

The Circulatory System

lungs – organs that exchange gases during breathing



red blood cells – part of the blood that carries oxygen and removes waste products



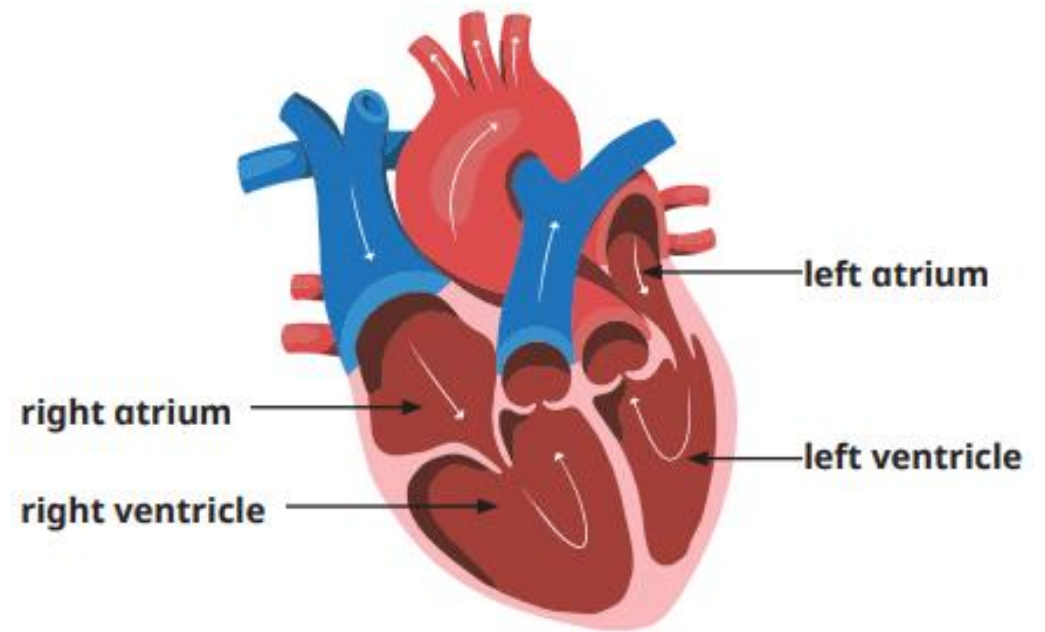
white blood cells – part of the blood that fights viruses and bacteria



heart – the organ responsible for pumping blood around the body

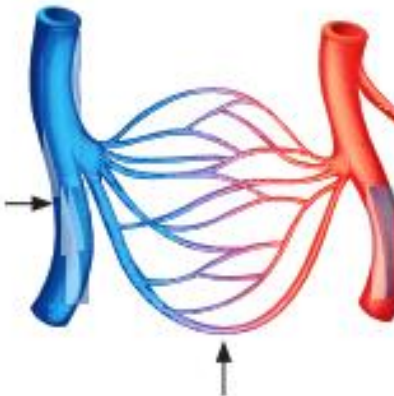


circulatory system – parts of the body that work together to move blood around the body



blood vessels – tubes within the body that carry blood

veins – blood vessels that carry blood towards the heart



arteries – blood vessels that carry blood away from the heart

capillaries – blood vessels that connect veins and arteries

Key Knowledge	
The circulatory system	The circulatory system moves blood around the body. It is made up of the heart, blood vessels and blood. The blood vessels that move blood towards the heart are called veins. The blood vessels that move blood away from the heart are called arteries. Capillaries are small blood vessels that link veins and arteries together.
Blood	Blood transports nutrients and oxygen to all parts of the body, and takes waste, such as carbon dioxide, away. Nutrients are carried in the plasma to provide the nourishment cells need to repair themselves and grow. Oxygen is carried in red blood cells from the lungs to all cells in our body. White blood cells help to fight bacteria and viruses in our body to prevent illness.
The Heart	The heart is part of the circulatory system. The heart is a muscle which beats regularly. As the heart beats, it pumps blood around the body. The heart is split into four chambers. It has two atria and two ventricles.
Blood flow in the heart	Blood flows through the heart as part of its journey through the circulatory system. Veins carry blood towards the heart. They have valves to stop the blood flowing in the wrong direction. Blood then flows through the right atrium, then out of the right ventricle to the lungs. Blood from the lungs then flows into the left atrium and out of the left ventricle towards the rest of the body.
Oxygenated and deoxygenated blood	Oxygenated blood is blood that carries lots of oxygen. Deoxygenated blood is blood that has little oxygen in it. Oxygenated blood mostly travels from the heart through the arteries. Deoxygenated blood mostly travels from the parts of the body back to the heart, through veins.
Enquiry Question	
What is the circulatory system and how does it work?	