

Systems for Movement

There are many people on planet Earth. Each person looks his or her own way. Each acts his or her own way. Each thinks his or her own way. All the people on Earth share some things, though. Their bodies all have the same kinds of systems inside. This is because they are all human.

All living things have genes. Humans all have human genes. Genes affect how they will look. They affect how they will behave. Many things come from genes. Body size, eye color, and hair texture come from genes. So do some diseases. All humans get the body's most important systems from their genes.

The human body is like a machine. It has many parts. These parts can do a lot of work. The parts depend on each other. They all make the machine work right. Each part has its own needs. Each part does its own job.

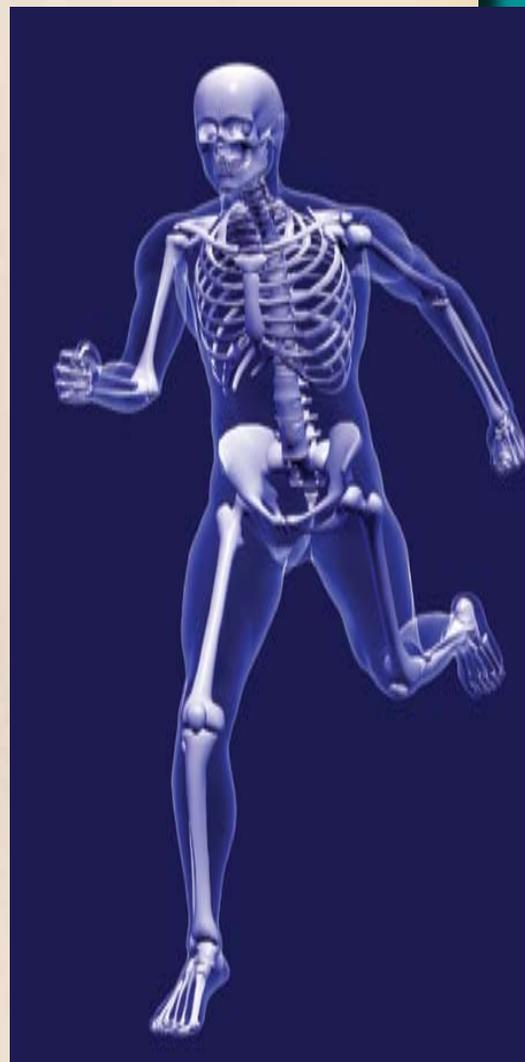
Doctors sort body parts by the work they do. A town is made of many people. The people do many jobs. The body is the same. It has many parts to do many jobs. A town needs all its workers to do their jobs. If they don't, there will be trouble. The body needs all its parts to do their jobs, too. If they don't, there will be trouble. The trouble can be illness or injury.

The Skeletal and Muscular Systems

The skeletal system is like a frame. It supports the body. It gives it shape. It supports muscles that allow the body to move. All of the bones in a body form the skeleton. The bones are linked by joints.

Some bones protect vital organs. The rib cage protects the heart. The skull protects the brain. The insides of bones also make white blood cells. White blood cells fight disease.

The skeleton works with the muscular system. Muscles make the body move. Some muscles move bones. Other muscles move on their own. Muscles can get shorter. This creates a pull. Most muscles come in pairs. One muscle pulls your body one way. The other muscle pulls your body the other way. That way you can move back and forth.



skeletal system



muscular system

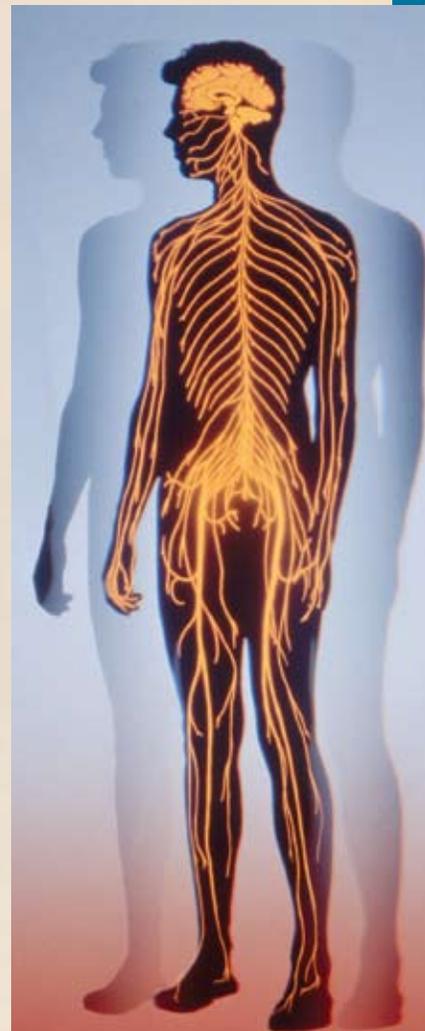
There are three types of muscles. Skeletal muscles are used for moving. They let us run, lift, and swim. These muscles get tired. The cardiac muscle is found in the wall of the heart. It works all the time. It creates your heartbeat. Smooth muscles let you swallow and breathe.

