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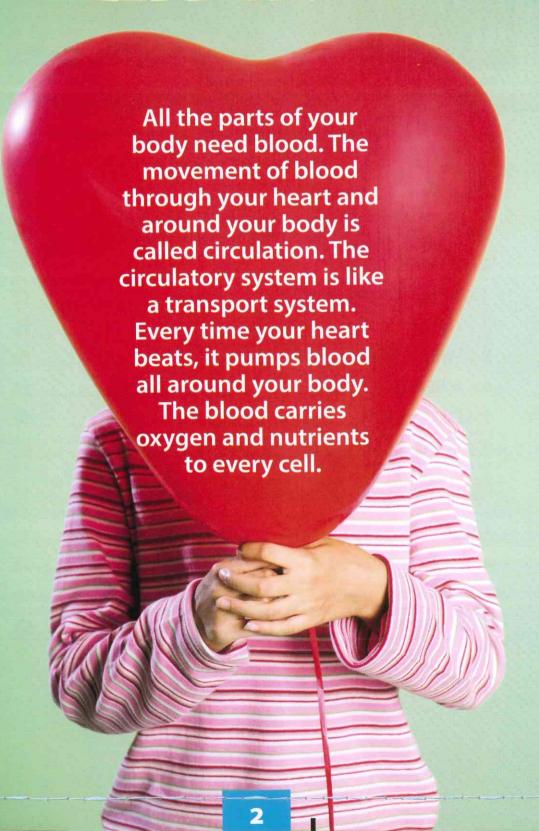
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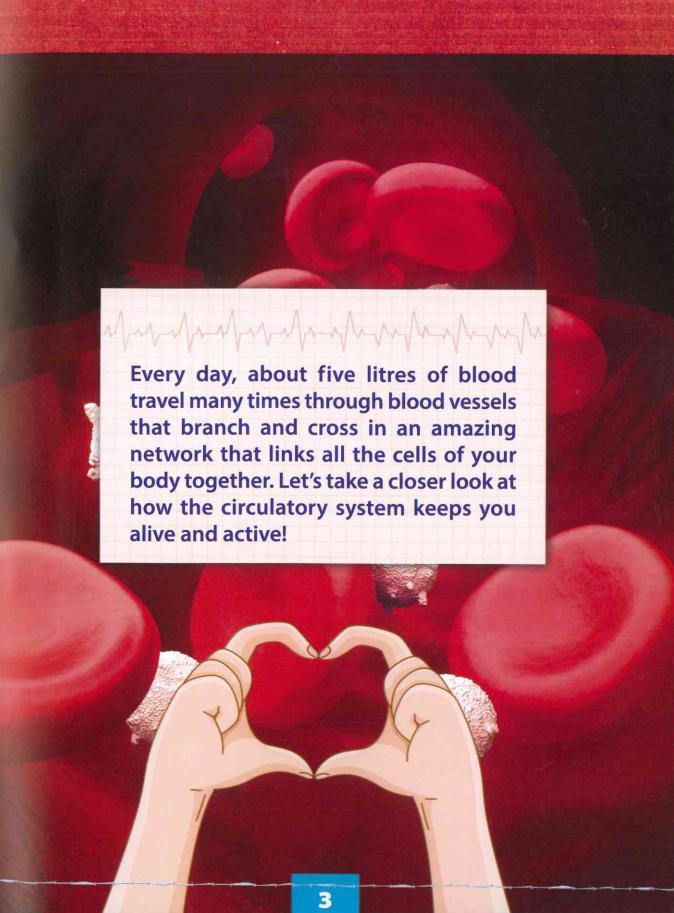
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LET'S START!



