

Key Concepts

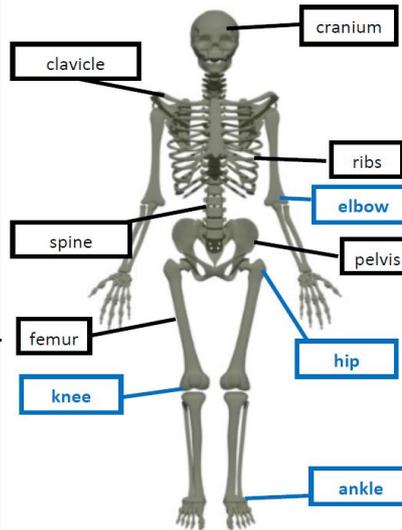
Key Vocabulary

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.



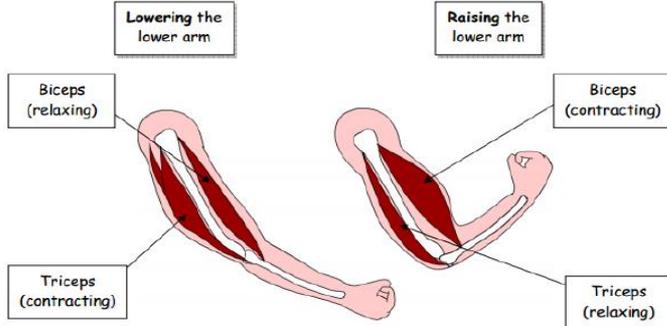
- When the skeleton exists outside the body, it is called an exoskeleton.
- An exoskeleton is a covering that supports and protects animals. These have to be shed and a new skeleton is grown



What does an endoskeleton do?

The three most important things a skeleton does are:

- provide support and shape to an animal's body
- allow movement through the joints
- protect organs (e.g. the skull protects the brain)



How do we move?

- Joints are where bones meet - they allow our bodies to move.
- Muscles contract and relax. And are connected to bones by tendons.

What are the different types of nutrients?

- Protein - help your body to grow and repair itself. Examples include red meat, yogurt, beans
- Carbohydrates - give you energy. Examples include bread, potatoes, pasta
- Fats - give you energy. Examples include nuts, oils, avocados
- Vitamins - keep your body healthy. Examples of foods high in vitamins include oranges.

- Minerals - keep your body healthy. Examples of foods high in vitamins include milk, sweetcorn, spinach
- Fibre - helps you to digest the food that you have eaten. Examples of foods high in fibre include wholegrain bread, cereals and lentils
- Water - helps to move nutrients in your body and get rid of waste that you don't need. Examples of foods high in water include celery.

backbone	The column of small linked bones down the middle of your back. Also known as spine
balanced diet	A variety of food that you regularly eat
contract	To make smaller by drawing together; shrink or make tighter
disease	An illness which affects people, animals or plants
endoskeleton	The internal skeleton of an animals, especially the bony skeleton of vertebrates
exoskeleton	The protective structure covering the outside of the body of many animals
hygiene	Keeping yourself and your surroundings clean
joints	The junction between two or more bones
muscles	Something inside your body which connects two bones and are used when you move.
nutrients	Substances that help plants and animals to grow
organs	A part of your body that has a particular purpose
relax	When a part of your body relaxes, it becomes less stiff or firm
starchy	Foods that contain a lot of starch (a nutrient which gives you energy)
skeleton	The framework of bones in your body
tendons	A strong cord which joins a muscle to a bone
vertebrate	A creature which has a spine

Working Scientifically Skills

	Asking relevant questions.		Setting up enquiries and choosing equipment.
	Explaining results – drawing conclusions and using results.		Setting up fair tests (with help)
	Recognising when to use other sources of information to find answers.		Choosing how to record information – tables, tally charts, Venn and Carroll diagrams and bar charts.

Famous Scientists



Diane France (1954-) solves mysteries and crimes by deciphering the stories bones tell her.