

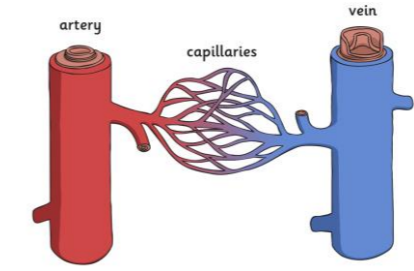
**Cunningham Hill Junior School - Science Knowledge Organiser - Animals Including Humans - Year 6 - The Circulatory System**

<u>Key Vocabulary:</u>	
<b>Circulatory System</b>	The system that circulates blood around the body.
<b>Blood</b>	Liquid that travels to every cell in the body transporting nutrients and oxygen. Contains red, white blood cells, plasma and platelets.
<b>Blood Vessels</b>	The tubes that carry blood around the body: arteries, veins, capillaries
<b>Heart</b>	A strong muscle in the chest protected by the ribs, that pumps blood around the body through the circulatory system.
<b>Lungs</b>	Two spongy organs inside the chest which fill with air when air is breathed in. They remove carbon dioxide from blood and add oxygen.
<b>Nutrients</b>	Substances that animals and humans need to stay alive, grow and develop.
<b>Healthy Lifestyle</b>	When a healthy diet and exercise are combined to create a physically healthy person.

<u>The Function of the Heart:</u>	
1.	Deoxygenated blood flows into the heart from the body through the veins.
2.	This blood is pumped out to the lungs through the pulmonary artery.
3.	Blood is oxygenated in the alveoli (air sacs) in the lungs.
4.	The oxygenated blood is then pumped out of the heart through the aorta.
5.	The blood travels around the body delivering oxygen and nutrients to the organs.
6.	Deoxygenated blood flows into the heart from the body through the veins.

<u>The Importance of a Healthy Lifestyle:</u>		
Fatty rich foods can clog arteries and veins, preventing blood from delivering what is needed.	Exercise can improve the health of a person by removing fatty deposits from the body.	Some exercises are called cardiovascular, and are designed to improve the fitness of the overall circulatory system by strengthening the organs and pulse rate.

