Brooklands Primary School

Knowledge Organiser - Science: Year 3 Animals including humans

Key ideas and information

Animals, including humans, need the right types and amount of nutrition. Animals, including humans, cannot make their own food but instead get nutrition from what they eat.

Different animals need different types of nutrients to keep healthy. Food can be split into different groups including fruit and vegetables, protein, fats, carbohydrates, dairy. Each group has different health benefits.

Humans need to eat a balanced diet to keep healthy.

Humans and some other animals have skeletons for support, protection and movement.

Animals can have an endoskeleton, exoskeleton or hydrostatic skeleton. Animals can be vertebrates or invertebrates.

Humans have an endoskeleton and each bone has a scientific name.

Muscles and bones work together for movement.

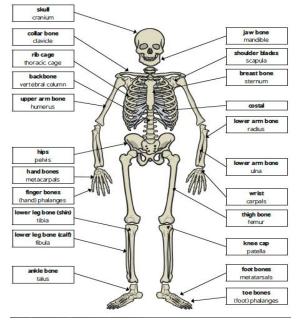
Our bodies are made up of different types of cells. Cells form to make tissue. Skeletal muscles are made up of just muscle tissue.

Some muscle movement is voluntary and we can control it. Other muscle movement is involuntary and we don't have control over it.

Muscles work in pairs.

Each muscle has a scientific name.





Scientific Vocabulary

<u>Animal</u> – Animals are living things which grow, move, reproduce and respond to things in their environment. They are different to plants because they depend on other living things for their food and can't produce their own.

<u>Human</u> – A human is a person or human being. They belong to the mammals animal group due to their characteristics.

<u>Skeleton</u> – The inner framework of bones and cartilage in animals. Skeletons support the body and protect softer body parts.

<u>Bone</u> – The hard tissue that forms the skeleton of a person or animal.

Vertebrate – An animal with a backbone.

Invertebrate – An animal without a backbone.

<u>Muscle</u> – Tissue in the body of animals and humans that moves parts of the body. They move the body by working in pairs, contracting and relaxing.

<u>Nutrients</u> – Nutrients are substances that help plants and animals to grow and stay healthy.

Balanced diet - A diet consisting of

the proper quantities and proportions of foods needed to maintain health or growth.

<u>Food groups</u> – Any of the categories into which different foods may be placed according to the type of nutrients they give to a living thing.

<u>Endoskeleton</u> – An internal skeleton e.g. a human skeleton.

<u>Exoskeleton</u> – An external skeleton e.g. the shell of a crustacean.

<u>Hydrostatic skeleton</u> – The animal has no bones and instead has a fluid-filled compartment in their body called a coelom.

<u>Voluntary</u> – Muscle movement that animals including humans control.

<u>Involuntary</u> – Muscle movement that animals including humans are not in control of.

Working scientifically and scientific enquiry

Can you classify food into different groups? Can you classify animals based on the type of skeleton they have? Can you use secondary sources to label a diagram of the bones in the body?

