

Year 3 Skeletons and Muscles

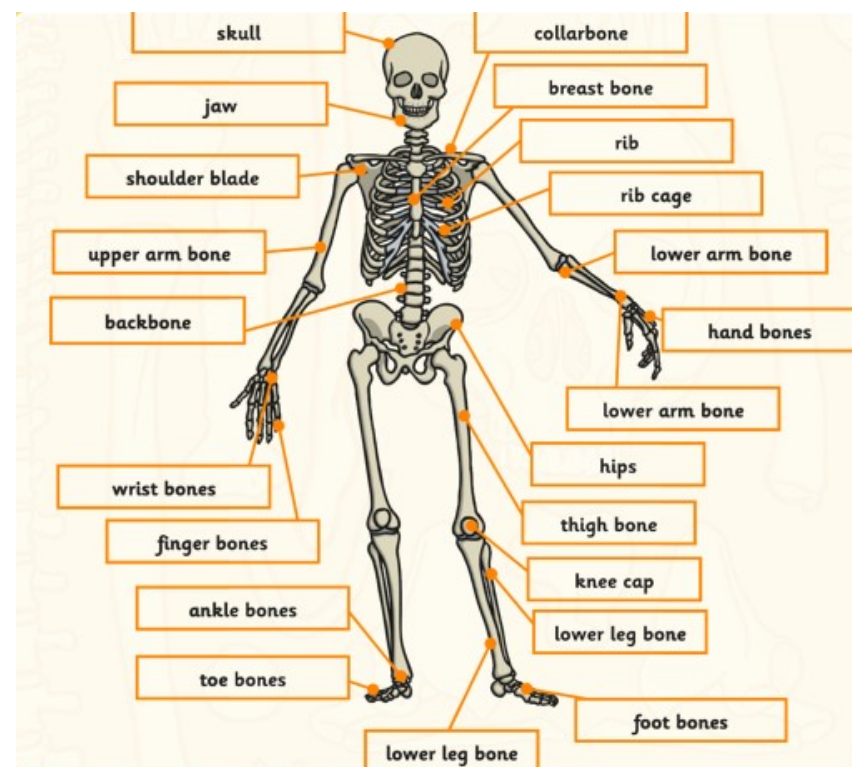
What our children should already know

- Understanding of things that are alive, were alive and have never lived.
- Knowledge of different animals and the different habitats they live in.
- Knowledge of which animals are classed as an in/vertebrate.

Key Vocabulary

- **Protect**—To protect someone or something means to prevent them from being harmed or damaged.
- **Skeleton**—The human skeleton is made of bone and grows as we grow.
- **Support**—If something supports an object, it is underneath the object and holding it up.
- **Pelvis**—The pelvis is a bony cradle-shaped structure located at the base of the spine.
- **Cartilage**—Cartilage is a connective tissue found in many areas of the body.
- **Tendon**—Muscles are attached to the bone by tendons and work in pairs to allow for smooth movement.
- **Spine**—Also known as your backbone, your spine is a strong, flexible column of ring-like bones that runs from your skull to your pelvis.
- **Muscles**—Muscles are attached to bones by tendons and help them to move.
- **Joint**—Joints allow the body to make movements. The body has many bones and are connected through the joints.
- **rib cage**—It is made up of curved bones. The rib cage is found in the chest area.
- **Endoskeleton**—The skeleton is on the inside.
- **Exoskeleton**—The skeleton is on the outside.
- **Hydrostatic**—The animal has no bones.
- **Invertebrate**—No backbone.
- **Vertebrate**—Has a backbone.

Diagrams



Final Outcome

In groups, children will teach another group about a specific animal bone. They will provide a range of explanations to prove why the bone is from the specific animal.

SMSC Links

Spiritual - Buried skeletons can be found in countries across the world.

Moral - Importance of looking after our bones and muscles.

Social - How are human bodies improved to promote sporting successes and how this is celebrated in communities.

Cultural - Different cultures may have different beliefs about how to treat skeletons.

Lesson sequence

Lesson 1 – WALT: recognize why we need a skeleton

Lesson 2 – WALT: Know the names and functions of the skeleton

Lesson 3 – WALT: Investigate the length of the femur bone in children of different heights

Lesson 4 – To compare, contrast and classify the skeletons of animals

Lesson 5 - WALT: Identify that humans have muscles for support, protection and movement

Lesson 6 – WALT: Investigate how muscles help animals move parts of their

Key Knowledge

- That humans cannot make their own food. They get their nutrition from what they eat.
- That humans have skeletons and muscles for support, protection and movement.
- Know that the body parts have special functions.
- Know the names of the body parts associated with skeleton and muscles.
- Explore how humans grow bigger as they reach maturity by making comparisons linked to body proportions and skeleton growth.
- Know how the skeletons of birds, mammals, fish, amphibians or reptiles are similar and the differences in their skeletons.
- Know that muscles, which are attached to the skeleton, help animals move parts of their body.

Choices

- What type of skeleton do you think provides the best protection?
- What are the best conditions for muscles to work in?

Skeletons and Muscles Retrieval Grid

What does the skull protect?	How do muscles help us to move?	Give a scientific name for a bone.	What are the functions of muscles?
What is an endoskeleton?	Where is the spine located?	What is a hydrostatic skeleton?	Describe how a joint works.
What type of skeleton does a human have?	What are the functions of a skeleton?	What does the ribcage protect?	What is a vertebrate?
Can you compare similarities and differences between the skeletons/muscles of different animals?	What is an invertebrate?	What is an exoskeleton?	Where are your biceps and triceps?

One Point	Two Points	Three Points	Four Points
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