**The Blood Vessels:**

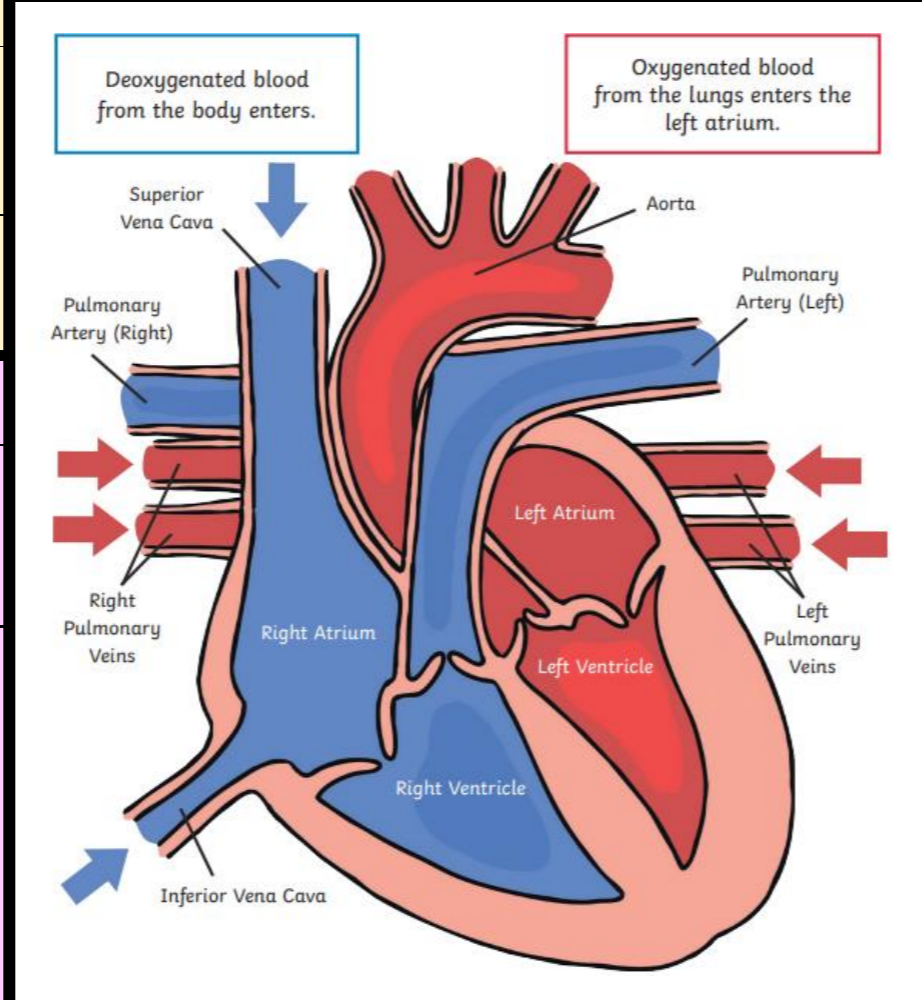


Arteries - carry blood away from the heart

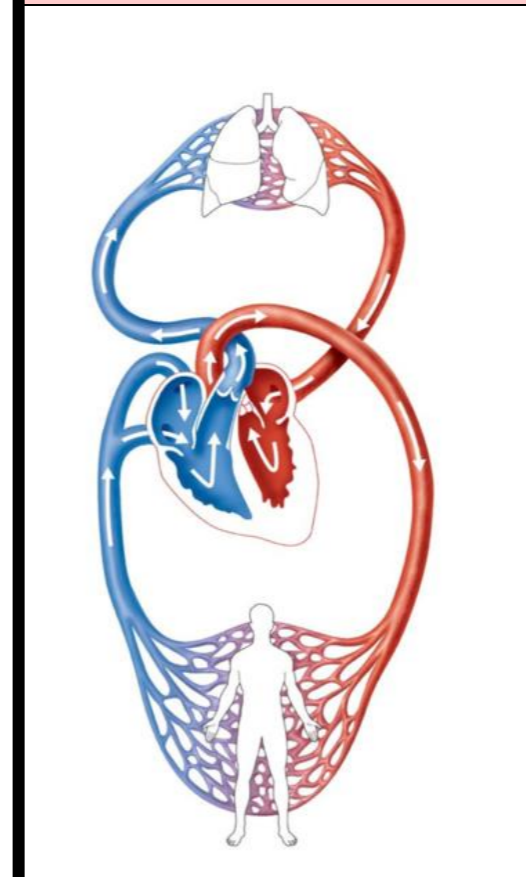
Veins - carry blood to the heart

Capillaries - deliver blood to muscles

**The Heart:**



**The Double Pump:**



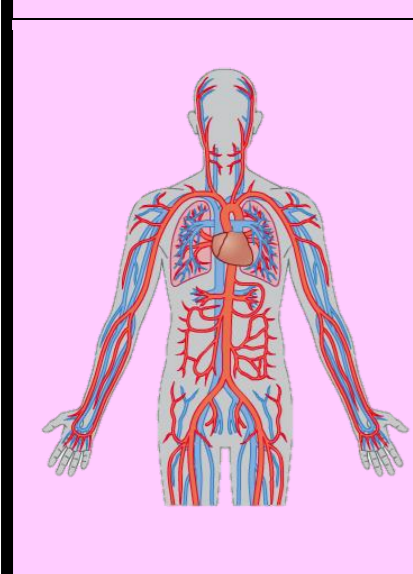
When you feel your heartbeat, you will notice two pumps.

- 1) To pump blood to the deoxygenated blood to the lungs.
- 2) To pump the oxygenated blood around the body.

**Roles of the Blood Cells:**

Red Blood Cells	Post man
Plasma	Van
White blood cells	Policeman
Platelets	Doctor

**The Circulatory System:**



**Scientist Study:**

Daniel Hale Williams (1856 - 1931). He is known for having completed the first successful heart surgery.

