



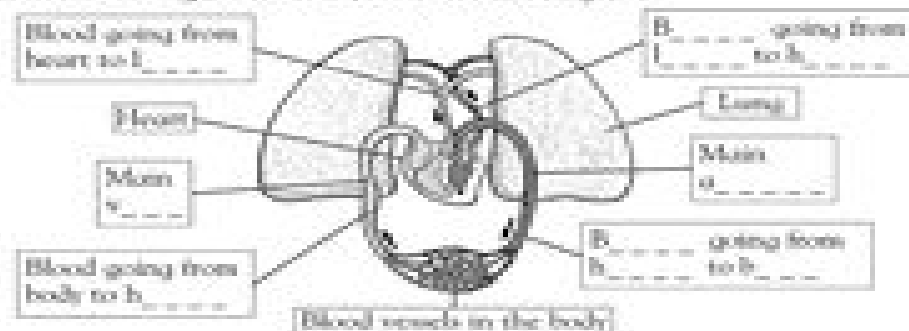
Blood highways

Background knowledge

Every time the heart beats, blood is sent throughout the body, carrying oxygen and nutrients to all of the cells. Each day, the average adult heart pumps more than 7,570 liters of blood many times through about 96,360 km of blood vessels. The blood that leaves the heart and goes to the body is rich in oxygen. After the oxygen is delivered to the cells, the blood returns to the heart to be sent to the lungs to pick up more oxygen. Blood vessels that carry blood away from the heart are called arteries. They have thick, muscular walls to help move the blood to your cells. Veins are the thin-walled blood vessels that carry blood back to the heart. Your heart, veins, and arteries are part of your circulatory system. This system delivers important substances to your cells and removes waste. You can think of your circulatory system as your blood highway.

Science activity

Fill in the missing letters in the labels for this diagram.



Science investigation

A stethoscope is a device that can listen to your heart. Obtain 30 cm of rubber tubing, some masking tape, and two small funnels. Attach a funnel to each end of the tubing with some tape. The funnel end should fit into the tube. Place one funnel over your heart and the other over your ear. How many times does your heart beat per minute? How does this compare to your pulse? Explain any similarities or differences.