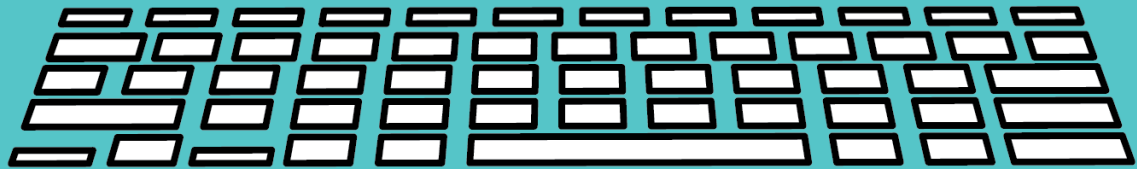
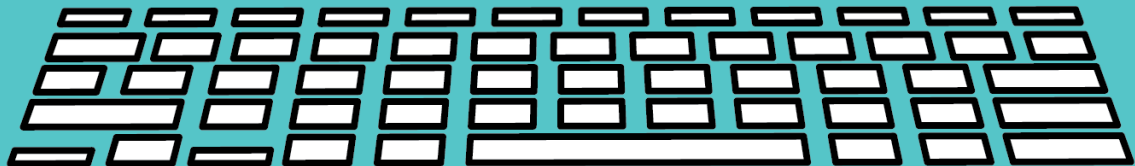


Short Answer	Type Answer Here
1. What color are the blood cells that carry oxygen?	
2. How many chambers is the heart split into?	
3. What are the parts called that help blood clot?	
4. What color are the veins that return blood to the heart?	
5. What connects the arteries and veins?	
6. How many miles long is the blood superhighway?	
7. What color blood cells destroy germs?	
8. How many main pumps does the heart have?	



Short Answer	Type Answer Here	Fill in the Blank	Type Answer Here
1. What color are the blood cells that carry oxygen?		9. ____ move blood from capillaries to veins.	
2. How many chambers is the heart split into?		10. The circulatory system gets the ____ moving in your body!	
3. What are the parts called that help blood clot?		11. The main artery that pumps blood away from the heart is the ____.	
4. What color are the veins that return blood to the heart?		12. The ____ venae cavae lead blood right to the heart.	
5. What connects the arteries and veins?		13. Sometimes it is called the vascular or ____ system.	
6. How many miles long is the blood superhighway?		14. ____ control the speed of flow (blood pressure).	
7. What color blood cells destroy germs?		15. The heart is the primary ____ that pumps the blood.	
8. How many main pumps does the heart have?		16. Circulatory system includes the heart, blood, & blood ____.	



# CIRCULATORY SYSTEM

The circulatory system gets the blood moving in your body! Sometimes it's also called the vascular or cardiovascular system. The chief goal of circulation is to transport oxygen, blood cells, hormones, and nutrients. Blood travels throughout the body, delivering it to organs along the way. The heart pumps blood to get it moving about the body in a cycle. This repeated cycle is why it's called the circulatory system.

The circulatory system includes the heart, blood, and blood vessels. Blood has several components:

- red blood cells - carry oxygen, last approximately 120 days
- white blood cells - destroy germs and protect the body - they last anywhere from one day to one year
- platelets - help blood clot, they are tiny round cells that change shape when forming blood clots to cut a wound
- plasma - holds the blood cells and carries them

Blood carries nutrients from food to cells and transports oxygen from the lungs to cells. Blood moves carbon dioxide from cells and delivers it to the lungs. Finally, blood regulates body temperature and keeps the body hydrated. Blood is part of a superhighway in the body!

The heart is the primary muscle that pumps the blood through the body. The heart is only the size of a fist, and it pumps blood in one direction throughout the body. Adults typically have 10 to 12 pints of blood in the body. The heart has two main pumps: the first sends blood to the body, the second pump sends blood to the lungs. The heartbeat changes with physical activity. If the body is moving a lot, the heart pumps faster to deliver oxygen. If the body is sitting quietly, the heart pumps slower. The beating of the heart happens when the muscle squeezes to pump the blood.

The heart is split into four chambers: two on top and two on the bottom. The right and left ventricles are in the bottom chambers. These ventricles pump blood out of the heart. The right and left atriums are in the top chambers. The atriums receive blood that is returning to the heart. These chambers have valves so that blood flows in one direction only.

The heart cannot move blood throughout the body without blood vessels.

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Blood vessels include arteries, arterioles, capillaries, venules, and veins.

- Arteries carry blood to the body.
- Arterioles control the speed of flow (blood pressure).
- Capillaries distribute blood to tissue. They also carry blood with no oxygen to venules.
- Venules move blood from capillaries to veins.
- Veins return blood (with no oxygen) to the heart.

Arteries, which are red, move blood away from the heart. Blue veins return blood to the heart. An easy way to remember this: A (arteries) = away! Capillaries are the link between the veins and arteries. They transfer fuel and oxygen to individual cells. The main artery that pumps blood away from the heart is called the aorta.

The circulatory system has two systems in one. First, pulmonary circulation is a small loop from the heart to the lungs to the heart again. The pulmonary artery is a large artery from the heart. Here the blood moves to the lungs, picks up oxygen, and leaves carbon dioxide. Then the blood returns to the heart through pulmonary veins. The second system is systemic circulation. Within this system, blood travels from the heart to all the other parts of the body and back again. Once the blood picks up oxygen from the lungs, the aorta moves the blood throughout the body. Think of it like a large tree. The blood starts in the trunk of the tree. As it travels, it moves to the smaller branches.

Along this journey, capillaries connect the arteries and veins. Nutrients and oxygen travel by capillaries. Most capillaries take in waste products. Capillaries take these wastes to small veins. Veins and arteries closest to the heart are larger. The superior vena cava and inferior vena cava lead straight to the heart. Now the heart beats itself over and over again. Blood moves from the heart to arteries, capillaries, and then to veins and back to the heart again.

Fun fact: If you straighten out the blood vessels in a straight line, they could wrap around the world two and a half times! The blood superhighway is about 60,000 miles long!

It's important to keep your heart healthy. Exercise for at least a half hour each day to keep your muscle moving. Stay hydrated by drinking water for your heart. Try to avoid junk food, processed foods, sugary drinks, and soft drinks. Eat five servings of fruits and vegetables each day. Finally, never smoke! Do your part and care for your heart!

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