



Science

Year 6

The Human Heart

How do I maintain a healthy heart and what's the point?

Shakespeare
Primary School
and Nursery



Speak like a Scientist

Haemoglobin- A red protein that is responsible for carrying oxygen around the body.

Antibody- A protein produced by the body's immune system that fights disease and infection.

Nutrient- An essential substance that the body needs for life and growth, including proteins, vitamins and minerals.

Blood vessel- A tube that transports blood around the body. Arteries, veins and capillaries are all types of blood vessel.

Veins- A vein is one type of blood vessel that has the job of carrying deoxygenated blood away from the body's tissues and back to the heart.

Arteries-An artery is a type of blood vessel which has the job of taking the blood full of oxygen away from the heart and towards the body's tissues.

Capillaries- Capillaries are tiny passages that connect the arteries and the veins to the body's tissues.

Pulmonary artery- The blood vessel that carries blood from the heart to the lungs to collect oxygen.

Pulmonary Vein- The blood vessel that carries oxygenated blood from the lungs to the heart.

The Blood

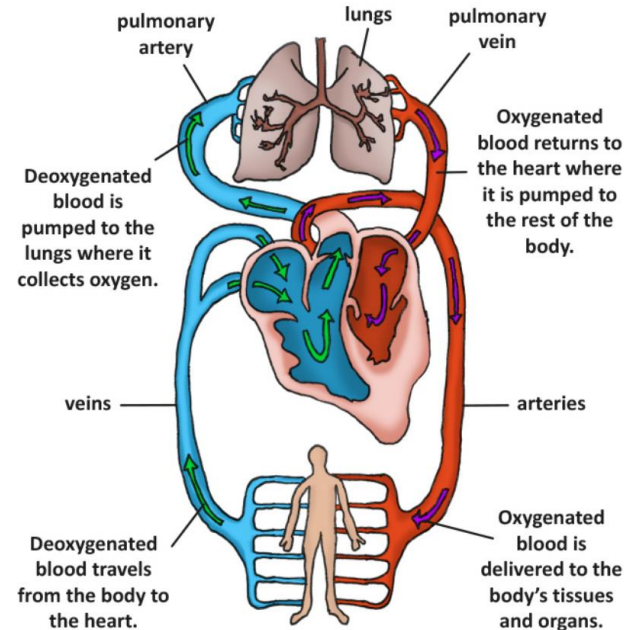
Blood is made up of red blood cells, white blood cells, platelets and plasma. **Plasma** is the liquid that carries the red blood cells, white blood cells and platelets around the body.

White blood cells protect against illness and disease. **Red blood** cells contain a protein called haemoglobin that carries oxygen from the lungs to different parts of the body.

Platelets are small blood cells that help the body to stop bleeding after a cut or scrape.

The Circulatory System

The circulatory system is made up of the heart, blood vessels and blood. It is responsible for transporting nutrients, oxygen, water and waste products around the body.

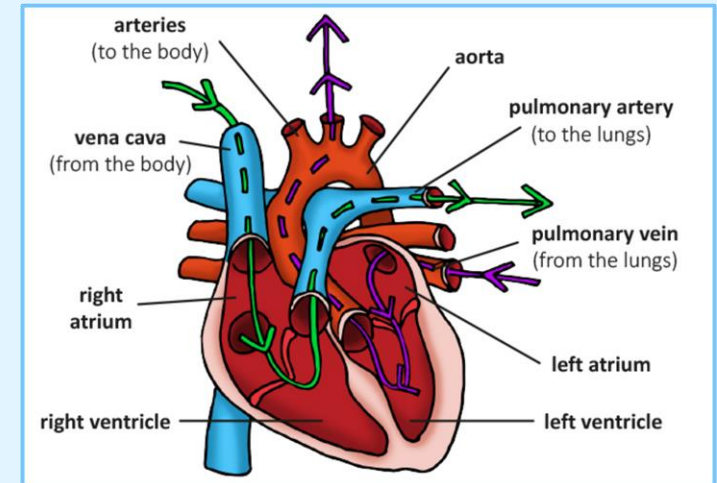


Project Questions

- Can you explain the main parts of the human circulatory system and their functions?
- How does the heart work to pump blood throughout the body, and why is this function important?
- What are the different types of blood vessels, and how do they each play a role in the circulatory system?
- How does a healthy diet and regular exercise impact the way our bodies function, especially in terms of the circulatory system?
- Explain the importance of water and nutrient transport in our bodies. How does this process work?

The Heart

The heart is a muscle that is found in the chest cavity between the lungs. It is responsible for pumping blood around the body, through the circulatory system. The heart is made up of four chambers known as the left atrium, right atrium, left ventricle and right ventricle.



The heart is a hardworking organ and it is important to keep it healthy. A balanced diet and regular exercise are vital for heart health. This should include plenty of fruits and vegetables, whole grains, low-fat dairy products, lean meat and fish, nuts and pulses and good fats. Eating foods that are high in salt, sugar and fat can be bad for the heart and lead to blockages in the arteries which means that the heart must work harder to pump blood around the body.