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# Science Shorts

## The Skeletal System

It is time to look closely at the first system in the human body. We will start with the skeletal system, since it provides the framework for your body. This system has three main jobs, a minor job and four major parts.

The skeletal system is similar to the wooden frame of a house. It shows the size and shape of your body. It also supports the many parts inside your body. It allows you to stand up. Without the skeletal system you would be a blob of jelly on the ground. The first main job of the skeletal system is to shape and support your body.

Inside your body, you have many parts that need to be protected from the environment. The skeletal system does that for you. Your brain is an important and sensitive organ, so it needs lots of protection. The skull will protect your brain from damage. Your ribs protect your heart and lungs. The second important job of the skeletal system is to protect the organs inside your body.

For the next job the skeletal system works with the muscular system. Together these two systems help you move your body. Some of your muscles are attached to the bones in the skeletal system. The third important job of the skeletal system is to work with the muscular system to move the parts of your body.

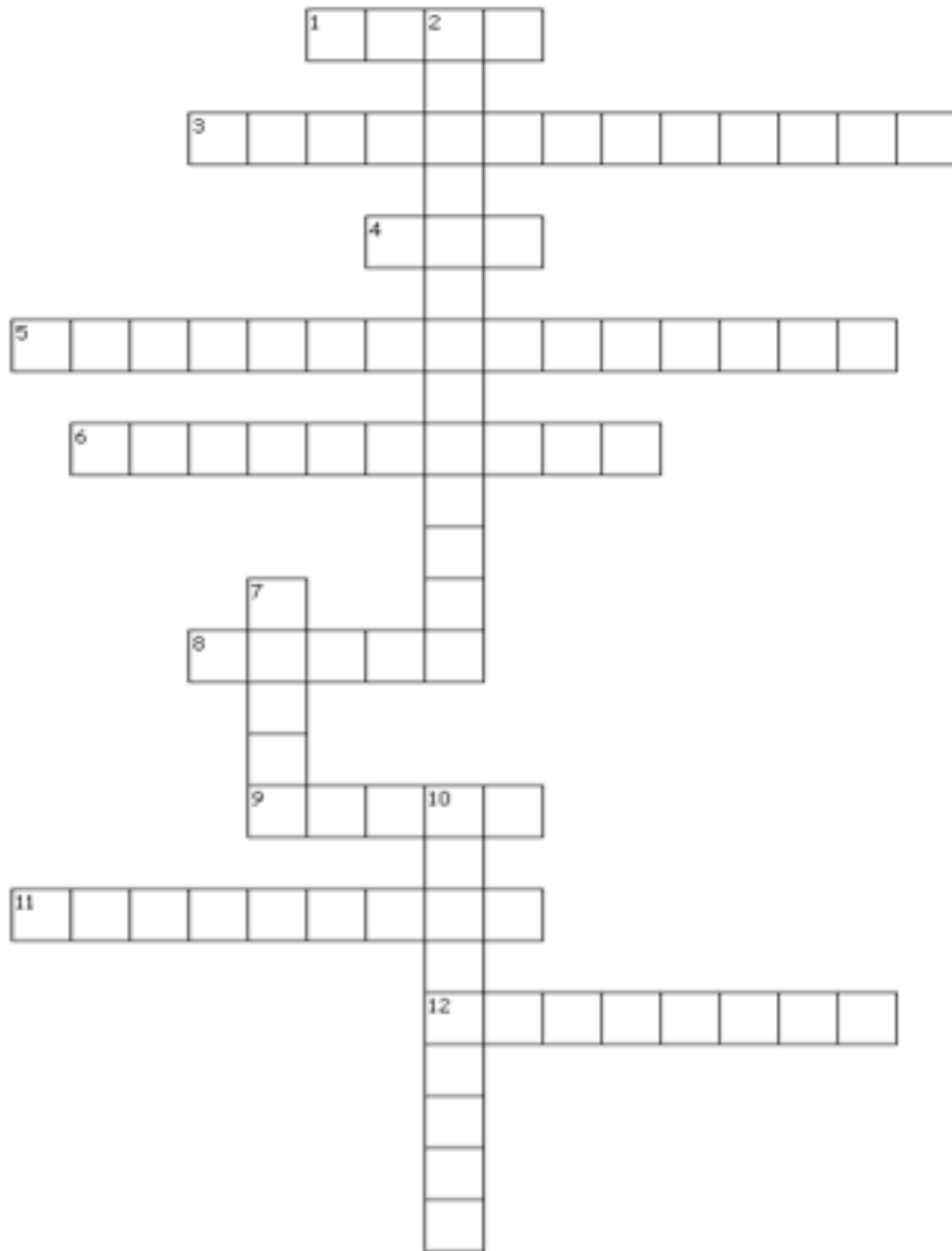
The minor job that the skeletal system does is to make red blood cells. These cells move into the blood and travel all around your body. These blood cells have many important jobs to do such as carry oxygen to the cells and carbon dioxide to the lungs.

The skeletal system has four basic parts: the bones, the ligaments, the cartilage and the joints. There are 206 bones in the human body. Some are large like the skull and some are very small like the three bones in your ear that allow you to hear sound.

The ligaments connect bones to other bones. Ligaments are tough tissue and they are stretchy to allow bones to move. If you stretch a ligament too much it can be pulled or torn. This is very painful!

The cartilage is not as stretchy as the ligaments. It is found where two bones meet and provides a cushion where the bones rub together. Cartilage is also what makes up your ear and nose. Although it is not stretchy it is very flexible.

The last part of the skeletal system is the joints. A joint is where two bones meet. There are five different types of joints in the body. The first kind of joint is called a fixed joint. You find fixed joints in the skull. The second kind of joint is the gliding joint. Your wrists have gliding joints. You are able to rotate your head almost all the way around your body. You can do that because of the pivoting joints in your neck. The fourth kind of joint is called a hinge joint. Your elbows and knees are hinge joints. The last type of joint is the ball and socket joint. Your shoulder and hip have ball and socket joints.



**Across**

1. Protects heart and lungs
3. Carry oxygen to cells
4. Location of smallest bones
5. First main job
6. Type of joint found in skull
8. Found where two bones meet
9. Protects the brain
11. Cushion where two bones rub together
12. Works with this system to help you move

**Down**

2. Type of joint found in shoulder and hip
7. Provide framework for your body
10. Connects bones to other bones