Year 3 Science : Animals including humans. Skeletons, muscles and nutrition

Autumn

Core Knowledge—Skeletons and muscles

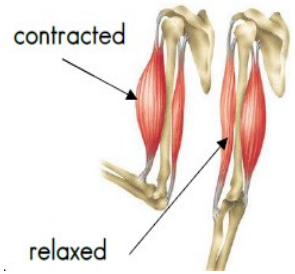
Humans, and some other animals, have skeletons and muscles which help them move and provide protection and support.

The skeleton **protects** our internal organs, keeps us **supported** and helps us **move**.

For example, the backbone supports your body and helps you sit, stand and walk. The rib cage protects our heart and our lungs and our skull protects our brain.

Skeletons bend at the joints such as knees and ankles. Joints are where two or more bones join together.

Skeletons move because bones are attached to muscles. Muscles work in pairs. When a muscle contracts, it gets shorter and pulls up the bone it is attached to. When a muscle relaxes, it goes back to its normal size.



Scientific Enquiry

Key Vocabulary

Vocabulary	Definition
carbohydrates	the main source of energy for our bodies (rice, potatoes, pasta, bread, sugar).
fats	stored for energy and creates a layer of fat to keep us warm (chocolate, sweets, butter, oil, cream).
fibre	These are parts of plants that cannot be digested by the body so help move food through the body
nutrition	how the body takes in food and how we work out what we need to eat to stay fit and healthy.
protein	repairs and builds muscles and organs (fish, meat, eggs and cheese).
Vitamins and minerals	these help us to grow, form bone and muscle and prevent infection (fruit and vegetables).

Core Knowledge—Nutrition

Animals, unlike plants which can make their own food, need to eat in order to get the nutrients they need.

Food contains a range of different nutrients – carbohydrates (including sugars), protein, vitamins, minerals, fats, sugars, water – and fibre that are needed by the body to stay healthy.

A piece of food will often provide a range of nutrients.

A healthy diet contains a balance of nutrients.