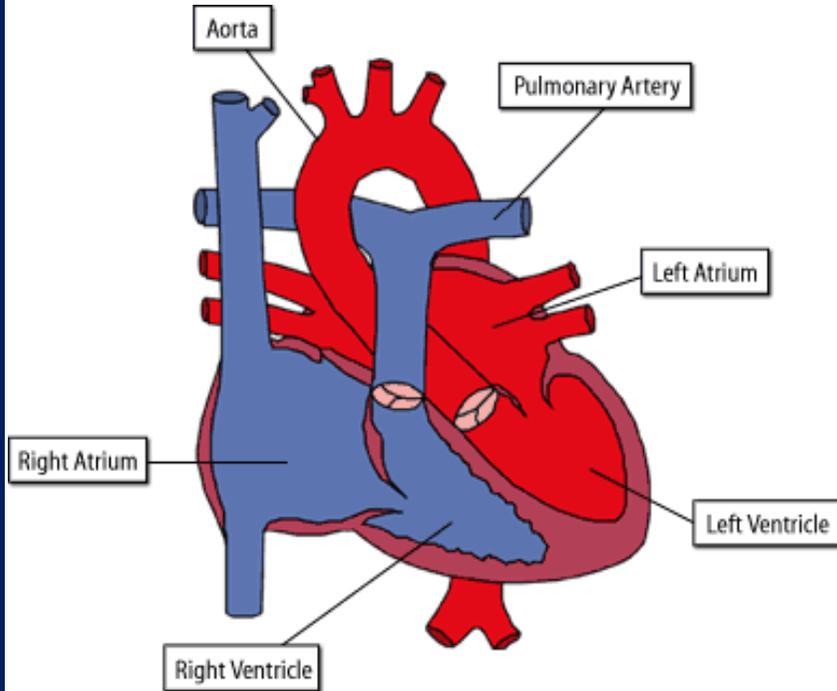


Year 6 Knowledge Organiser

The Circulatory System



The Function of the Heart



The Heart

Your heart is a very strong **muscle** and plays an important part in being healthy. It keeps all the **blood** in your **circulatory system** flowing.

Your heart first pumps blood to your lungs. Here, the blood picks up oxygen from the air that you have breathed in.

The blood (carrying oxygen) then travels back to your heart. The heart gives the blood a second push. This time, it's sent all around the body to the various organs and tissues.

The blood travels back to the heart and it all begins again.

Diet and Lifestyle

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 Circulatory System

Your circulatory system is made up of three parts: the heart, blood vessels and the blood itself.

Your heart keeps all the blood in your circulatory system flowing. The blood travels through a network of blood vessels to everywhere in your body. It carries useful materials like oxygen, water and nutrients and removes waste products like carbon dioxide.

Year 6 Knowledge Organiser

The Circulatory System



Glossary

Heart: the organ in your chest that pumps the blood around your body

Blood vessels: the narrow tubes through which your blood flows includes the arteries, veins and capillaries

Blood: a red fluid that is pumped by the heart and supplies the body with nutrients and oxygen.

Veins: blood vessels that carry blood to the heart.

Arteries: blood vessels that carry blood away from the heart.

Capillaries: microscopic blood vessels found in the muscles and lungs

Oxygen: a colourless gas that exists in large quantities in the air. All plants and animals need oxygen in order to live.

Lungs: the two spongy organs inside your chest which fill with air when you breathe in. They remove carbon dioxide from blood and add oxygen.

Ribcage: the bony structure consisting of the ribs and their connective tissue that encloses and protects the lungs and heart

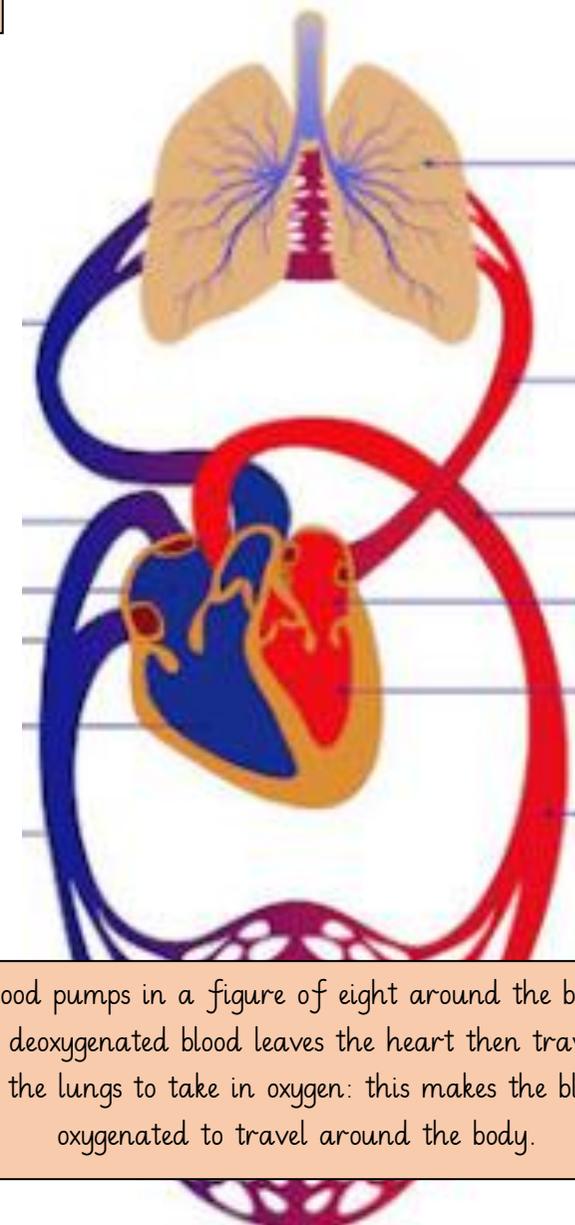
Carbon dioxide: a gas produced by animals and people breathing out

Oxygenated: to be enriched with oxygen

Deoxygenated: to be depleted of oxygen

Did you know?

- The heart beats about 100,000 times per day (about 3 billion beats in a lifetime).
- A human heart is roughly the size of a large fist!
- An adult heart beats about 60 to 80 times per minute.
- Newborns' hearts beat faster than adult hearts, about 70 to 190 beats per minute.
- The heart pumps approximately 6l of blood throughout the body.
- The heart is located in the centre of the chest, usually pointing slightly left.



Blood pumps in a figure of eight around the body – deoxygenated blood leaves the heart then travels to the lungs to take in oxygen: this makes the blood oxygenated to travel around the body.