Nervous System

The brain controls the body. It does not work alone. It uses the nervous system. The nervous system watches things. It watches all day long. It watches inside the body. It watches outside the body. Then it reacts. It sends signals to the muscles. It watches the organs. It reviews what it has seen and felt. It helps to control the whole body.

Neurons are like wires all through the body. They send signals from one part to the other. Most are in the brain. The brain is the most complex body part. It makes sure things get done. You don't even have to think about some of them. These are involuntary actions. They include heartbeats, breathing, and digestion.

The brain also takes care of voluntary actions. These might be walking or moving. It even does conscious actions. These include thought, reasoning, and abstraction. The brain makes up only two percent of the body. It controls the whole body.



nervous system

Comprehension Question

How does your body move around?

Systems for Movement

More than six billion humans live on Earth. They look different. They act differently. They think different thoughts. They all share the same basic structure, though. Their bodies all have the same kinds of systems inside. This is because they are all human.

All living things have genes. Humans all have human genes. Genes affect how a person will look and behave. Many things come from genes. Body size, eye color, and hair texture do. Genes sometimes make chances for getting some diseases greater. All humans get the body's most important systems from their genes.

The human body is like a machine. It has many parts. These parts can do a lot of work. The parts depend on one another. They all support the machine. Each part has specific needs and abilities.

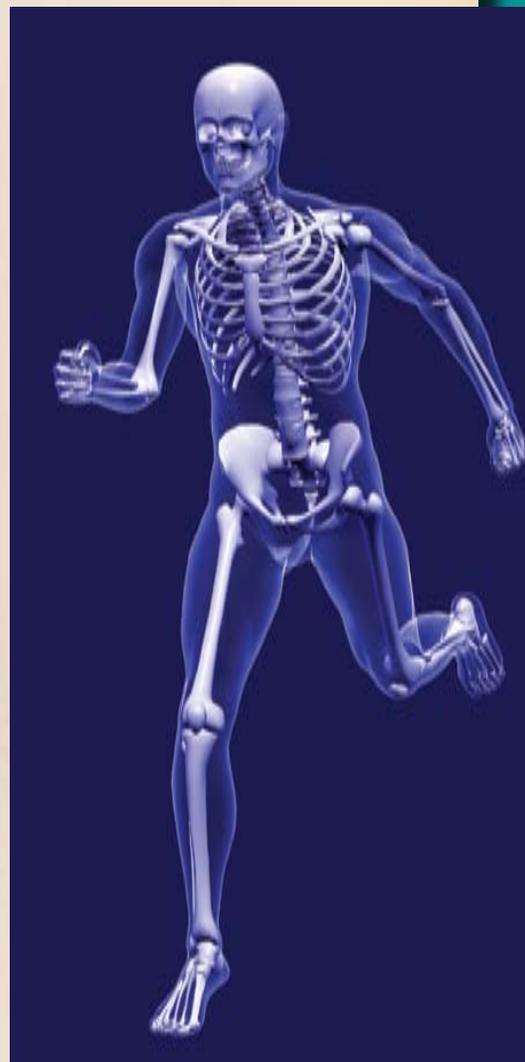
Doctors sort body parts by the work they do. A community is made of many people who do many jobs. The body is the same. It has many parts to do many jobs. A community needs all its workers to do their jobs. If they don't, there will be trouble. The body needs all its parts to do their jobs, too. If they don't, there will be trouble. The trouble can be illness or injury.

The Skeletal and Muscular Systems

The skeletal system is the framework for the body. It supports the body. It gives it shape. It supports muscles that allow the body to move. All of the bones in a body form the skeleton. The bones are linked by joints.

Bones often protect vital organs. The rib cage protects the heart. The skull protects the brain. The skeletal system also makes white blood cells to fight disease.

