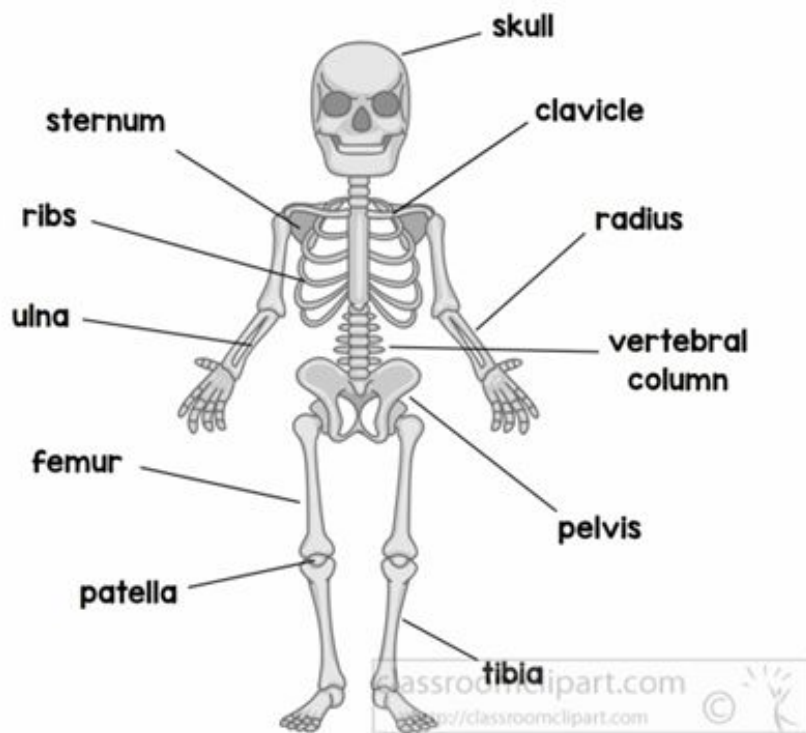


## The Human Body: 4<sup>th</sup> Grade- Unit 1, Lesson 3

Science concept: The Skeletal System

### IT'S TIME TO TALK ABOUT BONES!

Hey guys. Welcome back! In our last lesson we talked all about the heart and how blood travels in our body. Today we are focusing on another important body system. The skeletal system.



Think back to Halloween for a minute. Wherever you looked, there were vampires, ghosts, or bony skeletons grinning back at you. Maybe you even dressed up as some of these for fun. Vampires and ghosts don't really exist, but skeletons sure do!

## Supplementary teaching video link

Here's a fun video about our skeleton: <https://www.brainpop.com/health/bodysystems/skeleton/>



Have any skeletons in your closet? At least you've got one in your body! In this BrainPOP movie, Tim and Moby take a closer look at the human skeleton and how it works. You'll learn why your head is so hard and what body parts form your skeleton. You'll find out some of the functions of your bones and what makes them so useful.

## Concept reinforcement questions

I hope you enjoyed that video. Now it's time to answer a few fun questions!

- 1) How many bones does an adult skeleton have?
- 2) What is the function of our spine?
- 3) Where can you find the periosteum?
- 4) What are bones connected by?
- 5) What connects muscles to bones?
- 6) Where can we find the smallest bone and where can we find the largest bone?

*Answers*

- |                                |                      |
|--------------------------------|----------------------|
| 1) 206                         | 4) Ligaments         |
| 2) Shock absorption            | 5) Tendons           |
| 3) The outermost layer of bone | 6) The ear and thigh |

## Additional reading

Every single person has many bones. These bones collectively make up the skeleton or skeletal system. The skeletal system gives your body structure, lets you move in many ways, protects your internal organs, stores minerals and even produces blood cells. If our skeleton didn't exist we would not be able to sit up, walk, run or even stand. We'd be literal jellyfish!



The main parts of our skeleton are:

the skull- also known as the cranium, which protects our brain



the ribcage- which protects the heart and lungs and helps us breathe



backbone- which protects the spinal cord and supports the body



pelvis- which connects the spine to the lower limbs and protects important internal organs



bones of the limbs which include our arms and legs- which help us to move



## **DID YOU KNOW?**

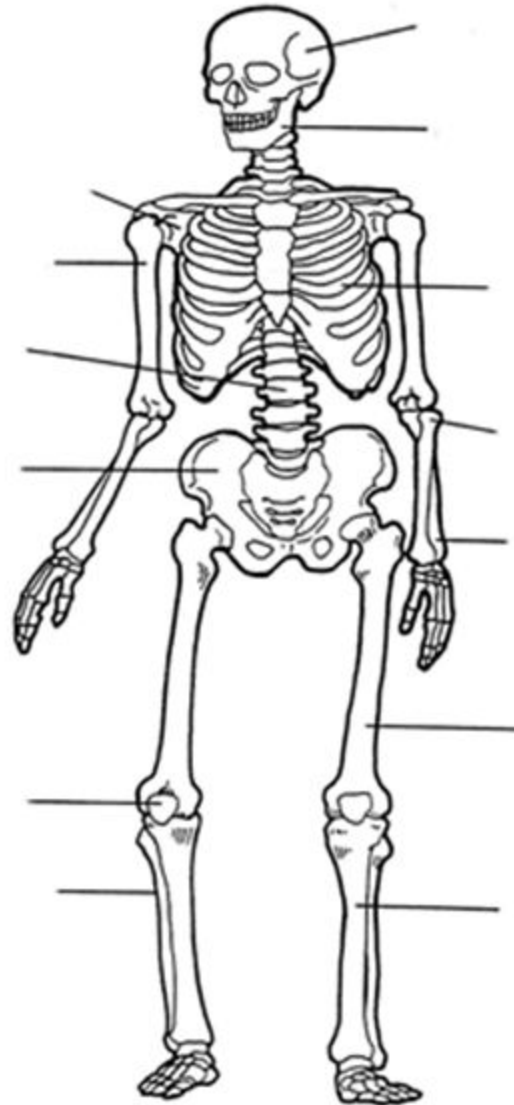
- At birth the human skeleton is made up of around 300 bones. By adulthood, some bones fuse together to end up with 206 bones.
- The longest bone in the human body is the thigh bone called the femur.
- The smallest bone, the stirrup, is located in the middle ear.
- The spine is made up of 33 bones.
- Your body can heal broken bones all on its own.

## Supplementary concept reinforcement exercises

### Human Skeleton

❖ The human body has over 200 bones that create our skeletal system. Use the vocabulary words in the box to label the major bones in our body.

CRANIUM  
FIBULA  
PATELLA  
ULNA AND RADIUS  
SCAPULA  
STERNUM  
HUMERUS  
FEMUR  
TIBIA  
CLAVICLE  
PELVIS  
METACARPALS/METATARSALS  
PHALANGES  
CARPALS  
TARSALS



**LABEL ME!!!**

Let's have a little fun. You guys like dancing right? Here's THE HUMAN BONES SONG!

<https://youtu.be/h5dYvPruBFY>



## Scratch software

Create an animation explaining the function of the skeletal system. Don't forget to include the major parts such as the skull and ribcage as well as their functions.

## These might be useful!!

<https://www.sciencebuddies.org/science-fair-projects/references/adding-images-sprites-to-a-scratch-program>

[https://www.ilearn2.co.uk/uploads/8/0/8/9/80891968/scratch\\_tips\\_and\\_tricks.pdf](https://www.ilearn2.co.uk/uploads/8/0/8/9/80891968/scratch_tips_and_tricks.pdf)