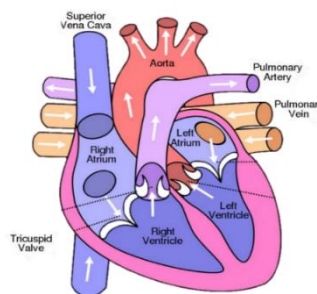




Key facts

- The circulatory system, also known as the cardiovascular system, is a network of organs and blood vessels that work together to circulate blood around the body.
- The circulatory system is made up of three main components: Heart, Blood and Blood Vessels.
- As we exercise, our muscles need more oxygen. So, we breathe quicker, helping our lungs to take in more oxygen. Our heart needs to pump blood more quickly to get all of the oxygen around the body. In order to do this, our heart rate increases.
- A healthy, balanced diet can have a huge effect on a person's health and their heart. People who eat the right balance of fresh, healthy foods are less prone to chronic illnesses and diseases.
- A drug is a chemical has an effect on your body. Some drugs are prescribed by doctors to make people healthy. Other, illegal drugs can have a dangerous effect on our health and heart.

The circulatory system is centred on the heart, an organ that works constantly to pump blood around the body.



The heart is made up of four sections called chambers. There are two sides to the heart (right and left) each of which have an atrium (at the top) and a ventricle (at the bottom).



- asking questions
- making predictions
- setting up tests
- observing and measuring
- recording data
- interpreting and communicating results
- evaluating



Key words:

| | |
|----------------|--|
| artery | Blood vessels that deliver oxygen-rich blood from the heart to the tissues of the body |
| blood | The red liquid that circulates in the arteries and veins of humans and other vertebrate animals, carrying oxygen to and carbon dioxide. |
| carbon dioxide | A gas produced by animals and humans when they breathe out. |
| circulatory | 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. |
| heart | Muscular organ that pumps blood through the body |
| heart rate | Number of times that your heart beats in a minute. This can change depending on how active you are. |
| lungs | Organ inside your chest that fills with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it. |
| oxygen | A chemical element which animals need to survive |
| respire | Breathing, inhaling and exhaling air |
| vein | Blood vessels that carry blood towards the heart |

Did you know?

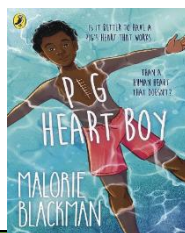
- Louis Washkansky received the first human heart transplant in 1967, South Africa.
- If you linked up all of the body's blood vessels, including arteries, capillaries and veins, they measure over 60,000 miles.
- The heart is a powerful muscle that pumps approximately 9,092 litres of blood per day!
- People have **different blood types**. There are four main blood types: A, B, AB and O.
- It takes about **20-30 seconds** for blood to circulate completely throughout the body.

Exciting books / web links:

<https://www.bbc.co.uk/bitesize/clips/z9dg9j6>

<https://www.stem.org.uk/resources/community/collection/13109/year-6-animals-including-humans>

<https://www.hamilton-trust.org.uk/science/year-6-science/art-being-human/>



Parents as partners:

- Monitor your heart rate regularly and describe how it changes over the course of a day.
- Research how your diet differs from your favourite sportsperson.
- Create a fact file about Santorio Santorio or Sir Richard Doll.
- Find out what would happen to our bodies if we went without certain foods/nutrients.
- Design a healthy snack and list the nutrients it contains.
- Create a poster raising awareness of the impact of drugs and to live a healthier lifestyle.