

Skeletal System

By Sharon Fabian

¹ A skeleton is good for scaring people on Halloween, but it does have other uses too. Your skeleton is what keeps you standing tall. Without your skeleton, you would just be a puddle of skin and stuff on the floor. Not a pretty sight! Your skeleton also protects your most important insides, like your heart, lungs, and brain.

² Here are some of the main parts of your skeleton, starting at the top.

³



Skull--a built-in helmet for your brain

⁴ **spinal column**--backbone, made up of **vertebrae**

⁵ **ribs**--surround your heart and lungs

⁶ **sternum**--connects some of your ribs in front

⁷ **pelvis**--protects digestive and reproductive organs

⁸ **humerus, ulna, and radius**--arm bones

⁹ **femur, fibula, and tibia**--leg bones

¹⁰ **patella**--knee cap

¹¹ Your skull is made of twenty-nine bones, including the tiny hammer, anvil, and stirrup bones in your ear. Eight bones form the brain case--what we usually think of as the skull. Fourteen bones make up the face, including the cheekbones, eye sockets, and nasal bone behind the nose. The tiny bones of the two ears are six more bones found in the head or skull. The mandible or jaw bone allows movement for chewing and talking. The hyoid bone, which supports the tongue, usually is not considered as part of the skull. It doesn't attach to any of the other bones. Some people do count it, though, which would bring the total bone count up to thirty.

¹² The skull protects the brain and also provides the shape for your face. In an adult, the skull bones are fused together, but a baby's skull bones are still separate.

¹³ Your spine, or backbone, consists of thirty-three rings of bone called vertebrae. These discs are separated by cushiony layers of cartilage which protect the vertebrae and allow your backbone to twist and turn.

¹⁴ Most people have twelve pairs of ribs, but a few people have one or two extra pair! The ribs are attached in the back, to the spine. The top seven pairs of ribs are also attached in the front, to the bone called the sternum, which is in the center of your chest. The next two or three pairs are held together in front by cartilage. The bottom few pairs do not meet in the front; they are only attached in the back.

¹⁵ Your leg bones attach to the skeleton at the pelvis. The long bone in the top part of your

leg is called the femur, or thighbone. It is your longest bone. The lower part of the leg has two bones side by side, the tibia and the fibula.

¹⁶ Your arm bones are attached to your shoulders at the scapula, a triangle shaped bone in your upper back. The bone above your elbow is called the humerus, and the two side-by-side bones below the elbow are the radius and the ulna.

¹⁷ Just in your wrist, you have eight bones. This makes your wrist very flexible. Each finger has three bones, and your thumb has two. All in all, your wrist, hands and fingers have fifty-four bones.

¹⁸ Foot bones are similar to hand bones, but the ankle has only seven making a total of fifty-two bones in your feet and ankles.

¹⁹ Bones are made up of two or three layers of material. The outer layer is the smooth hard part that you see in a skeleton. Inside that is a layer that is spongier but still strong. Some bones, but not all, have a third layer in the center, called bone marrow. Bone marrow is a thick jelly-like substance that has a very important job. Bone marrow produces your red and white blood cells. Your body needs to keep producing new blood cells to be able to fight off germs, and to transport oxygen to all parts of your body.

²⁰ If you ever decide to be a doctor or nurse, you'll spend a lot of time memorizing all 206 bones in the human body, but for now let's end with one more interesting fact. Did you know that humans and giraffes have the same number of bones in their necks?

Name _____

Science Pd: _____

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<p>1. Your skull is _____. <input type="radio"/> A One large bone <input type="radio"/> B Made of twenty-nine bones <input type="radio"/> C Made of cartilage <input type="radio"/> D Made of two halves</p>	<p>2. The upper arm bone is the _____. <input type="radio"/> A Fibula <input type="radio"/> B Femur <input type="radio"/> C Tibia <input type="radio"/> D Humerus</p>
<p>3. The bone that connects the legs to the rest of the skeleton is the _____. <input type="radio"/> A Femur <input type="radio"/> B Patella <input type="radio"/> C Pelvis <input type="radio"/> D Tibia</p>	<p>4. The name for all of the bones of the body together is _____. <input type="radio"/> A Spinal column <input type="radio"/> B Skeleton <input type="radio"/> C Skull <input type="radio"/> D Vertebrae</p>
<p>5. Bone marrow <input type="radio"/> A Produces red blood cells <input type="radio"/> B Produces white blood cells <input type="radio"/> C Both A and B <input type="radio"/> D Is made up of hard material</p>	<p>6. Cartilage has the job of _____. <input type="radio"/> A Joining muscle to bone <input type="radio"/> B Joining bone to bone <input type="radio"/> C Providing cushion for bones <input type="radio"/> D None of the above</p>
<p>7. How many bones are in the human body? _____</p>	<p>8. A giraffe has the same number of neck bones as a human <input type="radio"/> A False <input type="radio"/> B True</p>