We see and hear about hearts everywhere. A long time ago, people even thought that their emotions came from their hearts, maybe because the heart beats faster when a person is scared or excited. Now we know that emotions come from the brain, and in this case, the brain tells the heart to speed up. So what's the heart up to, then? How does it keep busy? What does it look like? Let's find out.

The Heart Is a Muscle



Your heart is really a muscle. It's located a little to the left of the middle of your chest, and it's about the size of your fist. There are lots of muscles all over your body — including in your arms, in your legs and in your back.

But the heart muscle is special because of what it does. The heart sends blood around your body. The blood provides your body with the oxygen and nutrients it needs. It also carries away waste.

Your heart is sort of like a pump, or two pumps in one. The right side of your heart receives blood from the body and pumps it to the lungs. The left side of the heart does the exact opposite: It receives blood from the lungs and pumps it out to the body.

How the Heart Beats

How does the heart beat? Before each beat, your heart fills with blood. Then its muscle contracts to squirt the blood along. When the heart contracts, it squeezes — try squeezing your hand into a fist. That's sort of like what your heart does so it can squirt out the blood. Your heart does this all day and all night, all the time. The heart is one hard worker!

Parts of the Heart

The heart is made up of four different blood-filled areas, and each of these areas is called a chamber. There are two chambers on each side of the heart. One chamber is on the top and one chamber is on the bottom. The two chambers on top are called the **atria**. If you're talking only about one, call it an **atrium**. The atria are the chambers that fill with

the blood returning to the heart from the body and lungs. The heart has a left atrium and a right atrium.
The two chambers on the bottom are called the **ventricles**. The heart has a left ventricle and a right ventricle. Their job is to squirt out the blood to the body and lungs. Running down the middle of the heart is a thick wall of muscle called the **septum**. The septum's job is to separate the left side and the right side of the heart.

How Blood Circulates

You probably guessed that the blood just doesn't slosh around your body once it leaves the heart. It moves through many tubes called arteries and veins, which together are called **blood vessels**. These blood vessels are attached to the heart. The blood vessels that carry blood away from the heart are called arteries. The ones that carry blood back to the heart are called veins.
The movement of the blood through the heart and around the body is called **circulation**, and your heart is really good at it — it takes less than 60 seconds to pump blood to every cell in your body.

Your body needs this steady supply of blood to keep it working right. Blood delivers oxygen to all the body's cells. To stay alive, a person needs healthy, living cells. Without oxygen, these cells would die. If that oxygen-rich blood doesn't circulate as it should, a person could die.

The left side of your heart sends that oxygen-rich blood out to the body. The body takes the oxygen out of the blood and uses it in your body's cells. When the cells use the oxygen, they make carbon dioxide and other stuff that gets carried away by the blood. It's like the blood delivers lunch to the cells and then has to pick up the rubbish!

The returning blood enters the right side of the heart. The right ventricle pumps the blood to the lungs for a little freshening up. In the lungs, carbon dioxide is removed from the blood and sent out of the body when we exhale. What's next? An inhale, of course, and a fresh breath of oxygen that can enter the blood to start the process again. And remember, it all happens in about a minute!