

Prior knowledge

- That vertebrates are animals with a backbone and there are five types of vertebrate (mammals, fish, reptiles, amphibians, birds).
- Some animals give birth to live young, but others lay eggs.
- Animals go through a series of changes known as a life cycle
- All animals need water, air and food to survive.
- The basic parts of the human body and which sense they use.
- To stay healthy humans need to eat a balanced diet and
- exercise to stay healthy.

Key vocabulary:

Muscles - inside part of your body that connects two bones and is used when you move.

Tendons - cords that join muscles to bones

Joint - Part of the skeleton that allows movement

Vertebrate - animals with backbones

Invertebrate - animals without back bones

Endoskeleton - skeleton inside the body

Hydrostatic - a very flexible skeleton found in animals like jellyfish

Nutrition - Food necessary for health and growth

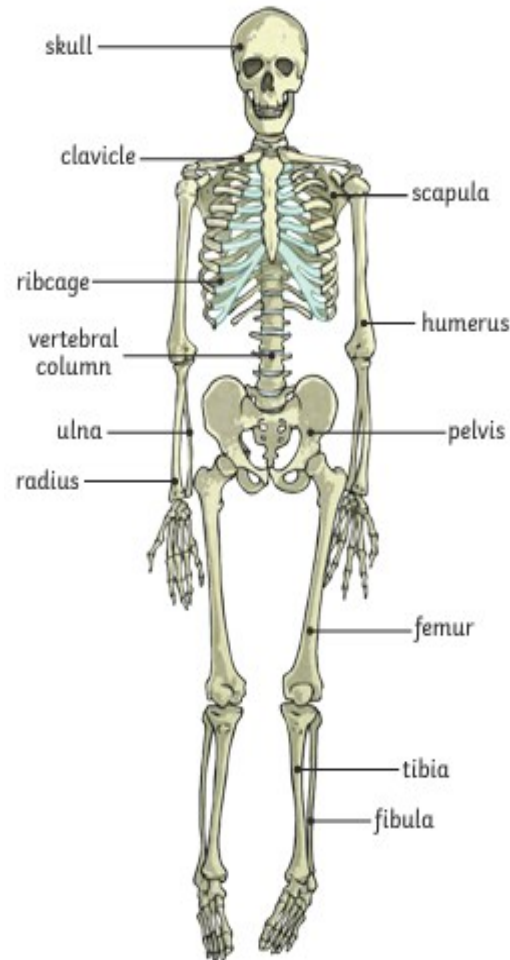
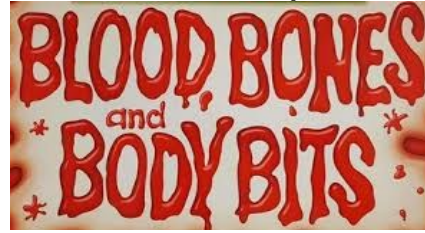
Nutrients - Useful substances that help animals and plants grow.

Energy - strength to be able to move and grow

Saturated fats - types of fats considered to be less healthy

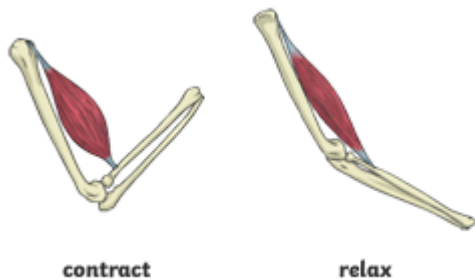
Unsaturated fats - fats that give you energy, vitamins and minerals

Year 3/4/5 Cycle C



Knowledge:

- That animals, including humans, need the right types of nutrition.
- For a balanced diet, our bodies need carbohydrates, protein, fat, fibre, vitamins, minerals and water, in the right amount.
- The skeletons support the body of the human or animal and protect their organs and allow movement.
- That some skeletons are outside of the body and are called exoskeletons.
- Animals with skeletons have muscles attached to the bones.
- A muscle has to contract (shorten) to make a bone move.
- Muscles work together in pairs to move the bones they are attached to by taking turns to contract and relax.
- Carbohydrates help your body work properly.
- Protein is needed for chemical reactions in our body.
- Vitamins & minerals help your body grow and repair itself.
- Fats and oils act as an energy store.
- Fibre gives you energy.
- Living things need food to grow and to be strong and healthy.
- Plants can make their own food, but animals cannot.
- To stay healthy, humans need to exercise, eat a healthy diet and be hygienic.
- Animals, including humans, need food water and air to stay alive.



