Year 3: Animals, Including Humans

NUTRITIONAL VALUE OF FOOD:

Animals, including humans, need to eat in order to get the nutrients they need.

Fats can be healthy (unsaturated) and unhealthy (saturated) - we need healthy fats in small amounts.

Eating the right amount of each food group is called a balanced diet.

Fibre is needed for healthy digestion - it helps us go to the toilet regularly.

Food contains a range of nutrients called: carbohydrates, protein, vitamins, minerals, fats, sugars, water and fibre.

Carbohydrates give us energy.

Protein helps muscle growth and repair.

Too much unhealthy food can lead to certain diseases such as heart disease or diabetes.

Nutrients are needed in different amounts to keep the body healthy.

Vitamins and minerals come from fruit and vegetables and help keep illnesses away, such as colds.

A piece of food will provide us with a range of nutrients.

Sugars are not needed by the human body to be healthy - sugary foods need to be eaten in small amounts as treats.

Too much food can lead to a building up of fat that we don't need – this can lead to obesity and increase strain on joints and growing bones.

ANIMAL SKELETONS:

A skeleton is made of lots of bones.

Some animals, including humans, have a skeleton on the inside of their body - this is called an endoskeleton

The function of the skeleton is to protect vital organs and allow animals to stay upright and move.

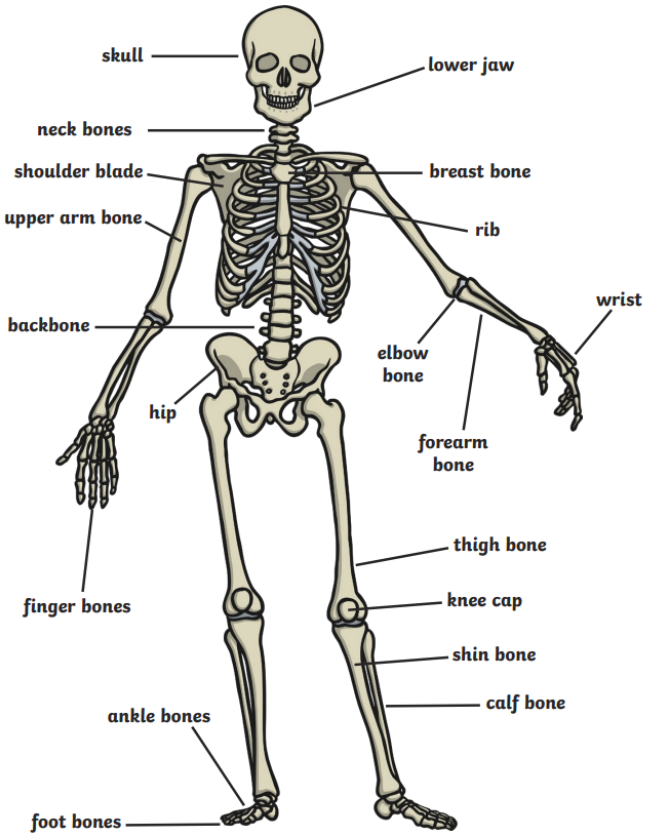
The skull protects the brain, the ribcage protects the heart and lungs.

Joints are where two or more bones join together, e.g. elbows, shoulders, knees, ankles etc.

Some animals have a skeleton on the outside of their bodies - this is called an exoskeleton.

Some animals do not have a bony skeleton and these are called invertebrates, e.g. earthworms, slugs etc.

Invertebrates have water held inside by muscles which acts like a skeleton.



MUSCLES:

Muscles can only pull (contract), they can't push.

Muscles are attached to bones by tendons.

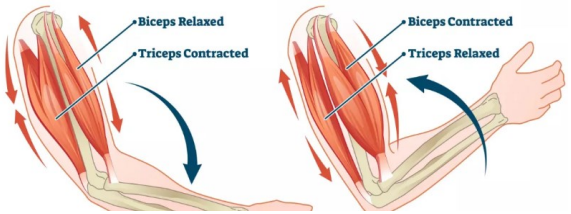
Our joints are controlled by muscles that work in pairs.

The muscles in the arm are called biceps that pull your arm up and the triceps that pull your arm down.

When a muscle contracts, it gets shorter and when a muscle relaxes, it gets longer.

Our muscles work in pairs to move our bodies.

In our leg, if the muscle on the back of our thigh contracts and get shorter. It bends our leg at our knee joint. If we want to extend our leg, the muscle at the front of our thigh contracts and gets shorter, and it extends our leg.



KEY VOCABULARY

BALANCED DIET: a variety of food that you regularly eat

CONTRACT: the tightening and shortening of muscles when you do some activity

ENDOSKELTON: the internal skeleton of an animal particularly a vertebrate

EXOSKELETON: the protective structure covering the outside of the body of many animals

INVERTEBRATE: an animals that does not have a backbone

JOINT: the place where two or more bones join

MUSCLES: something inside your body which is used to make a movement

ORGAN: a part of the body that is used for a particular purpose and is important to keeping the animal alive

RELAX: when the muscle becomes less stiff or firm and lengthens

RIBCAGE: the bony frame formed by the ribs around the chest

SKELETON: the collection of bones that provide support and protection for the body inside an animal

TENDONS: a strong cord in a human or animal body that joins muscle to bone