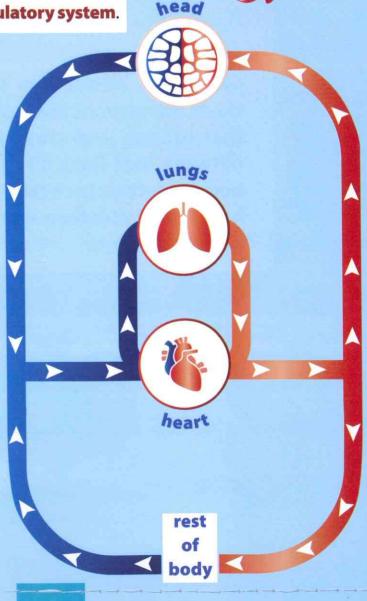


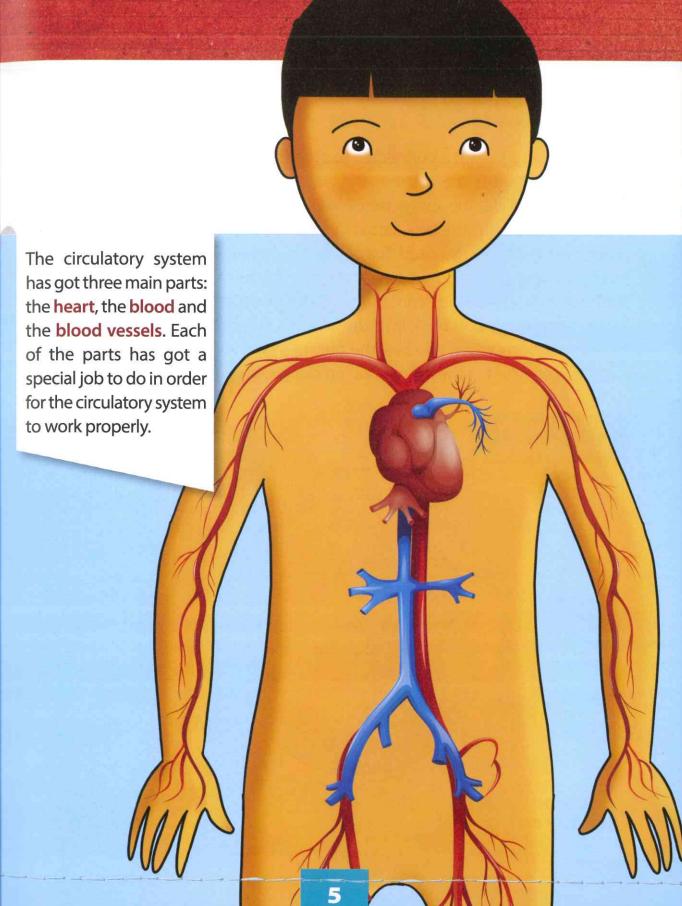


WHAT IS THE CIRCULATORY SYSTEM?

All the cells in your body need oxygen and nutrients. This is what keeps you alive. The cells also need their wastes, such as carbon dioxide, removed. This is the job of the **circulatory system**.

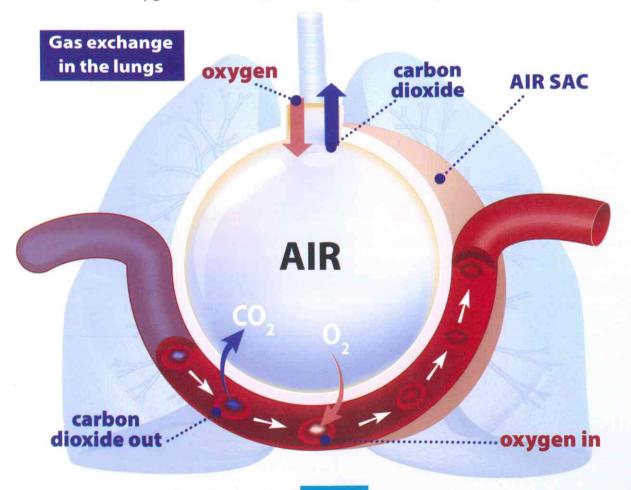
The circulatory system uses a network of blood vessels to carry carbon dioxide to the lungs. When you breathe out, the carbon dioxide leaves your body. Then, when you breathe in, oxygen goes into the lungs and the same network of blood vessels carries it to all parts of your body. To put it simply, the circulatory system is a loop which starts and ends at the heart. It is called a closed system because the blood does not enter or leave the system on its journey around your body. In a closed system, a continuous flow of blood can be pumped through the loop again and again.



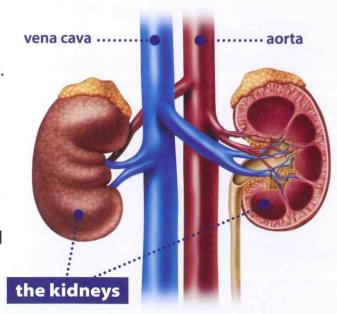


Connections to Other Systems

Your circulatory system is connected to other systems in your body, too. One of them is the **respiratory system**, which includes the **lungs**. So, how do the lungs help? Well, when you breathe in, oxygen travels from the tiny air sacs in the lungs into the blood. When the blood is oxygenated (full of oxygen), it travels to the heart through one of the blood vessels. At the same time, deoxygenated (without oxygen) blood, containing waste like carbon dioxide, passes from the blood back into the air sacs. The carbon dioxide leaves your body when you breathe out. This swapping of carbon dioxide for oxygen in the lungs is called gas exchange.



Another system that is connected to the circulatory system is the urinary system. This includes the kidneys. Blood from your heart goes to the kidneys through a large blood vessel called the aorta. The kidneys clean the blood and then send it back to the heart in another blood vessel called the vena cava.



The digestive system is also connected to the circulatory system. Nutrients from the food we eat are absorbed in the small intestine into the blood Then, the blood carries the nutrients all around your body.

the small intestine



It takes our heart only one minute to pump blood into every cell of our body!