What should I already know?

The parts of the human body and what they do.

There are five types of vertebrates (mammals, fish, reptiles, amphibians, birds).

Vertebrates are animals that have a backbone.

Invertebrates are animals that do not have a backbone.

All animals need water, air and food to survive.

Notice that animals, including humans, have offspring which grow into adults. Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.



Animals including humans

Year 3

What I will learn by the end of the unit

KEY KNOWLEDGE

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.

Humans (and many other animals) have a system of muscles in their bodies.

The main purpose of the muscles is for movement. As they contract, muscles move parts of the body around.

Muscles are also important for maintaining posture, helping humans/animals sit, stand and walk.

Some muscles (e.g. the heart) move by themselves - they are involuntary.

Humans (and many other animals) have a system of bones called a skeleton.

Skeletons help support your body and give it shape.

Skeletons are also important for movement. Muscles are attached to bones.

Skeletons help protect important parts of the body. E.g. the ribs protect the heart and lungs.

KEY SKILLS I WILL LEARN/USE

Ask relevant questions and using different types of scientific enquiries to answer them.

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

Recording findings using simple scientific language, drawings, labelled diagrams.

Identify differences, similarities or changes related to simple scientific ideas and processes.

Use straightforward scientific evidence to answer questions.

KEY VOCABULARY

Energy - the property that gives us strength of body or mind to do things or work.

Nutrition - the process of providing or obtaining the food necessary for health and growth.

Skeleton - a framework of bones supporting the body.

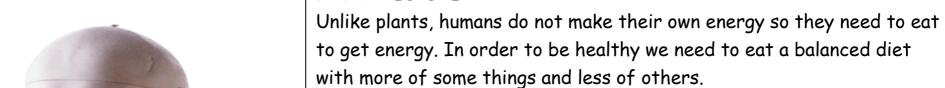
Muscle - a soft tissue in the body that contracts and relaxes to cause movement of the skeleton.

Healthy - in good physical condition.

Consumers - living things that eat other living things to get energy.

Vitamins - substances found in foods that keep you healthy.

Diet - the foods that a person, animal or community habitually eat.



BALANCED DIET -

PROTEIN - required for growth and repair of our bodies. Found in meats, poultry, fish, dairy products, eggs and beans.

CARBOHYDRATES - provide energy for the body. Found in grains, cereals, potatoes, bread, pasta and in some fruits and vegetables.

FATS - provide energy and help with building our bodies. Found in dairy products, red meats and some poultry and fish.

FIBRE - Help you digest your food. Found in cereals, fruit and bread.



Focus Scientists—Elsie Widdowson

Elsie Widdowson (1906-2000) was a British dietician and nutritionist who loved experiments. She wrote a book which told us for the first time what energy and nutrition was in different foods. She also played a key role in wartime rationing.

Greg Whyte OBE

Whyte (born 1967) is a former Olympian and a

sports scientist. He is a Professor in Applied Sport & Exercise Science at Liverpool John Moores University. He is an expert on exercise physiology, sports performance and rehabilitation. He has also been involved with Comic Relief.