

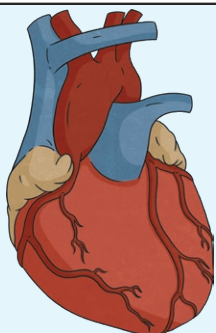
Key Vocabulary	
<b>circulatory system</b>	a system of the body that includes the heart, blood vessels and blood
<b>heart</b>	a muscular organ that pumps blood around the circulatory system
<b>blood vessels</b>	tube-like structures that carry blood through the body's tissues and organs
<b>veins</b>	blood vessels that carry blood towards the heart
<b>arteries</b>	blood vessels that carry blood away from heart
<b>capillaries</b>	the smallest blood vessels in the body
<b>red blood cells</b>	a component of blood that carries oxygen to cells and returns carbon dioxide to the lungs
<b>lungs</b>	organs located in the chest

Key Vocabulary	
<b>white blood cells</b>	a component of blood that protects the body from infection
<b>nutrients</b>	substances that provide the body with the nourishment needed to grow and repair itself
<b>plasma</b>	a component of blood that carries other components of blood around the body
<b>oxygen</b>	a gas that is essential for the cells of the body to survive
<b>platelets</b>	a component of blood that forms clots to help stop wounds bleeding
<b>chamber</b>	a compartment or an enclosed space
<b>atria (singular - atrium)</b>	the two upper chambers of the heart

Key Vocabulary	
<b>ventricles</b>	the two lower chambers of the heart
<b>oxygenated blood</b>	blood that contains a high amount of oxygen
<b>deoxygenated blood</b>	blood that contains a low amount of oxygen
<b>AR (augmented reality)</b>	a technology that allows computer-generated images and information to be overlaid on a view of the real world
<b>dissection</b>	the process of carefully cutting apart an object to understand how it works

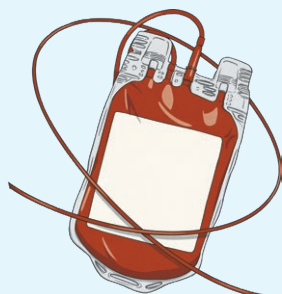
## The Circulatory System

The **circulatory system** is a complex network of organs, **blood vessels** and blood. There are three main parts of the **circulatory system**.



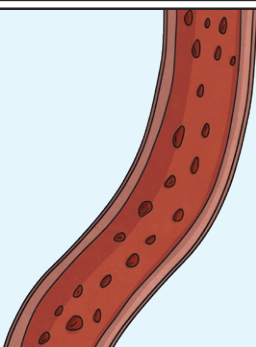
### The Heart

The role of the **heart** is to pump blood around the body. The right side of the **heart** pumps **deoxygenated blood** to the **lungs**, while the left side pumps **oxygenated blood** to the body.



### Blood

Blood is made up of **plasma**, **red blood cells**, **white blood cells** and **platelets**. It transports gases and **nutrients**, fights infection and regulates body temperature.

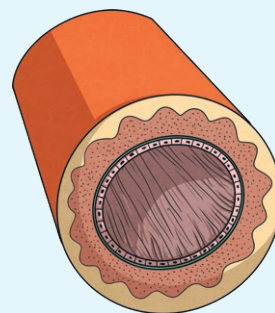


### Blood Vessels

**Blood vessels** transport blood around the body.

## The Three Types of Blood Vessel

There are three main types of **blood vessel**.



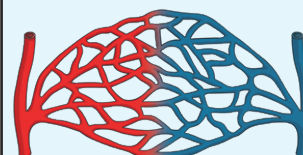
### Arteries

**Arteries** transport blood away from the **heart** to all the other parts of the body.





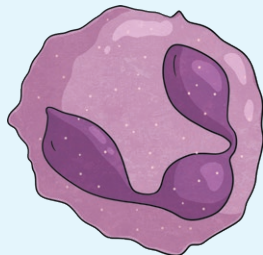
### Veins

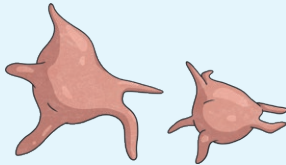
**Veins** collect blood and return it to the **heart**. They contain valves that make sure blood only flows towards the **heart**.

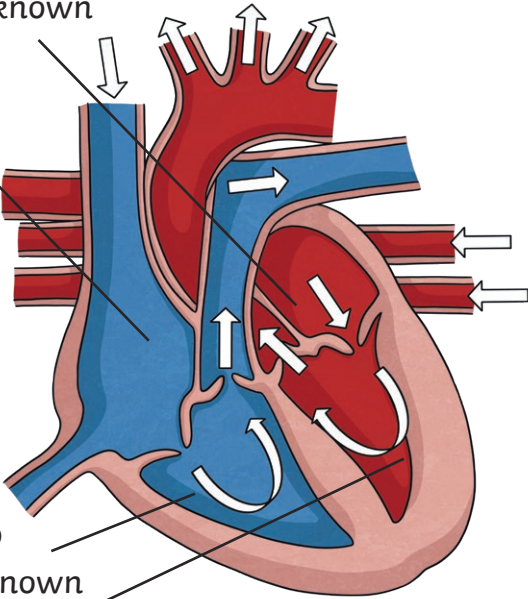


### Capillaries

**capillaries** are the smallest **blood vessels**. They connect **arteries** and **veins** together. The exchange of gases and **nutrients** between blood and the cells of the body occurs in the **capillaries**.

Blood	
There are four key components that make up blood.	
	Plasma
	<b>Plasma</b> transports the other components of blood around the body.
	Red Blood Cells
	<b>Red blood cells</b> are the reason that blood appears red. New <b>red blood cells</b> are produced continuously in bone marrow.
	White Blood Cells
	<b>White blood cells</b> protect the body from infection by attacking and destroying invasive microorganisms they find.

	Platelets
	<b>Platelets</b> form clots to slow and stop bleeding.

Chambers of the Heart	
<p>The top two <b>chambers</b> are known as the <b>atria</b>.</p> 	<p>The bottom two <b>chambers</b> are known as the <b>ventricles</b>.</p>