

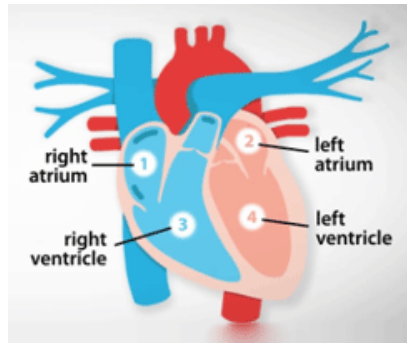
Y6 Science Knowledge Organiser—Animals Including Humans

Key Knowledge

Learn these key facts—key points in red

Circulatory System—What Do We Need To Know?

Diagram—The Heart



The **heart** is composed of four chambers; the right **atrium**, the right **ventricle**, the left **atrium** and the left **ventricle**.

The rate that your heart pumps is called your **pulse**.



The Function of the Heart

- 1 **Deoxygenated blood** flows into the **heart** from the body through the **veins**.
- 2 This blood is pumped out of the lungs through the **pulmonary artery**
- 3 Blood is then the **oxygenated** in lungs
- 4 Blood returns to the heart through the **pul-**
- 5 The **oxygenated blood** is then pumped out of the heart through the **aorta**.
- 6 The blood travels around the body delivering **oxygen** and **nutrients** to the **organs**.

What is the circulatory system?

The **circulatory system** is made up of the **heart**, **lungs** and **blood vessels**.

Arteries carry **oxygenated blood** from the heart to the rest of the body.

Veins carry **deoxygenated blood** from the body to the heart.

Nutrients, **oxygen** and **carbon dioxide** are exchanged via the **capillaries**.

Key Scientist



James Lind came closest to finding the link between scurvy and vitamin C in 1747 when he conducted the world's first clinical trial.

Healthy Diet & Lifestyle

Things that can harm the circulatory system

- Smoking and drinking alcohol can be harmful to our health.
- Tobacco can cause short-term effects such as shortness of breath and loss of taste and long term effects such as lung disease and cancer.
- Alcohol can cause short term effects such as addiction and long term effects such as organ damage and cancer.

Things that can maintain a healthy circulatory system

- Exercise helps to improve health by:**
- Removing fatty deposits from the body.
 - Toning muscles and reducing fat.
 - Increasing fitness (ability to do high intensity activities for longer).

Key Vocabulary

Understand these key words

Word

Definition

arteries	tubes in your body that carry oxygenated blood from your heart to the rest of your body.
atrium	the part of the heart that receives blood from the veins.
blood vessels	narrow tubes that your blood flows through.
carbon dioxide	a gas produced by animals and people breathing out.
circulatory system	the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide .
deoxygenated	blood that does not contain oxygen .
*heart	the organ in your body that pumps blood around the body .
*lungs	two organs in your chest which fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.
*nutrients	substances that help animals and plants grow.
*organ	a part of the body that has a particular purpose and performs specific functions.
*oxygen	a colourless gas that plants and animals need to survive.
oxygenated	blood that contains oxygen .
pulse	the regular beating of blood through your body. How fast or slow your pulse rate is depends on how active you are.
respiration	inhaling oxygen -rich air and exhaling air filled with carbon dioxide .
veins	a tube in your body that carries deoxygenated blood to your heart from the rest of your body.
ventricle	the part of the heart from which blood passes into the arteries.
*	vocabulary that I know from years 3&4. Definitions contain more complex explanations.