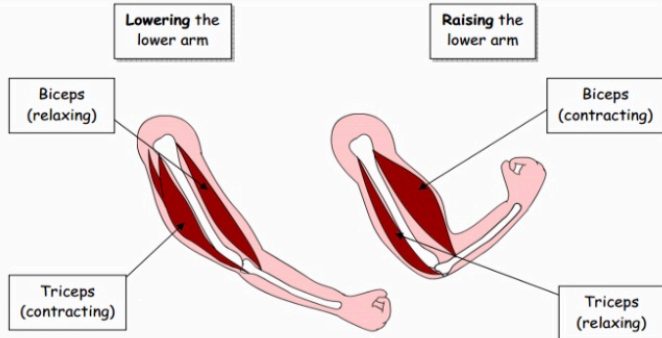


## What? (key Knowledge)

### Muscles

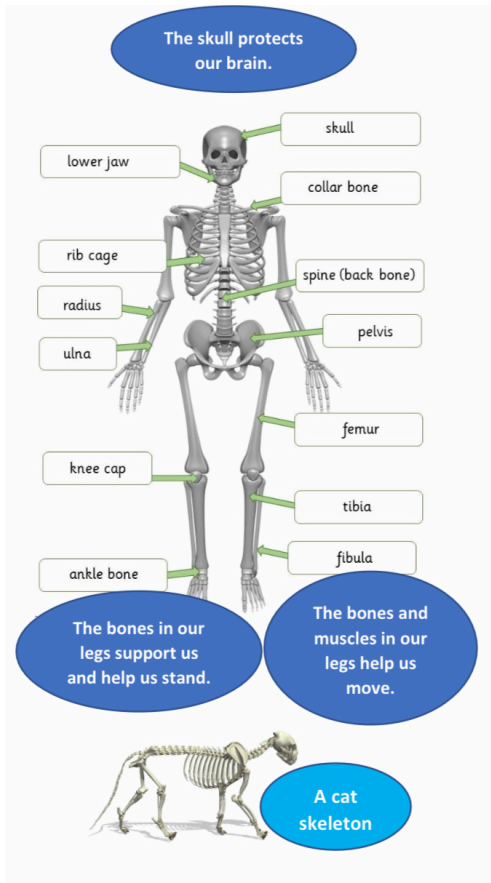
Skeletons move because bones are attached to muscles.  
 When a muscle contracts (bunches up), it gets shorter and so pulls up the bone it is attached. When a muscle relaxes, it goes back to its normal size.



### Skeleton

Skeletons do three important jobs

- 1) Protection - The skull/cranium protects the brain and eyes, the rib cage protects the heart, the vertebral column protects the spinal cord, etc.
- 2) Support - The skeleton supports the body and enables its shape and keeps vital organs in their place.
- 3) Movement - Bones along with joints enable actions like jumping, holding a pencil, rotating arms, etc.



## What? (key Vocabulary)

Spelling	Definition/Sentence
skeleton	keeps the body in shape, helps movement and protects organs
skull	a bone that protects the brain
ribcage	a bone that protects the heart
heart	muscle that pumps blood around the body
joints	area where two bones meet
muscle	attached to the bone and is responsible for movement
posture	the position that a person sits in
nutrients	substances that help plants and animals to grow
organ	tissues in the body that perform functions
digest	when food in the stomach is broken down
tendon	a strong cord in a person or animal's body which joins a muscle to a bone

### Types of Skeleton

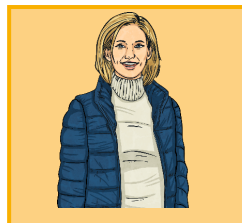
A further classification of skeletons comes from if an animal has a skeleton and where it is.

All vertebrates have an endoskeleton. However invertebrates can be divided again between those with an exoskeleton and those with a hydrostatic skeleton.

#### vertebrate



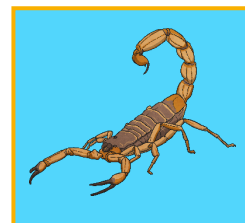
#### endoskeleton



#### invertebrate



#### exoskeleton



#### hydrostatic skeleton



### Living Things

Living things need food to grow and to be strong and healthy. Plants can make their own food, but animals cannot. To stay healthy, humans need to exercise, eat a healthy diet and be hygienic. Animals including humans need food, water and air to stay alive.

## What should I already know?

- The **town** I live in is called Bolton.
- Bolton is in Greater Manchester, which is a **county**. There are villages and towns in Lancashire, some of which are coastal.
- Greater Manchester is in England, which is a **country**.
- England is in United Kingdom, which is in the **continent** of Europe.
- The seven **continents** (including Europe) and five **oceans**.

## Geographical skills and field work

- Investigate your local area using maps, aerial photos and satellite imagery.
- Learn where you are in the world and describe a range of physical and human features of your locality.
- Locate the school and where they live. (Use postcode search on a digital map)
- Use aerial photos or a satellite view (such as those in Google/Bing maps) to identify key features of your locality e.g. buildings, shops, parks houses, town centre etc.
- Use Google Earth to locate your school, neighbourhood, local features, different land uses etc.
- Use historical maps to see what featured in your area fifty or one hundred years ago. How has land use changed?

- Bolton is a town in Greater Manchester.
- It is in the North-West of England.
- Bolton is surrounded by several smaller towns and villages that together form the Metropolitan Borough of Bolton.
- Bolton is a common Northern English name derived from the [Old English](#) *bothl-tun*, meaning a settlement with a dwelling.

## What? (key Vocabulary)

Spelling	Definition/Sentence
city	a large town that usually has a cathedral
country	a large area of land where people live under the same government
British Isles	Great Britain, Ireland and all nearby islands
United Kingdom	England, Scotland, Wales and Northern Ireland
coast	the land next to the ocean
capital city	the main city in a country, usually where the Government is located
region	a large area of land that is different from other areas of land
continent	very large landmasses found on Earth
atlas	a book of maps
climate	the general weather conditions that are typical of it
map	a drawing of a particular area such as a city, country or continent
river	a large, natural stream of fresh water that flows into the sea or a lake
village	a small group of houses, perhaps with a few shops. Thornton is a village
bird's eye view	the view of an area from above
human features	features designed and built by people
physical features	features which are natural (made by nature)

Map of Ancient Parishes & Townships



## Bolton Map

## Features of Lancashire

Human Features	Physical Features
Examples: schools, shops, cinema, roads, houses	Examples: hills, rivers, vegetation, fields, coast.
Lancashire has many villages (such as Thornton) and, market towns and towns (such as Blackpool). Lancashire has cities (Preston, Lancaster) Lancashire has many farms and its largest private sector industry is the defence industry (BAE). Historically it was famous for its mills and factories. Lancashire has some coastal, industrial and rural towns.	The River Wyre, Ribble and Lune all flow in to the Irish Sea. There is also a coastline. The climate in Lancashire is mild. The summers are warm; the winters are cool. Precipitation can be high. The landscape is a mixture of farming land, hills and sandy beaches.