

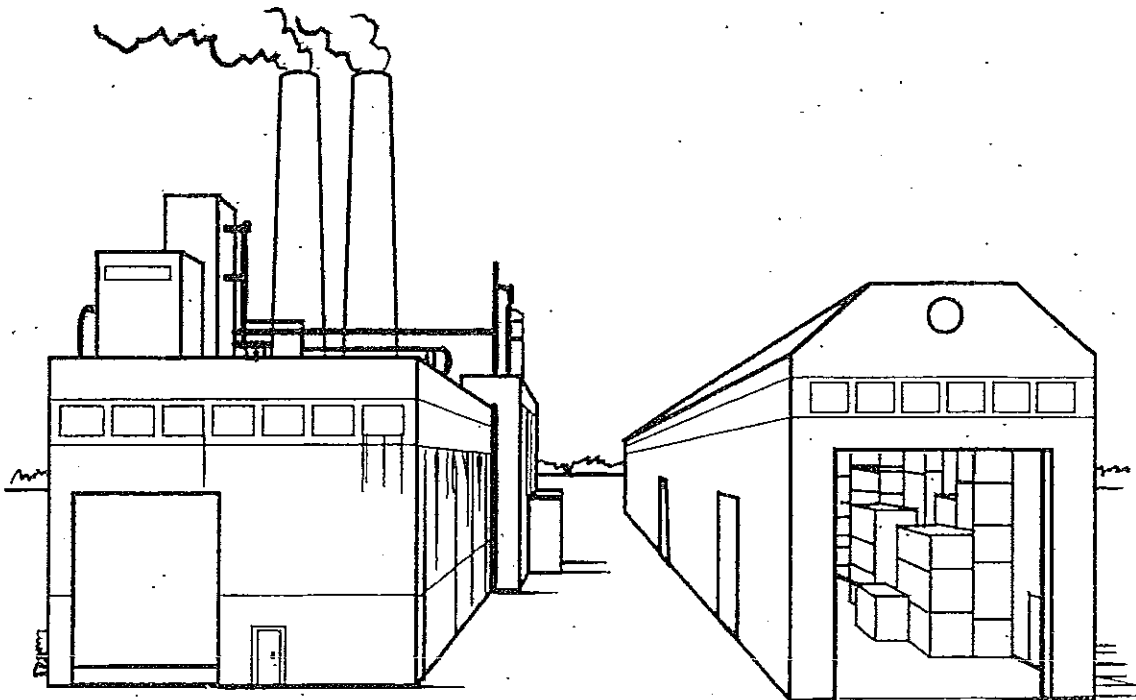
## A Factory and a Storehouse

Now you have seen that the skeletal system has three very important jobs: to give shape and support, to protect organs, and to help move the body. Without the skeletal system, you would not have much of a body, would you? Now, let's take a peek at a couple of other jobs that this system performs for you.

### Two Minor Jobs

In our hometown, we have a factory that makes nondairy creamer. The creamer is made in the building and then it is used by many people all around the world. They put the creamer in their coffee and enjoy a nice hot drink. Your skeletal system is like a factory. It makes blood cells. The cells move into the blood vessels and travel all around your body. Those blood cells have many important jobs to do, and you will learn more about them when you study the circulatory system. The skeletal system is responsible for **making the blood cells** so the rest of the body can use them.

We have another factory in our hometown, too. That factory makes plastic bags. Sometimes, the factory makes more bags than people need at that time. The bags are sent to a storehouse. They are kept until people are ready to buy them. Then the bags are removed from the storehouse and sent to the stores where they can be sold. Your skeletal system is also like a storehouse. When you eat, you bring minerals, such as calcium, into your body. Sometimes you eat more calcium and other minerals than you need at that time. Some of the calcium and minerals can be stored in your bones. When your body needs the calcium or minerals, it can be taken out of the bones and used by the body. Your skeletal system is also a **warehouse for fat cells, calcium, and other minerals**.



Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Questions

1. How is your skeletal system like a factory?

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2. How is the skeletal system like a storehouse?

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3. Your skeleton stores calcium. How does the calcium get into your body?

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4. Write a good sentence using each of the following words. (Think up your own sentences, and be sure you do not just copy them from this book!)

a) skeleton: \_\_\_\_\_

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b) framework: \_\_\_\_\_

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c) factory: \_\_\_\_\_

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d) warehouse: \_\_\_\_\_

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e) protect: \_\_\_\_\_

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f) support: \_\_\_\_\_

5. Many factories have advertisements describing the products they make. On your own paper, develop an ad for your skeletal system. Be sure to include information about the products being made!

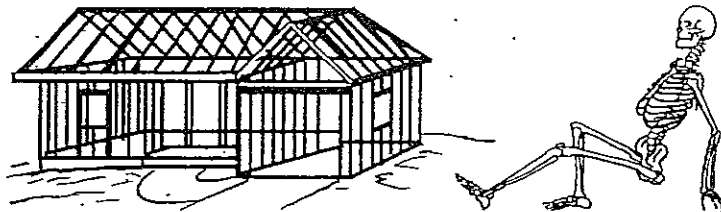
## The Framework: The Skeletal System

It is time to look closely at the first system in your wonderful machine. We will start with the skeletal system, since this provides the framework for your body. This system has three main jobs, two minor jobs, and it has four major parts. We will take a closer look at all of these jobs and parts. Let's start with the main jobs.

### Three Main Jobs

To understand the first job of the skeletal system, let's think about building a house. You need to start with some wood for the framework of the house. When you put up the wood, you will know how long the house will be, how wide it will be, as well as where the windows and doors will go. You will also know how the roof will cover the house. You will know what the shape and size of the finished house will be. The wooden framework will also support the many parts of the house. It will support all the furniture and other things you put into the house, as well.

The skeletal system is similar to the wooden framework of a house. The skeletal system provides the framework for your body. It shows the size and the shape of your body. It also supports the many parts inside your body. This is the first main job of the skeletal system: to shape and support your body.



Now we want to understand the second job of the skeletal system, so I would like you to think about a bicycle and a car. If you are riding along the street on a bicycle, you are exposed to everything around you. If a small stone is kicked up from the road, it might hit you and hurt you. If you are riding in a car, you are not exposed to the environment. If a small stone is kicked up from the road, it might hit the hood or windshield of the car, but you will not be hurt. The car will protect you from the environment.

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. Your brain is surrounded by a hard bone known as the skull. The skull will protect your brain from damage. Your ribs and breastbone are also parts of the skeletal system. They can protect your heart and lungs. Other parts of the skeletal system are also used for protection. The second important job of the skeletal system: to protect the organs inside your body.

Finally, the third job is a cooperative effort. The skeletal system works with the muscular system. Together the two systems help you move your body. Some of your muscles are attached to bones in the skeletal system. When you contract or relax those muscles, the bones move up, down, forward, backward, and so on. The third main job of the skeletal system: to work with the muscular system to move the parts of your body.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Questions

1. How is the skeletal system similar to the wooden framework of a house?

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2. How does the skeletal system help organs inside the body?

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3. What are three organs that are protected by parts of the skeletal system?

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4. If the skull is supposed to protect your brain, why should you wear a helmet when riding a bicycle?

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5. What system does the skeletal system work with to help you move your body?

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6. What are the three main jobs of the skeletal system?

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7. What would your body look like if you did not have a skeletal system?

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