environment - All the circumstances, people, things and events around them that influence their life

Food chain - A series of living things which are linked to each other because one thing feeds on the one next to it in the series

Food web - A combination of food chains that integrate to form a network

Habitat - The natural environment in which plants or animals normally live and grow

Herbivore - An animal that only eats plants

Incisor - The teeth at the front of your mouth which you use for biting food

Intestine - Long tube which food travels from the stomach and out of the body whilst it is being digested

Life processes - There are 7 life processes that tell us what living things are

Molar - The large, flat teeth towards the back of your mouth which you use for chewing food

Nutrition - The process of taking food into the body and absorbing the nutrients in those foods

Omnivore - A person or animal who eats all kinds of food, including both plants and meat

Organism - A living thing

Oesophagus - The tube that takes food from the mouth to the stomach

Predator - An animal that kills and eats other animals

Premolars - Smaller chewing teeth

Prey - An animal hunted or captured by others for food

Primary Consumer - An organism that feeds on producers which are always herbivores

Producer - Organisms that make their own food using energy from the sun

Secondary Consumer - Organisms that eat primary consumers for energy

Stomach - Where food is digested

Tertiary Consumer - Those who eat primary and secondary consumers as their main source of food

Key Knowledge

- Animals can be grouped into carnivores, herbivores and omnivores and other ways in which to classify animals.
- Living things depend on each other to survive.
- There are 7 life processes and nutrition is one of them.
- Nutrition is the life process by which animals get energy.
- A food chain is a simple way to show the direction in which energy moves from the producer to the various consumers to the top of the tertiary consumer.
- The producer (a plant) gets its energy from the sun.
- The arrow in a food chain shows the direction in which the energy travels.
- A food web shows the direction in which the energy travels when animals and producers (plants) are eaten by more than 1 thing.
- When part of the food chain is removed, this has an impact on the other parts of the food chain. The number of some species will increase, while the population of others will decrease.
- The population of tertiary consumers depends on the healthy populations of producers, primary and secondary consumers.
- Our body needs food to provide it with energy, vitamins and minerals. In order to use food we must first break it down into substances that the various organs and cells in our body can use. This is digestion.
- The digestive system acts in stages to digest our food. Each stage is important and prepares the food for the next stage.

- The entire length of our digestive system is around 20 to 30 feet.
- The main stages of the digestive system are chewing, swallowing, stomach, small intestine and large intestine.
- Saliva is made up of water and it helps you chew, taste and swallow food. It contains enzymes which start to break down the food we eat.
- Humans have 3 main types of teeth - canines for tearing and ripping; incisors for helping you bite off and chew; molars to help you crunch and grind food.
- Animals that only eat meat are carnivores.
- Animals that only eat plants are herbivores.

Key Questions

- Why is important that humans have different teeth in their mouth?
- Why do herbivore animals need different teeth to carnivores?
- Why is it important that you chew your food before swallowing it?
- What role does our epiglottis play when swallowing?