

Year 6 Knowledge Organiser Science: Animals Including Humans



ALL SAINTS
MULTI ACADEMY TRUST
BIRMINGHAM
GOD'S LOVE IN ACTION

Key Vocabulary

Circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
Heart	An organ which constantly pumps blood around the circulatory system.
Blood vessels	The tube – like structures that carry blood through tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
Oxygenated blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
Deoxygenated blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.

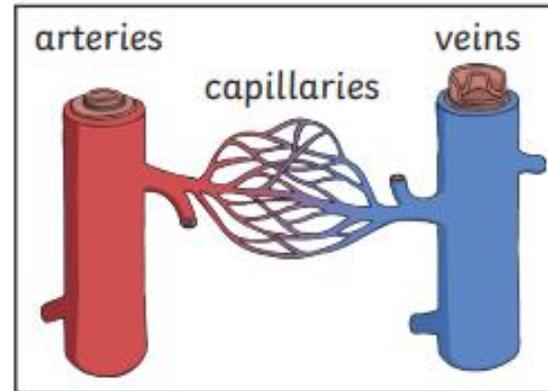
Fun facts

If you linked up all the body's blood vessels, including arteries, capillaries and veins, they would measure over 60,000 miles!

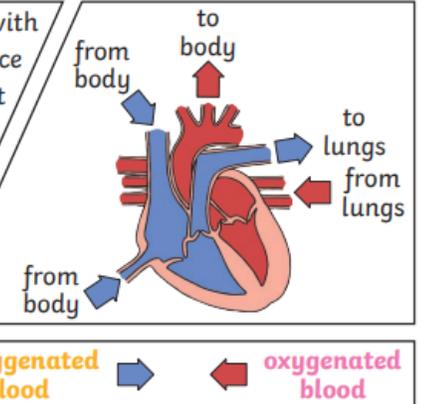
Arteries carry away oxygenated blood away from the heart.

Veins carry deoxygenated blood towards the heart.

Capillaries are the smallest blood vessels in the body. Here the exchange of water, nutrients, oxygen and carbon dioxide takes place.

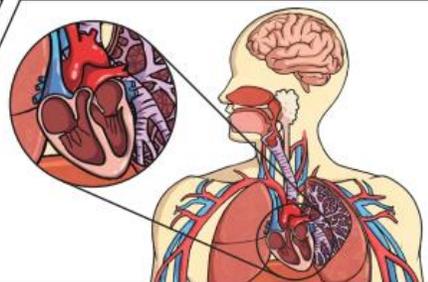


Mammals have **hearts** with four chambers. Notice how the blood that has come from the body is **deoxygenated**, and the blood that has come from the lungs is **oxygenated** again. The blood isn't actually red and blue: we just show it like that on a diagram.



The **heart** pumps blood to the lungs to get oxygen.

It then pumps this **oxygenated blood** around the body.



What do I already know?

Life cycles are the changes a living thing goes through.

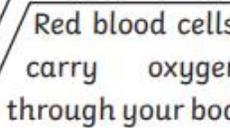
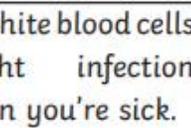
Male and female sex cells fuse together during fertilisation.

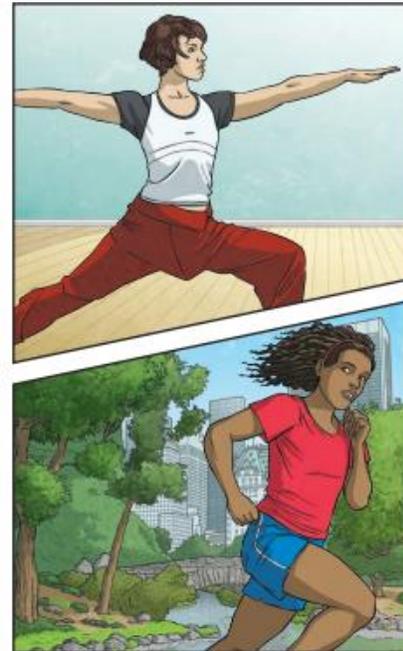
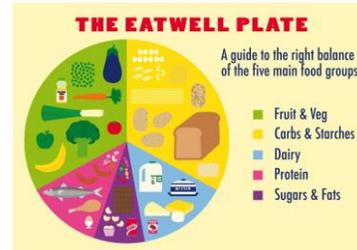
Adolescent is the stage between childhood and adulthood.

Key Vocabulary

Drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
Alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.
Nutrients	Substances that animals need to stay alive and healthy



Plasma is liquid. The other parts of your blood are solid.		Platelets help you stop bleeding when you get hurt.	
Red blood cells carry oxygen through your body.		White blood cells fight infection when you're sick.	



Exercise

Regular exercise:

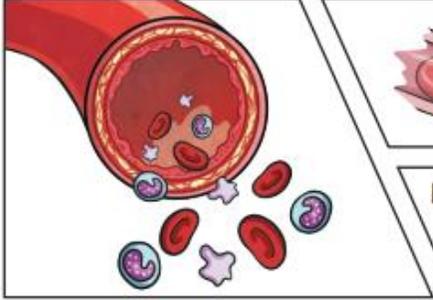
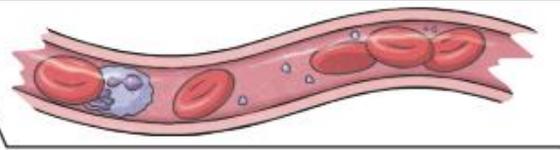
- Strengthens muscle including the heart muscle
 - It improves circulation
- It increases the amount of oxygen around the body
- It releases brain chemicals which help you feel calm and relaxed
 - It can help you sleep easier
 - It strengthens bones.

Facts

Drugs, alcohol and smoking have negative effects on the body.

A healthy diet involves eating the right types of nutrients in the right amounts.

Regular exercise can stop us from getting ill.

	
The liquid part of blood contains water and protein. This is called plasma.	<p>Blood transports:</p> <ul style="list-style-type: none"> • gases (mostly oxygen and carbon dioxide); • nutrients (including water); • waste products.