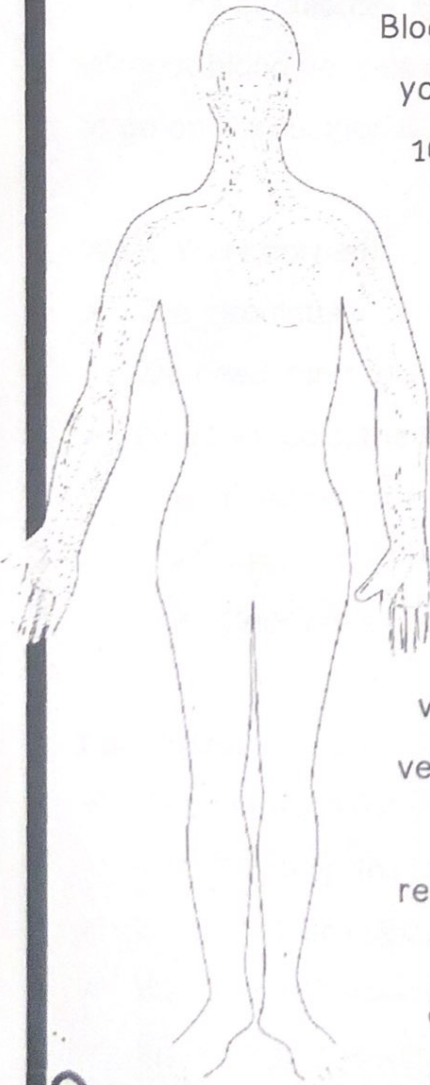


The Circulatory System – Blood Vessels

Directions Read the following information to learn about the circulatory system.

The circulatory system or cardiovascular system is made up of your heart, blood cells, and blood. The circulatory system is important to our bodies because it delivers substance to your cells, carries waste away from the cells, and helps to regulate your body temperature. Every thirty seconds, your blood moves throughout your entire body.

Parts. The circulatory system is made up of three parts. It consists of the heart, blood vessels, and your blood.



Blood vessels are found in almost every part of the body. If you laid out your blood vessels they would stretch out 161,000 km. or 100,000 miles. To give you a frame of reference, the distance from New York to California is 3,928 km or 2,441 mi. It is long enough to travel around Earth two times! That's a lot of blood vessels that are in our bodies. Blood vessels run through the tissue in your body. They look like hallways in a building. They can be as wide as your thumb or as fine as one strand of hair. Arteries, capillaries and veins are examples of the three main types of blood vessels. In size order, arteries are the largest, followed by veins and capillaries.

Arteries carry blood away from the heart. A good way to remember this is that arteries and away both start with the letter a. All arteries, aside from those that go to the lungs, carry oxygen rich blood and nutrients. Arteries carry materials the cells need.

Veins carry blood from the body back to the heart. All veins, aside from those that are coming from the lungs, contain dissolved waste material. All veins travel in one direction to bring the blood back to the heart.

Capillaries connect arteries and veins. Try remembering this because both capillaries and connect start with the letter c. Capillaries are tiny. They are so tiny that you need a microscope to see them. Their walls are very thin so that oxygen and glucose can pass through them and enter the cells while carbon dioxide and waste products are carried away and taken out of the body. A majority of the blood vessels that are inside your body are capillaries.

The circulatory system is made up of blood vessels, the heart and blood. Without blood vessels circulating, or moving the blood along, life would not be able to go on. Circulation is a vital life function. We need it to survive.

What You Learned:

- The circulatory system is the system that moves blood throughout our body. We need it in order to survive.
- Blood vessels, the heart and blood make up the circulatory system
 - Arteries carry blood away from the heart
 - Veins carry blood to the heart
 - Capillaries connect arteries and veins

Fun Facts:

- ✓ If you stretch out your arteries, veins and capillaries, they would stretch up to 100,000 mi or 161,000 km. Capillaries make up most of this.
- ✓ Capillaries are about 1/10 of the diameter of one human hair.
- ✓ Blood travels your entire body in about 30 seconds.
- ✓ From largest to smallest, the order of blood vessels is artery, vein and capillary