The skeleton could not work without the muscular system. Muscles perform all body movements. Some muscles attach to bones. Other muscles work on their own. Muscles can get shorter, or contract. This creates a pulling force. Most muscles come in pairs. One muscle pulls your body one way. The other muscle can pull your body the other way. That way you can move back and forth.



skeletal system



muscular system

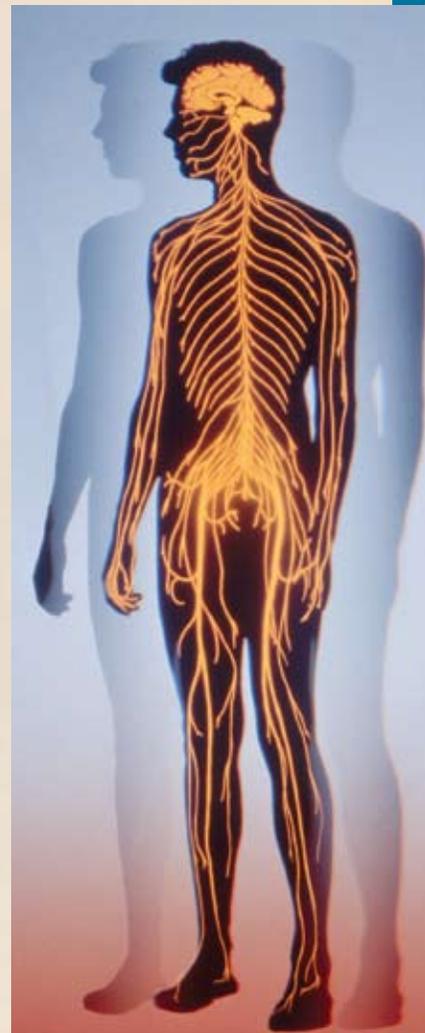
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Nervous System

The brain controls the body, but it does not work alone. It uses the nervous system. The nervous system watches things all day long. It watches things inside the body. It watches things outside the body. Then it reacts. It sends signals to the muscles. It monitors the organs. It reviews what it has seen and felt. Then it makes decisions. It helps to control the entire body.

Neurons carry signals all over the body. Most neurons are in the brain. The brain is the most complex part in your body. It makes sure things get done. You don't even have to think about some of them. These are involuntary actions. They include heartbeats, breathing, and digestion.

The brain also takes care of voluntary actions. These might be walking or moving. It even does conscious actions. These include thought, reasoning, and abstraction. The brain makes up only two percent of the body. It controls the whole body.



nervous system

Comprehension Question

How do you use your body's systems to move around?

Systems for Movement

More than six billion humans live on Earth. They look different. They act differently. They think different thoughts. However, they all share the same basic structure. Their bodies all have the same kinds of systems inside. This is because they are all human.

All living things have genes. Humans all have human genes. Genes help determine how a person will look and behave. Many things are inherited. Body size, eye color, and hair texture are all inherited. So are chances for developing certain diseases, and even personality traits. Everyone inherits the body's most important systems.

The human body is like a machine. It has many working parts. Together, these parts can do a lot of work. The parts depend on one another to support the machine. Each part has specific needs and abilities.

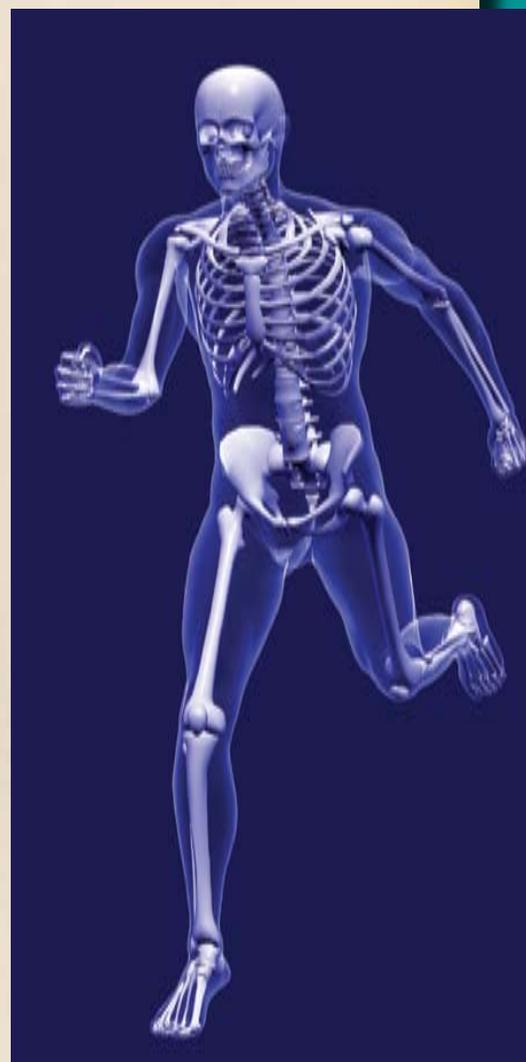
Scientists categorize body parts by the work they do. Any community has people who perform different jobs. The body is similar. It has different parts to do different jobs. A community needs all of its workers to do their jobs, or there will be trouble. The body needs all its parts to work well, too. If they don't, there will be trouble. The trouble can be illness or injury.

