

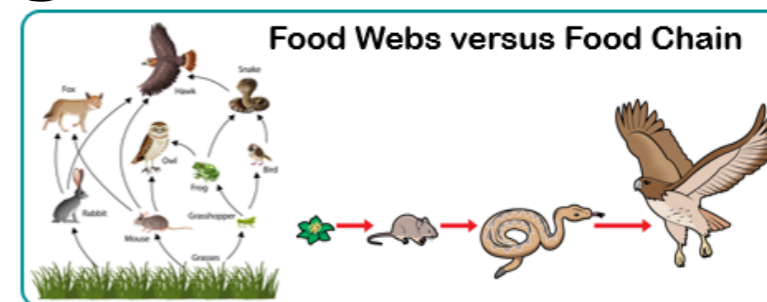
Year 4 Science Autumn 1 Unit

Animals including Humans

Key Scientific Skills	Year 4 Animals, including humans
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	
Ask relevant questions and using different types of scientific enquiries to answer them	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
Set up simple practical enquiries, comparative and fair tests	Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	Identify differences, similarities or changes related to simple scientific ideas and processes
Gather, record, classify and present data in a variety of ways to help in answering questions	Use straightforward scientific evidence to answer questions or to support their findings

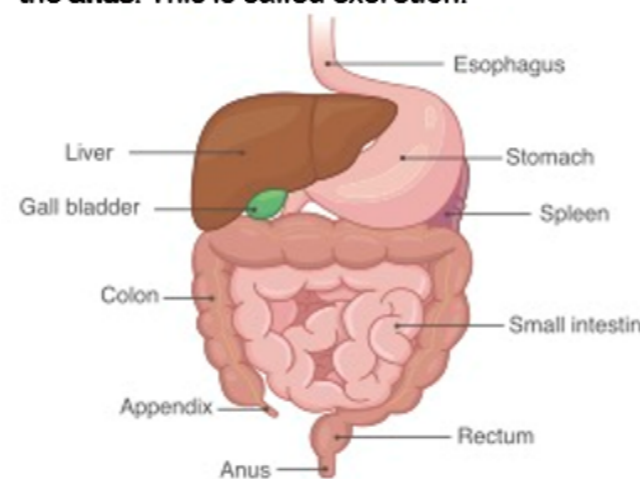
The Digestive System

- 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 (poo). It is stored here until it is pushed out by the **anus**. This is called excretion.

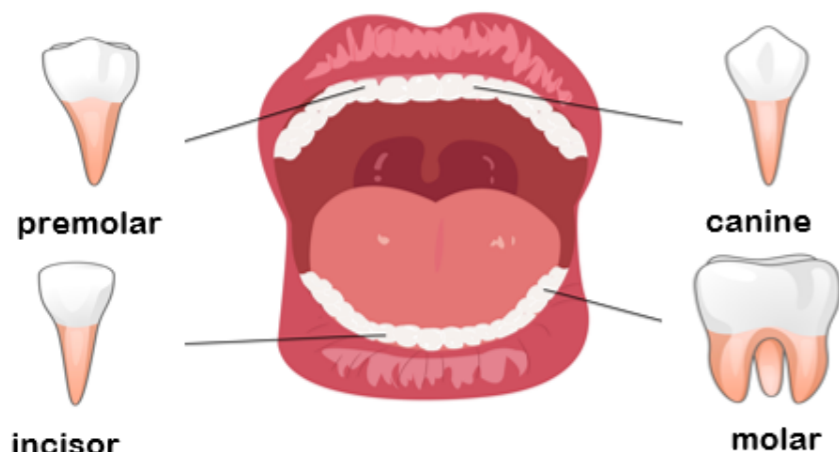


Rocket Words

digestive system	series of organs that break down food
oesophagus	tubes running from mouth to stomach
saliva	a fluid in the mouth which helps break down food
peristalsis	the movement of food through parts of the digestive system
incisors	front teeth for cutting food
molars	wide, flat teeth for grinding food
enamel	very hard layer covering the tooth
fluoride	ingredient in toothpaste that helps prevent cavities forming
consumer	an animal which gets its food from other living things
predator	an animal that gets its food from killing and eating other animals
tundra	region found in the Arctic, where the climate is cold and windy
hide	the skin of an animal



Types of Teeth and their function



Different teeth have different functions
Teeth of animals are designed for the foods they eat

- **Herbivores** (e.g., horses) have little use for canines and mainly use incisors and molars
- **Carnivores** (e.g., Lion) mainly use canines and incisors, they don't have molars (have premolars – small molars)
- **Omnivores** (e.g., humans) use all three

Tooth enamel is the hardest substance in the human body
Humans have two sets of teeth; milk teeth and adult teeth

Progression of Knowledge

Unit	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Animals, including humans	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	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	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	Describe the changes as humans develop to old age	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans