



Y6 Science Knowledge Organiser—Animals Including Humans

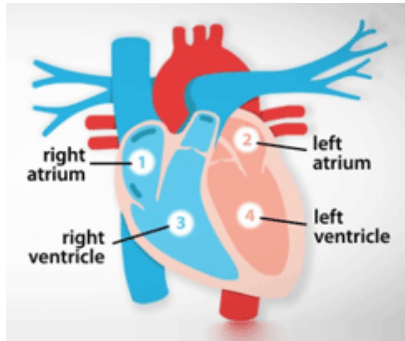


Key Knowledge

Key Vocabulary

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

Barbara Casadei - researcher helping The **British Heart Foundation** find cures for cardiovascular conditions.

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).

Word

Definition

Arteries

a tube in your body that carries **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.

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vocabulary that I know from years 3&4. Definitions contain more complex explanations.