

Science Knowledge Organiser

Skeletons and Movement

Key Questions:

- How many bones are there in the human skeleton?
- What are the functions of the skeleton?
- Why is it important?
- How are human skeletons similar to the skeleton of other mammals?
- What is an exoskeleton?
- How can you group these animals?
- What is a joint?
- Do all joints allow the same movement?
- What are biceps/triceps?
- What does contract/relax mean?

Step 1 Identify and name bones in the human body

Step 2 Functions of the skeleton

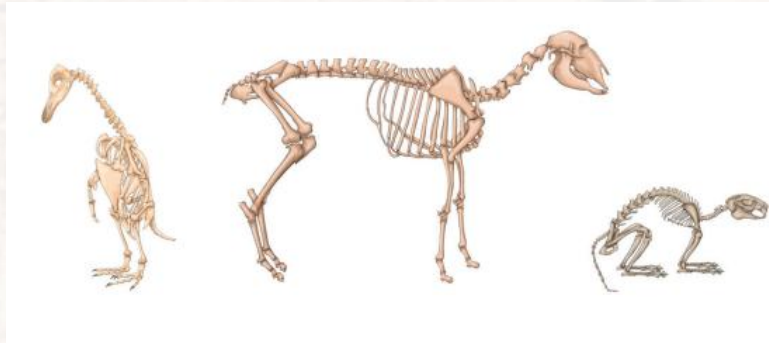
Step 3 Identify and name bones in a range of animals

Step 4 Animals with and without a spine

Step 5 Are all skeletons the same?

Step 1 Joints

Step 2 How we move

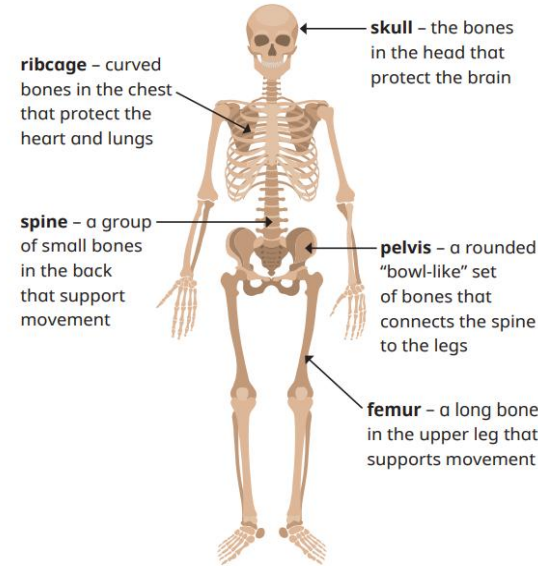


Useful Links:

- Information and games:
 - <https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zqfdpbk>
 - <https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zpbxb82>
 - <https://thehumanbodygame.co.uk/#info-skeleton-lowerleg>

Key vocabulary

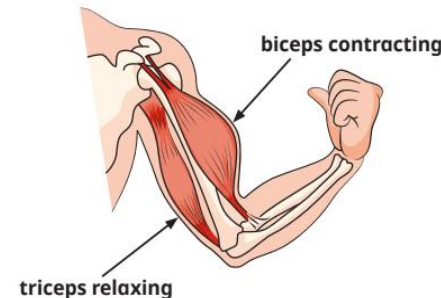
- **skeleton** – a collection of bones that provides protection and supports movement



- **muscle** – works with joints and bones to allow movement



- **bicep and tricep** – two muscles in the upper arm
- **contract** – a tightening and shortening motion
- **relax** – a relaxing and lengthening motion



- **spine** – a group of small bones in the back that support movement



- **antennae** – organs on an insect’s head, used for touch and smell



- **insect** – a small animal that has three body sections, six legs and antennae



- **exoskeleton** – a type of skeleton on the outside of an animal’s body that provides support and protection



- **joint** – a point where two or more bones connect



- **hinge joint** – a joint that only allows bending and straightening



- **ball-and-socket joint** – a joint with a round head of bone that fits inside the cup of another bone to allow movement in all directions



- **skeleton** – a collection of bones that provides protection and supports movement

