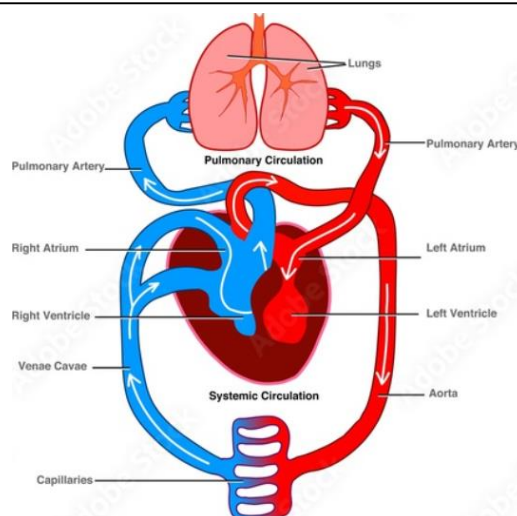


Science Knowledge Organiser – The Circulatory System

Key Enquiry Question: What are the main functions of the heart?

National Curriculum

- to identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood;
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function;
- describe the ways in which nutrients and water are transported within animals, including humans.



Key Vocabulary	Meaning
The Circulatory System	A system which includes the heart, veins, arteries and blood transporting substances around the body.
Heart	An organ which constantly pumps blood around the circulatory system.
Blood Vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
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.
Drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
Alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.

Nutrient	Substances that animals need to stay alive and healthy.
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Sticky Knowledge

- The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.
- Mammals have hearts with four chambers. Blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated again.
- Capillaries are the smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.
- Arteries carry oxygenated blood away from the heart.
- Veins carry deoxygenated blood toward the heart.
- Drugs, alcohol and smoking have negative effects on the body.
- A healthy diet involves eating the right types of nutrients in the right amounts.