



# Why Humans Need a Skeleton and What It Does

KS2 SCIENCE

HUMAN BODY

Ages 10-14 ⌚ 3 min read

## What Is a Skeleton?

Your **skeleton** is the framework of **bones** that holds your entire body together. You're born with about **270 bones**, but as you grow, some fuse together, leaving you with **206 bones** as an adult. These aren't dead, lifeless sticks—your bones are living tissues that are constantly changing and repairing themselves.

## Support and Structure

The main job of your skeleton is to **support** your body and give it shape. Without it, you'd be like a jellyfish, unable to stand up or hold yourself together. Your skeleton works like the frame of a building—it keeps everything in the right place and prevents you from collapsing into a floppy heap.

Think of it like a tent. The tent poles are the skeleton, holding up the fabric (your skin and muscles) and keeping the whole structure standing upright.

## Protection

Your bones act like armour for your most important organs. Your **skull** protects your **brain**, your **ribcage** guards your **heart** and **lungs**, and your **spine** shields your **spinal cord**. Imagine if these delicate organs were exposed—they'd be damaged easily. Your skeleton keeps them safe inside a bony fortress.

## Movement

Bones don't move by themselves. Your **muscles** are attached to bones by tough cords called **tendons**. When your muscles contract, they pull on the bones, creating movement. Your skeleton and muscles work together like a system of levers to help you run, jump, dance, and reach for things.

Think of it like a puppet. The skeleton is the wooden frame, the muscles are the strings, and together they make movement possible.

## Blood Cell Factory

Here's something amazing: your bones make blood! Deep inside many bones is a spongy tissue called **bone marrow**. This marrow produces **red blood cells**, which carry oxygen around your body, and **white blood cells**, which fight infections. Without your skeleton, you couldn't make new blood cells, and you'd become very ill.

## Storing Important Minerals

Your bones also store vital minerals like **calcium** and **phosphorus**. When your body needs these minerals, it takes them from your bones. That's why eating foods rich in calcium—like milk, cheese, and leafy greens—keeps your skeleton strong.