

Topic: Animals, including humans (circulatory system)

Year:6

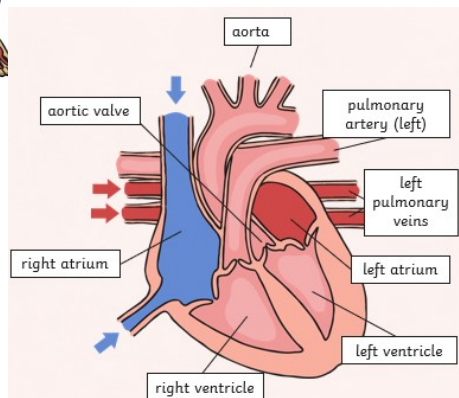
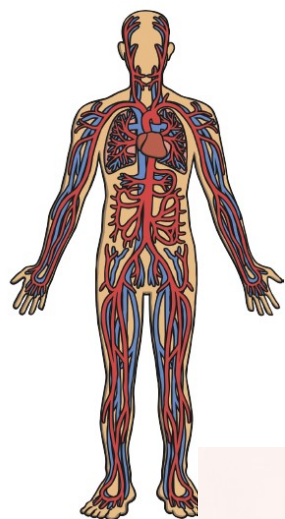
Term:2

Background Information

To know that:

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- describe the ways in which nutrients and water are transported within animals, including humans

Diagrams



Interesting facts

- If you laid out all of the arteries, capillaries and veins in one adult, end-to-end, they would stretch about 100,000 kilometres (62,000 miles). The circumference of the Earth is about 40,000 km which means a person's blood vessels could wrap around the planet approximately 2.5 times!

Heart rate

- An adult human has an average resting heart rate of about 75 beats per minute.
- A blue whale's heart is about the size of a compact car, and only beats five times per minute.
- A shrew, on the other hand, has a heart rate of about 1,000 beats per minute.

Weird but true!

- The heart can still beat after being removed from the body this is because the heart generates its own electrical impulses, which cause it to beat. As long as the heart continues to receive oxygen, it will keep going, even if separated from the rest of the body.

Know how to / Activity

Activities on the internet.
 On BBC Schools there are 4 interesting videos about the circulatory system.
<https://www.bbc.co.uk/bitesize/topics/zwdr6yc>
 Purple Mash—Circulatory system

| | |
|--------------------|--|
| absorbed | Taken in or soaked up . |
| alveoli | Tiny sacs in the lungs where gas exchange takes place. |
| arteriole | Tiny branches of arteries that lead to capillaries. |
| artery | A vessel that carries blood high in oxygen content away from the heart to the farthest reaches of the body. |
| blood | The red fluid that circulates in the heart, arteries, capillaries, and veins of a vertebrate animal and that brings nourishment and oxygen to and carries away waste products from all parts of the body . |
| blood vessels | They transport blood, nutrients and oxygen around the body, They also take carbon dioxide and waste away from the tissues. |
| capillary | The smallest blood vessels.They serve to distribute oxygenated blood from arteries to the tissues of the body and to feed deoxygenated blood from the tissues back into the veins. |
| carbon dioxide | A colourless, odourless gas found in our atmosphere (CO ₂). |
| circulatory system | A system which includes the heart, veins, arteries and blood transporting substances around the body. |
| deoxygenated blood | Where most of the oxygen has been removed from the blood. |
| gas exchange | The process in which oxygen enters the bloodstream from the lungs and the lungs receive carbon dioxide from the blood to breathe out. |
| heart | An organ which constantly pumps blood around the circulatory system. |
| lungs | A paired organ forming the special breathing structure of vertebrates that breathe air |
| oxygen | A colourless gas that exists in large quantities in the air which all plants and animals need in order to live. |
| pulmonary | Related to the lungs. |
| vein | A blood vessel that carries blood that is low in oxygen content from the body back to the heart |