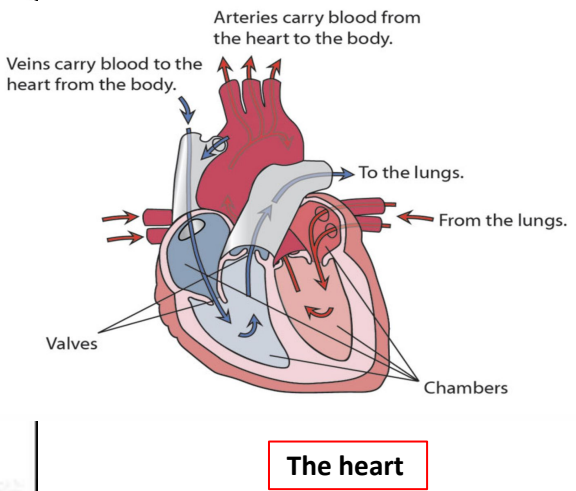
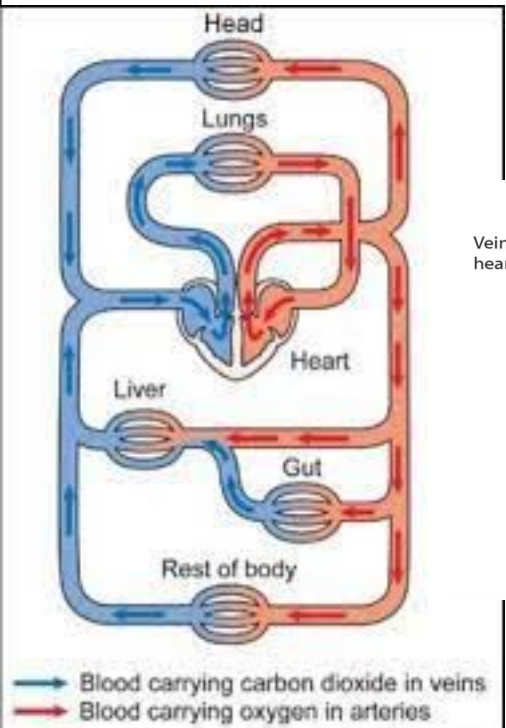




Years six science Humans - circulatory system



<p>The circulatory system</p>	<p>The circulatory system is made up of heart (a muscle), the blood vessels (arteries, veins and capillaries) and the blood.</p> <p>The heart pumps blood all around the body using blood vessels - transporting useful materials to our organs.</p> <p>The heart has two parts. One part pumps oxygenated blood through our arteries around the body and returns to the heart with deoxygenated blood in our veins. The other part of our heart pumps deoxygenated blood to our lungs and returns with oxygenated blood.</p>
<p>Blood</p>	<p>Our blood is a mixture made up of plasma (which is a yellow liquid); red blood cells (which carry oxygen); white blood cells (which protect against disease); and platelets (which help the blood thicken and clot).</p>
<p>Arteries and veins</p>	<p>Arteries carry blood away from the heart and transport oxygen and nutrients to the body's cells. After the oxygen has been used up, veins take blood back to the heart where it is pumped to the lungs to pick up new oxygen again.</p>
<p>Capillaries</p>	<p>An extremely narrow thin-walled blood vessel that connects small arteries with small veins to form a network throughout the body.</p>
<p>Pulse</p>	<p>The heart, pumping blood all around the body. Each pulse corresponds with a beat of your heart. Your pulse rate is the number of times your heart beats in a minute.</p>



Key vocabulary	
circulation	To move around something
Nutrients	There are seven essential nutrients that we get from our food: water, minerals, vitamins, carbohydrates, fibre, proteins, fat.
blood vessel	The tube-like structures that carry blood through the tissues and organs.
nutrient	Substances that animals need to stay alive and healthy.
transport	Move from one place to another
oxygenated blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
deoxygenated blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.



Dr Christiaan Barnard
 A South African surgeon who performed the first human-to-human heart transplant.

Significant people

Dr Hale Williams
 Black African American. Appointed by the president as chief surgeon at a hospital in Washington DC in 1894. He performed hundreds of open heart surgeries