The Skeletal and Muscular Systems

The skeletal system is the framework for the body. It supports the body and gives it shape. It supports muscles that allow the body to move. All of the bones in a body form the skeleton. The bones are linked by joints.

Bones often protect vital organs. For example, the rib cage protects the heart. The skull protects the brain. The skeletal system also provides substances to aid the immune system.

The skeleton could not work without the muscular system. Muscles perform all body movements. Some muscles attach to bones. Others work on their own. Muscles can get shorter, or contract. This creates a pulling force. Most muscles come in pairs. One muscle pulls your body one way. The other muscle can pull your body the other way. That way you can move back and forth.



skeletal system



muscular system

There are three types of muscles. Skeletal muscles are used for activities such as running, lifting, and swimming. These muscles tire easily. The cardiac muscle is found in the wall of the heart. It contracts constantly. It creates a heartbeat. Smooth muscles perform vital functions such as swallowing.

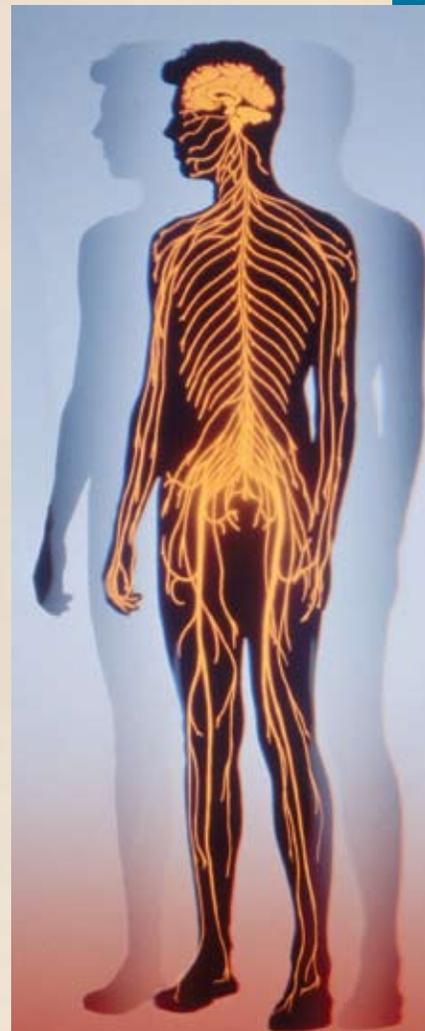
Nervous System

The brain controls the body, but it does not work alone. It uses the nervous system. The nervous system gathers information all day long. It takes information from inside the body. It gathers information from outside the body. Then it reacts. The nervous system sends signals to the muscles.

It monitors the organs. It reviews information. Then it makes decisions. It helps to control the entire body.

Neurons carry signals from all over the body. Most neurons are in the brain. The brain is the most complex of all body parts. It controls involuntary activities. These include heartbeats, breathing, and digestion.

The brain is also responsible for voluntary activities like walking and moving. It even handles conscious activities. These include thought, reasoning, and abstraction. The brain makes up only two percent of the body, but it controls everything the body does.



nervous system

Comprehension Question

Describe how your skeletal, muscular, and nervous systems work together.

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More than six billion humans live on Earth. They look different, act differently, and think different thoughts. However, they all share the same basic structure and their bodies all have the same kinds of systems inside. This is because they are all human.

All living things have genes, and humans all have human genes. Genes help determine how a person will look and behave. Many things are inherited such as body size, eye color, and hair texture. So are chances for developing certain diseases, and even personality traits. However, everyone inherits the body's most important systems.

