

## Reader's Theater

### I AM the Most Important

(A Script about the human body systems)

By Amy Bowden)



#### Characters

Judge (narrator)

Digestive System

Circulatory System

Muscular System

Nervous System

Respiratory System

Skeletal System

**Judge:** I hereby order court in session! (*Bangs gavel on the table.*) Today we will hear from each of the body systems. Once and for all, we will end the argument that has gone on for many years. Today I will decide which human body system is most important. Each system will present its case and be heard. Is this clear?

**All systems:** Yes, Your Honor.

**Judge:** Thank you. Now, Skeletal System. You have been called the basic form of our bodies, right?

**Skeletal System:** Right, Your Honor. I give our bodies their shape. I also protect all of the organs inside. Without me, the body would just be a blob on the floor.

**Judge:** You sound important then, Skeletal System. Tell me more about yourself.

**Skeletal System:** In an adult body, I am made up of 206 bones. In a child, I am made up of 300 bones. Some of these bones harden over time and some bones fuse together. My smallest bone is less than an inch long and is called the "stirrup". It is in the ear. My biggest bone is the thigh bone. How long that one is depends on how tall the body is!

**Judge:** Okay, so you have a lot of parts. What else?

**Skeletal System:** The skull is also part of my system. The skull is basically like a bike helmet for the brain. The ribcage, another part of me, protects the heart and lungs.

**Respiratory System** (lungs) AND **Circulatory System** (heart) AND **Nervous System** (brain) (*shouts out*): So you are saying we are really important, too!

**Skeletal System:** Sure, you are important. But I am more important because without me, you would get crushed easily. I protect you!

**Judge:** Okay, Skeletal System. Thank you. Is there anything else you would like to add?

**Skeletal System:** I just wanted to say that without me, your Honor, the body would not really be a body. The organs would get injured too easily. The body would have no shape. The person would die. I do need calcium rich foods to keep my bones strong, but I am worth it! I AM the most important part of the body.

**Judge:** Thank you for your testimony. Next, I would like to hear from the Muscular System.

**Muscular System:** Thank you, your Honor. I am a little hurt that the Skeletal System did not mention me.

**Judge:** Why is that?

**Muscular System:** Because we are buddies! We work together! Yes, the bones are important, your Honor, but they cannot move by themselves. They are just the shell of the person. I AM the most important system because without me, the body couldn't actually DO anything.

**Judge** (*nodding slowly*): Okay. Explain, please.

**Muscular System:** The muscles that make up my system are what make the body move, jump, dance, play, run, eat, go to the bathroom, and so much more. My muscles are attached to the bones and joints. Basically my muscles are big rubber bands, and there are over 600 of them!

**Judge:** Even more muscles than bones! Impressive. Keep going.

**Muscular System:** Some of muscles are called voluntary muscles. This means they work only when the brain tells them to work. For example, if a body wants to kick something, the brain has to tell those muscles to move.

**Nervous System:** See! I told you I AM the most important!

**Judge:** That's enough, Nervous System. Go ahead, Muscular System.

**Muscular System:** Thank you. Some of my muscles are involuntary. This means they move without anything telling it to move. For example, the heart beats without the brain thinking about it. The eyes focus without the body thinking about it. These muscles just do their jobs without being told to.

**Judge:** Very interesting. Is there anything else you want to tell me?

**Muscular System:** The more the muscles are used, the stronger they are. If a person uses his muscles often, the muscles can get pretty big and will be really strong. Muscles do need energy to work right, and we get that energy through the healthy foods people eat. Protein, like in meat, fish, nuts, and dairy, really helps us. Basically, your Honor, I AM the most important system because I make the body move. Without me, the body would be a blob on the couch, a pile of bones, unhealthy and unable to exercise!

