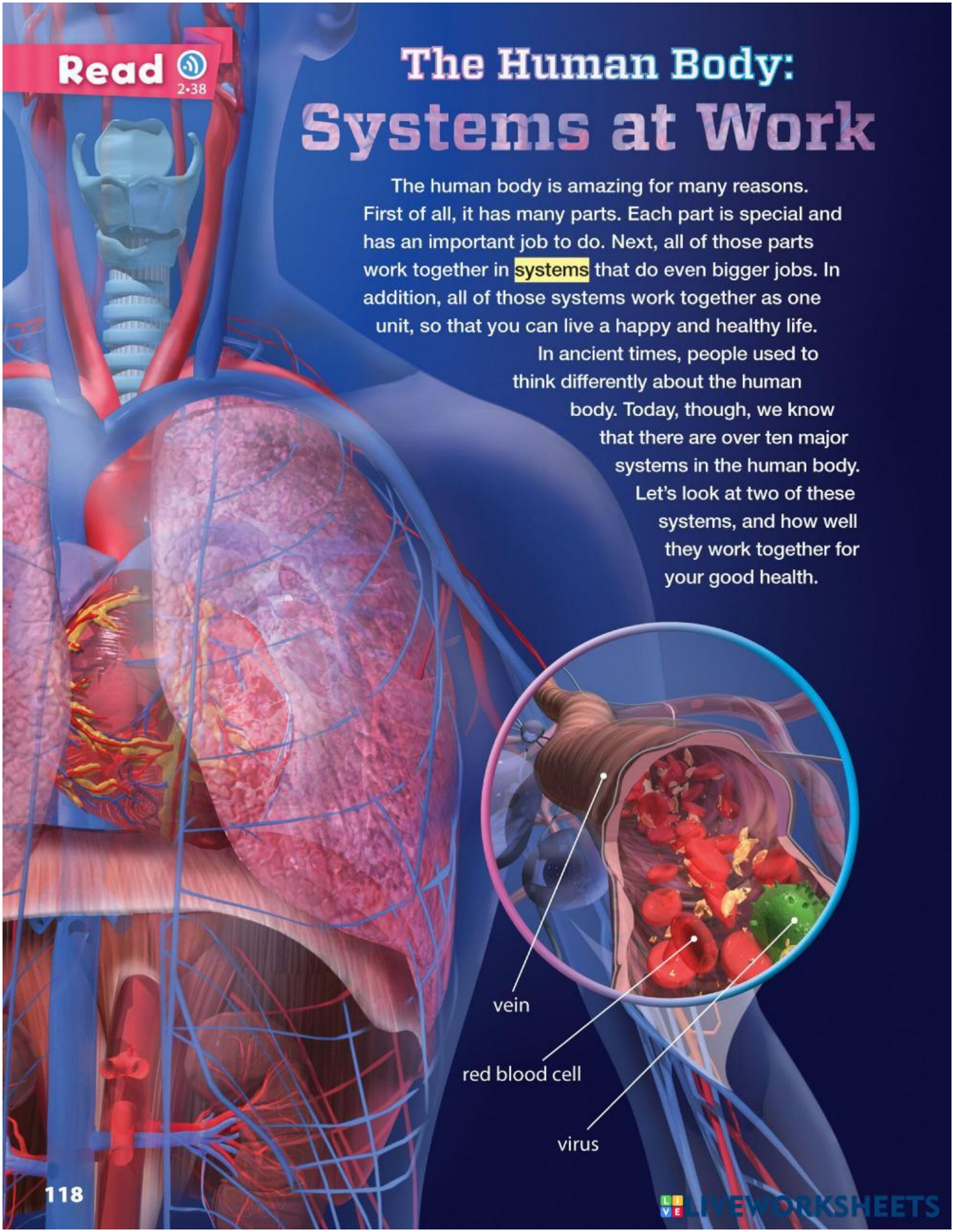
Read 2:38

The Human Body: Systems at Work

The human body is amazing for many reasons. First of all, it has many parts. Each part is special and has an important job to do. Next, all of those parts work together in systems that do even bigger jobs. In addition, all of those systems work together as one unit, so that you can live a happy and healthy life.

In ancient times, people used to think differently about the human body. Today, though, we know that there are over ten major systems in the human body. Let's look at two of these systems, and how well they work together for your good health.



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The Respiratory System

This system brings oxygen into your body and takes carbon dioxide out of your body. The major parts of the respiratory system are the trachea, the lungs, and the diaphragm.

The Circulatory System

This system carries oxygen and food to all of the cells in your body. It then removes carbon dioxide and other waste products from those cells. The major parts of the circulatory system are the heart, the arteries, the veins, the capillaries, and the blood that moves through those parts.

Two Systems Working Together as One

When you breathe in, your diaphragm first helps your lungs to get bigger. As a result, the air flows into your nose or mouth, through your trachea, and into your lungs. This air has oxygen, which your body needs to live. Next, the oxygen in your lungs passes into the capillaries, which then carry blood to the pulmonary vein. This vein then takes the blood to the left side of your heart.

Your heart pumps this blood into tubes called arteries, which then carry oxygen to all of the cells in your body. Next, these cells use this oxygen to keep your body healthy. They also create carbon dioxide after they use the oxygen. Your body doesn't need carbon dioxide, so your blood takes it away. After veins carry this blood back to the right side of your heart, it is pumped back into your lungs. The carbon dioxide then passes back into the air in your lungs. Finally, when your diaphragm squeezes your lungs, the air rushes out of your body.

Think

What is the sequence of actions up to now?

These two systems work together to bring oxygen-rich blood to every part of your body within one minute. They do this 24 hours a day, while you sleep, eat, study, and play. It is easy to see why the human body is called the most amazing machine in the world.

Think

What is the sequence of actions in this paragraph?

You **BREATHE** about 20,000 times every day.

Check Your
Lung Power!

1. Get a package of large balloons. Make sure they are all the same size. Give one to each friend.
2. Tell everyone to blow ONCE into their balloons, filling them as much as possible. Then measure the balloons. Whose is the biggest?

Put your **two fists together.** This is about the size of your **HEART.**

Check Your
Heartbeat!

1. Place two fingers on your wrist below your thumb. Can you feel blood moving through the artery? This is your pulse, which measures your heartbeat.
2. Count the number of beats you feel in one minute. Compare your heartbeat with your friends.

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