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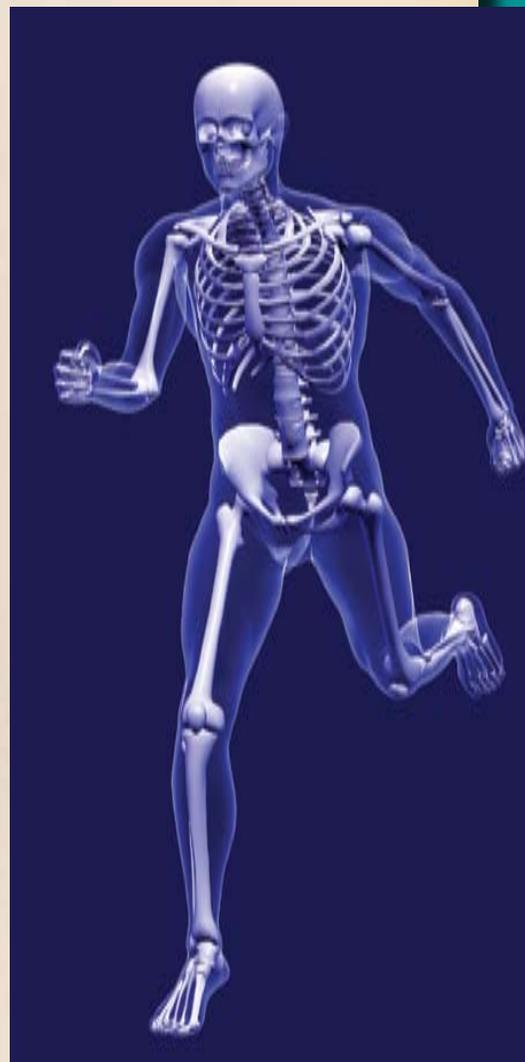
Scientists categorize body parts by the work they do. Any community has people who perform different jobs, and the body is similar: it has different parts to do different jobs. A community needs all of its workers to do their jobs, or there will be trouble; the body needs all its parts to work well, too. If they don't, there will be trouble: illness or injury.

The Skeletal and Muscular Systems

The skeletal system is the framework for the body. It supports the body, gives it shape, and supports muscles that allow the body to move. All of the bones in a body are linked by joints, and together they form the skeleton.

Bones often protect vital organs. For example, the rib cage protects the heart and the skull protects the brain. The skeletal system also provides substances to aid the immune system.

The skeleton could not work without the muscular system, which performs all body movements. Some muscles attach to bones, while others work on their own. Muscles can get shorter, or contract, creating a pulling force. Most muscles come in pairs so one muscle pulls your body one way and the other muscle can pull your body the other way. This allows you to move back and forth.



skeletal system



muscular system

There are three types of muscles: skeletal, cardiac, and smooth. Skeletal muscles are used for activities such as running, lifting, and swimming, and these muscles tire easily. By contrast, the cardiac muscle is found in the wall of the heart where it contracts tirelessly to create your heartbeat. Lastly, smooth muscles perform vital functions such as swallowing.

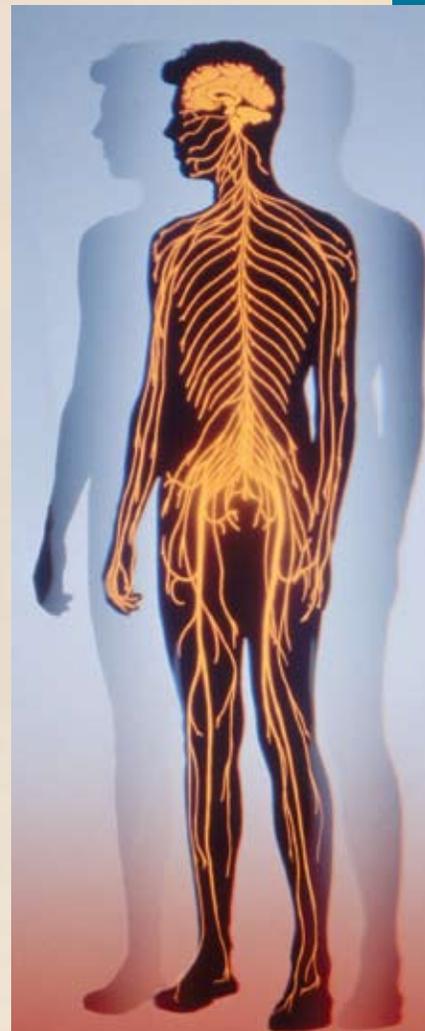
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nervous system

Comprehension Question

Describe how your body systems allow you to move.