

The Skeletal System



Our skeleton is what gives us our shape, it is located inside of our body tissues. Our bones are one of the hardest substances found in our body, second only to our teeth enamel. Our bones are living tissues made of cells and are mostly made up of calcium phosphate and collagen, our bones come in many shapes and sizes. The hardest part of our bones is on the outer layer which is called compact bone. Inside our bones are a softer, fatty tissues called the bone marrow. Our skeletal system is grouped by the axial and the appendicular skeletons. The axial skeleton includes the skull, vertebrae, ribs and sternum. The appendicular skeleton consists of our limbs (arms/legs) and all of their attachments (fingers/toes). We have 206 bones in our body that are all classified by their unique shape, with the major classifications being: long, short, flat or irregular. Where two of our bones connect, there are movable joints which allow for various movements like twisting and turning. Two major important functions of our bones are support and protection. Our bones provide a framework for our tissues and our organs to attach to while shielding our organs in a protective way. Another very important function of our skeletal system is movement. Our bones and muscles work together to move parts of our body. All of our body movements involve the skeletal system and our muscles. Our muscles rely on the structure of our bones they attach to in order to allow for movement. Think of your bones as levers. Our legs wouldn't be able to move if they weren't attached to bones. Another important function of our bones is to produce blood cells, which are formed inside our bones in a section called bone marrow. The bone marrow is found within the tissues of our bones. Our bones contain many minerals which help to keep us strong. Broken and fractured bones can regenerate and heal themselves. Our bones, muscles and joints all work together to make it possible for the hundreds of movements we make every day. This entire system of bones couldn't function without the help of our muscles and joints which is then referred to as the musculoskeletal system.

- ① Name 4 very important functions of the skeletal system.
- ② Explain why the bones and muscles need to work together.
- ③ What would happen if we didn't have a skeletal system?
- ④ List 5 facts about our skeletal systems.
- ⑤ List 3 questions you have about the skeletal system.