**Judge:** Okay, thank you for your testimony. I think I would like to hear from the Respiratory System next.

**Respiratory System** (*takes a loud, deep breath*): Right here, your Honor! I would like to say that I AM the most important body system because I am responsible for taking the air in and getting oxygen to the blood. I also get rid of the bad air, carbon dioxide. Without the oxygen I take in and without getting rid of the carbon dioxide, the body would surely die. Every body uses oxygen to break down nutrients for energy. The waste is turned into carbon dioxide. If your body doesn't have oxygen, nothing works. If your body has too much carbon dioxide, nothing works.

**Judge:** Sounds like an important job! Keep going.

**Respiratory System:** I am basically the lungs and the windpipe. The air comes in through the mouth and nose and travels down the windpipe to the lungs. My lungs expand like big balloons as oxygen comes in. They contract or get smaller (or deflate) when carbon dioxide goes out.

**Judge:** Do these lungs do anything else?

**Respiratory System:** Yes, your Honor. The lungs help us talk, sing, laugh, cry, scream, growl, and make any other sound you can think of. They help us communicate with others. Sometimes we have to sneeze or cough to clear things out of our airways, like dust, pollen, dirt, or air pollution.

**Judge:** Very well said. Is there anything else you would like to add?

**Respiratory System:** I would just like to say that people should really take care of me. Exercising is the best way to keep me healthy! Avoiding cigarette smoke and air pollution is also a good idea. Without me, the body cannot live. I AM the most important system.

**Judge:** You made your case. Thank you, Respiratory System. Next, let's hear from the Digestive System.

**Digestive System** (*loud stomach rumbling sound*): Hello, Your Honor! I would ask you how your lunch break was today, but I already know! I'm the one taking care of the food you ate! I am your mouth, esophagus, stomach, small intestines, and large intestines! All of these organs work

together to turn that turkey sandwich on wheat bread into something your body can actually use! We are processing it into energy!

**Judge:** That was a good sandwich! Tell me more, please.

**Digestive System:** Well, we start in your mouth. The saliva, or spit, and your chewing helps to break down the food into smaller, softer pieces. Then as you swallow, those pieces go through the stretchy tube called the esophagus into the stomach.

**Judge:** Is the esophagus in your throat like the windpipe? Are these the same?

**Digestive System:** Yes, it is in the throat, but no, your Honor, they are not the same tube. The esophagus goes to the stomach. The windpipe goes to those balloon-like lungs.

**Judge:** Okay. Continue.

**Digestive System:** Once the food is in the stomach, muscles there help churn and mix the food with something called "gastric juices." Have you ever hiccupped and had a burning feeling in your throat? Those are some of the gastric juices coming back up a little. We try to control that but sometimes they slip out a little. The stomach mixes and mixes until basically the food is like soup. Then it is sent to the small intestines which are really actually a very long tube that is like a coiled up snake. If you unrolled these small intestines, you would get about 22 feet of tube. That's about the length of two pick up trucks bumper to bumper!

**Judge:** Wow. And that's the small intestine?

**Digestive System:** Yes, your Honor. And that's where the food is broken down even more into vitamins, minerals, and other nutrients for the body to use. What's left gets passed to the large intestine, also called the colon. Water and anything else that can be used is absorbed here. Everything else gets pushed out as poop.

**Judge:** Okay, so you do a lot of work. Why are you important to the body?

**Digestive System:** Thank you, your Honor. I do work hard! I am important to the body because without me, the body could not get any nutrients, vitamins, minerals, or other energy from the food! I work best with nutritious foods and a lot of water, but without me, the body would never get any energy to breath, to move, or to live!

**Judge:** Thank you, Digestive System. How about the Circulatory System next?

**Circulatory System:** Oh my heart is pounding! My blood is pumping! Your Honor, I want to let my actions speak for themselves. Will you play along with me?

**Judge:** For a minute. Go ahead.

**Circulatory System:** Thank you. Please take your pointer and middle fingers and place them on your neck like this (*shows how to take pulse*). Do you feel that pulse?

*(Judge nods.)*

**Circulatory System:** Please take your hand and squeeze the base of one of your fingers. Hold it until your finger starts to hurt a little and turns purplish and cold.

