



Glossary

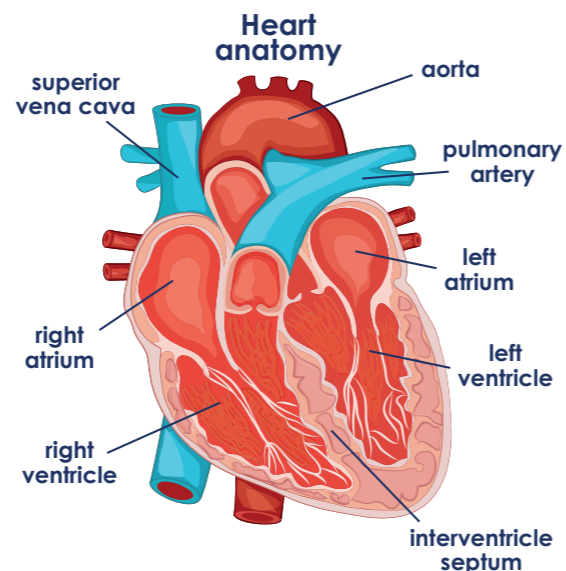
1	addiction	the uncontrollable nature of not being able to stop something
2	arteries	a blood vessel that transports blood away from the heart
3	atrium	the upper part of the heart
4	blood vessels	a tube-like structure carrying blood
5	capillaries	the smallest of the 3 blood vessels delivering oxygen and nutrients
6	carbon dioxide	also known as CO ₂ , the gas exhaled by humans — a waste product
7	circulatory system	the system that carries blood around the body
8	depressant	a substance or drug that reduces brain activity
9	diastole	the heart filling with blood
10	erythrocyte	red blood cells
11	leukocytes	white blood cells
12	nutrients	a substance that humans need to live and grow
13	oxygen	also known as O ₂ . Oxygen is needed by humans to survive
14	plasma	carries the red and white cells around the body
15	platelets	helps the blood clot if you have an injury
16	stimulant	a substance or drug that enhances brain activity
17	systemic system	the circuit that pumps oxygenated blood to the body
18	systole	the heart pumping out blood
19	veins	a blood vessel that transport blood towards the heart
20	ventricle	the lower chambers of the heart

The heart

The heart is made up of 4 main chambers: 2 upper chambers called left atrium and right atrium and two lower chambers called left ventricle and right ventricle. These chambers are separated by valves to ensure that the blood only goes from the top down to the bottom and not the other way.

You have 4 main blood vessels that carry blood to and from the heart, they are called: pulmonary artery, pulmonary vein, aorta and superior vena cava.

Your heartbeat is made up of 2 sounds- often referred to as a 'lub'-'dub'.



What is blood?

Blood is a vital component of our circulatory system. It carries oxygen to the parts in the body that require it such as the brain, muscles and digestive system. It also protects us from infection or disease and regulates our body temperature to ensure we function at our best. Blood is made up of 4 key parts; each play a major part in keeping us alive! These 4 parts are: red blood cells, white blood cells, platelets and plasma.

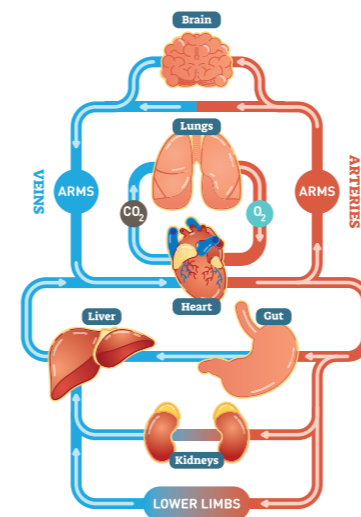
Red blood cells	White blood cells	Platelets	Plasma
These cells carry oxygen and nutrients around the body. They carry a red protein called haemoglobin — giving our blood its colour.	These cells help to keep us well. If they detect disease, infection or viruses they attack.	Platelets are small parts of cells. Their function is to block up holes in blood vessels. If you graze your knee, platelets will help clot the blood to stop bleeding.	Plasma makes up approximately 55% of your blood. It is straw-coloured and carries the cells around the body.

The circulatory system

The circulatory system is made up of two circuits. The pulmonary circuit and the systemic circuit.

- The pulmonary circuit transports blood to and from the lungs from the heart.
- The systemic system transports the blood from the heart around the body and back again.

The circulatory system relies on 3 types of blood vessel: arteries, veins and capillaries.



The lungs play a major part in the circulatory system providing the body with oxygen and removing the waste product carbon dioxide from the body.

Exercise, nutrients and drugs

Exercise is important in keeping the body healthy. Cardiovascular exercise strengthens the heart. A strong heart pumps more blood to the muscles delivering the much-needed oxygen.



Nutrients are transported around the body in the blood. They are diffused through the digestive tract membrane into the capillaries.



Drugs affect our body in a range of ways. There are three categories of drug: legal, legal with restriction and illegal. Within this there are four types of drug: stimulants, depressants, analgesics and hallucinogens.

