

Bomere and the XI Towns Federation Knowledge Organiser—Science

Topic: Science— Humans including skeletons

Class/Year Groups: Grinshill

Term: Autumn

What you 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.
- The different ways in which humans can be healthy.

What you will learn:

What are the different types of skeletons?

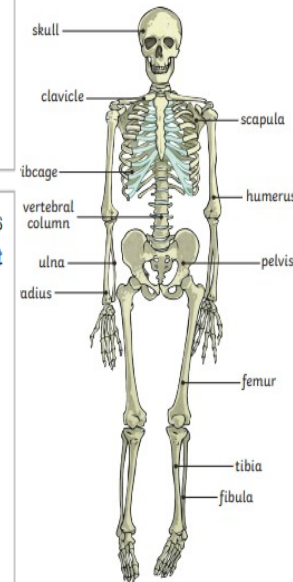
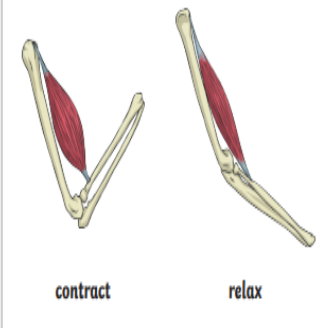
Vertebrates are animals that have a backbone. These skeletons are called endoskeletons - this means that the skeletons are on the inside of the bodies. These skeletons grow with the bodies.



Skeletons do three important jobs:

- protect organs inside the body;
- allow movement;
- support the body and stop it from falling on the floor.

Skeletal **muscles** work in pairs to move the bones they are attached to by taking turns to contract (get shorter) and relax (get longer).



Key vocabulary:

Vertebrate	Animals with backbones
Invertebrate	Animals without backbones
Muscles	Soft tissues in the body that contract and relax to cause movement
Tendons	Cords that join muscles to bones
Joints	Areas where two or more bones are fitted together
Healthy	In a good physical and mental condition
Nutrients	Substances that living things need to stay alive and healthy



National Curriculum Objectives:

- Notice that animals, including humans, have offspring which grow into adults
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene

