

# Skeletal system

The skeletal system in the adult consists of 206 bones and the strong elastic tissue that forms ligaments, tendons and cartilage, which tie bones together and form the nose, larynx, trachea, bronchial tubes, and the outer ear. The skeleton provides a strong framework for the body, gives it its basic shape, and permits us to stand upright. The skeletal system also supports and encloses soft internal organs and shields fragile organs such as the brain and lungs. Cartilaginous, connected by flexible joints, form a continuous of heads that allow coordinated movement. Bones also provide a firm anchor for skeletal muscles and produce red blood cells in their marrow cavities.

## Bone classification

**Long bones.** These bones, such as those in the legs, arms, toes and fingers are strong shafts made of compact bone tissue. Their ends are large and consist of spongy tissue covered with compact tissue. They are slightly curved, enabling them to absorb shock.

**Short bones.** Shaped like irregular cubes, the short bones are spongy with a covering of compact tissue. The forearm and the bones of the wrist and ankle belong to this category.

**Flat bones.** The skull, ribs, sternum, hip, and scapula are Flat bones – bones with broad flat plates of spongy tissue sandwiched between two layers of compact tissue. Flat bones protect organs and are anchor points for muscles.

**Irregular bones.** As their name implies, these bones are irregularly shaped. The proportion of spongy to compact tissue varies from bone to bone. The vertebrae and facial bones belong to this group. Other irregular bones are put to special purposes, including helping to support and protect the body.

Read the text about the skeletal system and answer these questions

1. What does the skeletal system consist of?
2. What is the function of ligaments, tendons and cartilage?
3. What does the skeleton provide?
4. What does it support and enclose?
5. What do bones produce in their marrow cavities?
6. How can bones be classified?
7. Describe long bones. Mention some.
8. Describe short bones. Mention some.
9. Describe flat bones. Mention some.
10. Describe irregular bones. Mention some.