*(Judge does and then lets go.)*

**Circulatory System:** This is basically what happens when your leg or arm falls asleep. You cut off the blood flow to that area. It hurts, too! Your Honor, have you ever cut yourself? What happened?

**Judge:** Of course. I bled.

**Circulatory System:** Did you rush to stop the bleeding?

**Judge:** Well, yes, of course.

**Circulatory System:** Why?

**Judge:** Because blood is important to your body and you don't want to lose too much of it.

**Circulatory System:** Your Honor, my system is the heart, the arteries, the blood vessels, and the capillaries. The heart pumps blood throughout the body through a bunch of tunnels, which are the arteries, the blood vessels, and the capillaries. Your body is basically a big road map of tunnels, and every tunnel takes blood to the organs so they can work and to the arms, legs, toes, and fingers so they can work too. If the heart stops beating, the blood stops moving. If the blood stops moving, the body stops working.

**Judge:** Your point is clear, circulatory system. You are needed to make the body work. Do I understand you correctly?

**Circulatory System:** Yes, your Honor. I rest my case.

**Judge:** Thank you. Last but not least, let us hear from the Nervous System.

**Nervous System:** Your Honor, I think you will soon see that I AM the most important system. I am made up of the brain, the spinal cord, and nerve cells. I am basically the command center for the entire body. I am in control. If I tell the muscles to move, they move. I even control those

involuntary movements that the muscular system talked about. I control the sweating, the digesting food, the heart beating, and the lungs breathing. Without me, none of it would happen!

**Judge:** So you think you are more important than everyone else because of that?

**Nervous System:** Yes, your Honor. To be honest, I do. I also control the senses. I see, hear, feel, smell, taste. I do it all! I tell the body when something hurts because my nerve cells send messages through my nerves, up my spinal column, into my brain, and I quickly send a message back. For example, if the hand is sitting on a hot stove, the nerve cells feel the pain. They quickly send a signal to the brain. The brain makes the decision to tell the hand to move off the stove. The message gets sent back to the hand and the person moves their hand before it gets too badly burned! Without me, the body would just not function AT ALL .

**Judge (nodding):** Important for sure.

**Nervous System:** I don't mean to be rude, your Honor, but without me, the body just cannot live. I am the main computer, the master of the body, the one in charge of everything. I tell everyone else what to do, how to do it, and when to do it. No one else can do make a decision without me. I never get a day off. I am even working while the body sleeps. In fact, I tell the body when to sleep! I tell it when to eat. I am the man in charge!

**Judge :** Thank you, Nervous System. *(To all, judge continues):* Thank you all for your testimonies. I can see why this argument has gone on for many years. I will review my notes and make a decision about which system is the most important. Please be quiet and let me think for just a few minutes.

*(Judge pretends to look at notes and think.)*

**Judge:** To all the systems, attention please! I have made a decision. First let me explain what I think before I tell you which system is most important. Nervous System, you are the brains of the operation. You are the command center. But you need oxygen from the lungs in the Respiratory System, right?

**Nervous System:** Well, yes, Your Honor.

**Judge:** And you get that oxygen because the blood in the circulatory system brings it to you. Circulatory system, you need the lungs to get the oxygen to you, too, correct?

**Circulatory System:** Yes, your Honor.

**Judge:** Respiratory System, if you don't get exercise, you won't be able to work very well. Right?

**Respiratory System:** That's true, your Honor.

**Judge:** Okay, well, you can't get exercise without the muscular system moving you around. And the muscular system can't move around without the support of the bones and joints in the skeletal system, correct?

**Muscular System** and Skeletal System: Yes, Your Honor. We work together.

**Judge:** All of you need the Digestive System because that is where food becomes energy and nutrients to make you work the way you are supposed to, right?

**All systems**, slowly nodding: Right...

**Judge:** So basically you all need each other, right?

**All systems**, slowly nodding again: Um..... right.

**Judge:** I officially declare that the most important system of the human body is the...

*(Quiet drum roll as all systems look at each other)*

**Judge** continues: The six of you together! All of you are equally important because you would not be able to work without each other. Argument settled. Case dismissed!