

# Y6 Science: Animals, including Humans

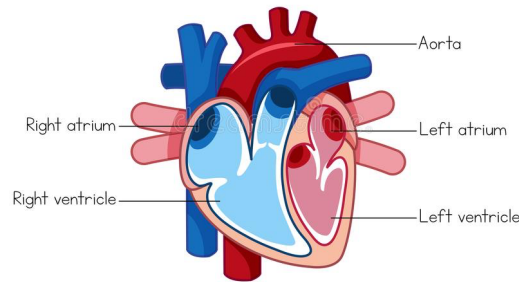


**Arteries** = blood vessels that carry blood away from the heart.

**Veins** = blood vessels that carry blood to the heart.

**Capillaries** = small, delicate blood vessels throughout the whole body.

The heart



muscles and organs

At the **lungs**, oxygen goes into the blood and carbon dioxide is removed.

lung

1. The **heart pumps** blood in the blood vessels to the **lungs** to pick up **oxygen** (become **oxygenated**).

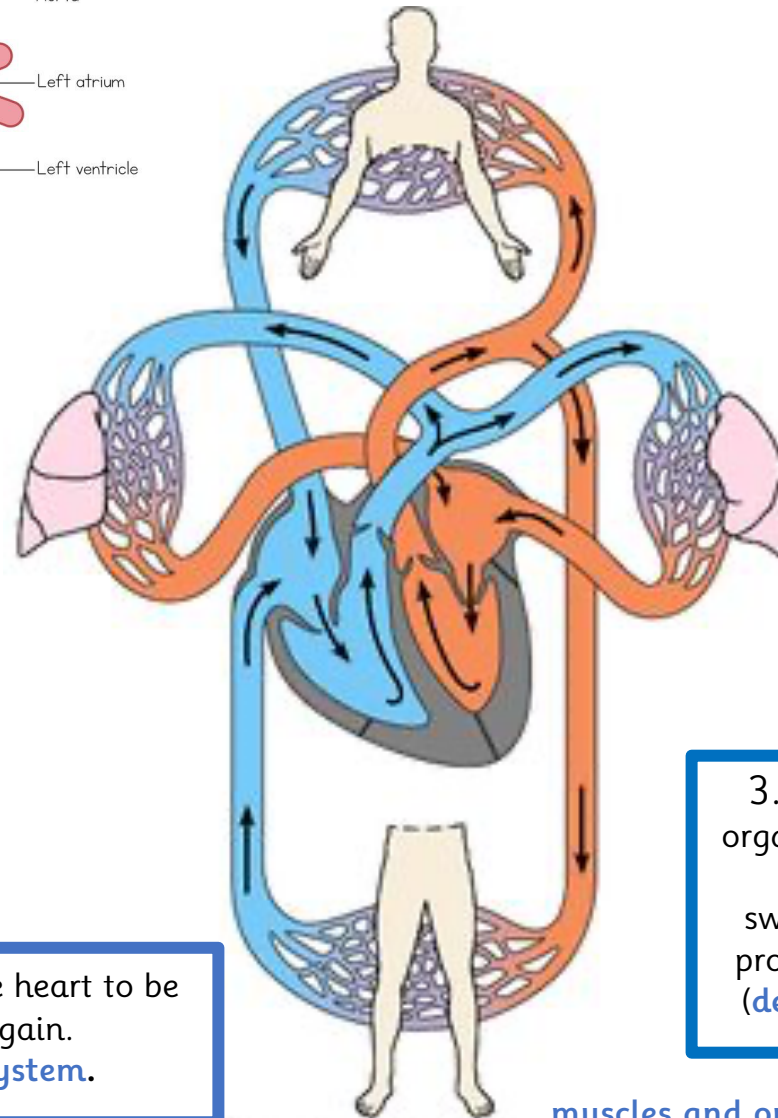
lung

2. The blood travels back to the heart, which then pumps it to the **muscles** and **organs** of the body.

4. The blood goes back to the heart to be pumped to the lungs again. This is the **circulatory system**.

3. At the muscles and organs, the oxygen in the blood is used and swapped for the waste product, carbon dioxide (**deoxygenated blood**).

muscles and organs



Nutrients, water and oxygen are transported in the blood to the muscles and other parts of the body where they are needed. As they are used, they produce carbon dioxide and other waste products.



Your heart rate (pulse) is how many times your heart beats in 1 minute.



**Christiaan Barnard**  
1922-2001  
- performed the first successful heart transplant in 1967.



**What I remember:**

- The digestive system takes nutrients from food (Y4)
- Food contains a range of different nutrients (Y3)
- Muscles and skeletons help animals move (Y3)
- To be healthy, humans need the right types of food and exercise (Y2)



Diet, exercise, drugs and lifestyle have an impact on how well our heart and lungs work, how likely we are to suffer from conditions such as diabetes, how clearly we think, and generally how fit and well we feel.