BLOOD, BONES and BODY BITS

Prior knowledge

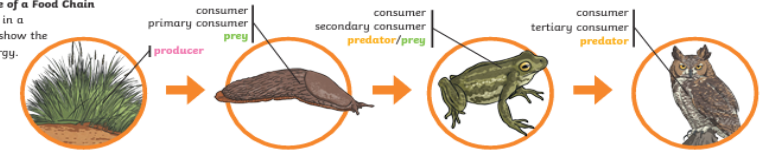
- The parts of the skeletal and muscular structure and what they do.
- All animals need water, air and food to survive.
- The different ways in which humans are healthy.
- Animals get nutrition from what they eat.
- Humans and some animals have skeletons and muscles for support, protection and movement.
- What carnivores, omnivores and herbivores are.
- Excretion is one of the seven living processes.

Scientific skills and enquiry:

Use research to find out a range of things

Use straight forward scientific evidence to answer questions or to support his/her finding

An Example of a Food Chain
The arrows in a food chain show the flow of energy.



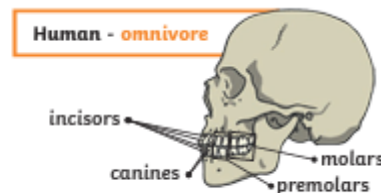
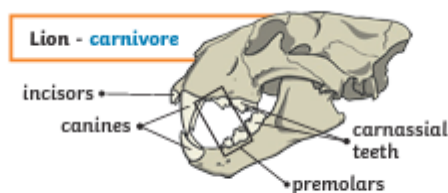
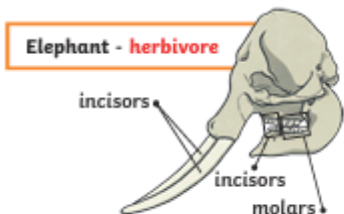
Key vocabulary:

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 process
digestion - breaking down ingested food material
enamel - the hard white substance that forms the outer part of a tooth
excretion - the process of eliminating faeces, 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 ingest a substance, they take it into themselves, for example by eating or absorbing it

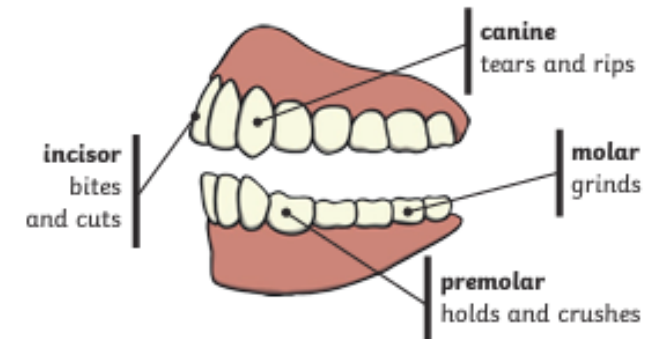
Key vocabulary:

intestines - the tubes in your body through which food passes when it has left your stomach
molar - the large, flat teeth towards the back of your mouth that you use for chewing food
oesophagus - the part of your body that carries the food from the throat to the stomach
omnivore - person or animal eats all kinds of food, including both meat and plants
organ - a part of your body that has a particular purpose
plaque - a substance containing bacteria that forms on the surface of your teeth
premolar - two situated on each side of both jaws between the first molar and the canine
saliva - the watery liquid that forms in your mouth and helps you to chew and digest food
stomach - the organ inside your body where food is digested before it moves into the intestines

The teeth of an animal are designed to eat different foods depending on the diet of the animal.
 Examples of a herbivore, a carnivore and an omnivore skull:



Human Teeth and Their Functions



BLOOD, BONES and BODY BITS

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- All animals need water, air 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.

The Big Idea

Knowledge:

The smell of food triggers saliva to be produced.

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.

It is stored here until it is pushed out by the anus.

This is called excretion.

To help prevent tooth decay:

- limit sugary food and drink;
- brush teeth at least twice daily using a fluoride toothpaste;
- visit your dentist regularly

The Digestive System

