

Topic: Science

Animals including Humans

Year: 6

Term: Autumn

Your blood is never blue!

The **circulatory system's** main function is to transport blood, nutrients, gases and hormones to and from the cells throughout the body.

Because your blood travels around your body in a circle, we call it the **circulatory system**.

The heart is divided into four chambers called: the **left atrium**; the **right atrium**; the **left ventricle** and the **right ventricle**.

Arteries carry blood **away** from the heart to the rest of the body.

Veins carry blood **back** to the heart from the rest of the body.

An adult human has an average resting heart rate of about 75 beats per minute.

Blood that flows through your arteries is **bright red**. After giving up its oxygen, your blood becomes **dark red** as it races back to your heart through your veins.

When you **exercise**, your heart beats faster. This is because your muscles are working harder and need more oxygen. Your lungs also work harder, making you breathe more quickly to get more oxygen.

Legal drugs include medicines like cough syrup and substances like tea or coffee. **Recreational drugs** are taken by choice—these are illegal.

Alcohol is a legal drug but there are restrictions and recommended limits on its use.

Smoking is very addictive and smokers become addicted to the nicotine inside cigarettes.

The Ancient Egyptians were cardiocentric — they believed the heart, rather than the brain, was the source of emotions, wisdom and memory.

Circulatory System

1. Your heart first pumps blood to your lungs. Here, the blood picks up **oxygen** from the air that you have breathed in

2. The blood (carrying oxygen) then travels back to your heart.

3. The heart gives the blood a second push. This time, it's sent to all the other parts of your body, including the brain, all the other organs and all the muscles. The blood delivers oxygen to them all.

4. The blood travels back to the heart, and it all begins again.

William Harvey was the first known physician to describe completely the circulatory system and properties of blood being pumped to the body by the heart.



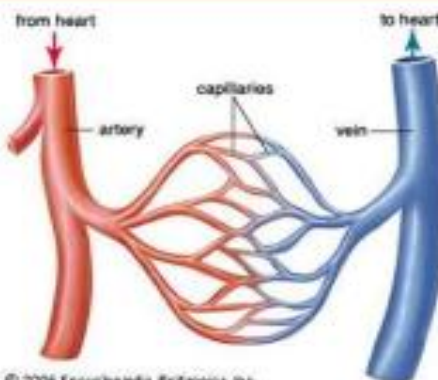
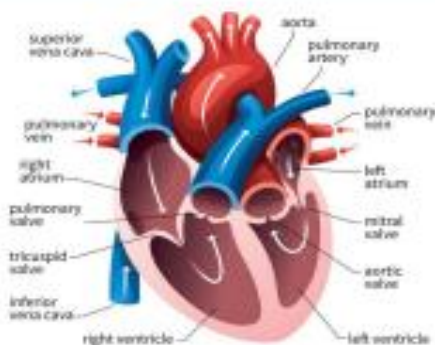
Carbohydrates give us energy. They are found in foods like bread, potatoes and pasta.

Proteins help our bodies to repair themselves. They are found in foods such as fish, meat, nuts, seeds, eggs and cheese.

Fats help store energy for our bodies. They are found in foods such as butter, cheese and fried foods.

Fibre is important for helping us digest our foods. It's found in fruit and vegetables.

The Eat Well Plate



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