

Science: Animals Including Humans

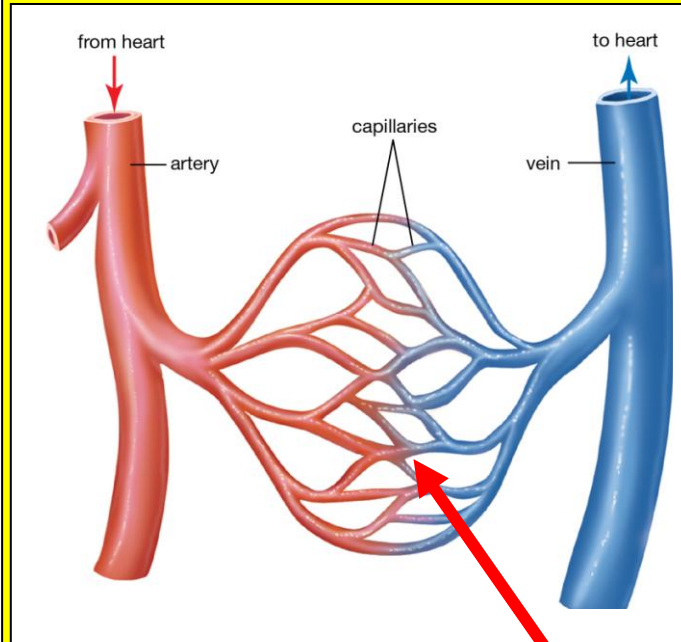
Year 5/6: Autumn 1

What does an artery do?

They carry **OXYGENATED** blood away from the heart.

This is pumped from the heart to the rest of the body.

Knowledge Organiser



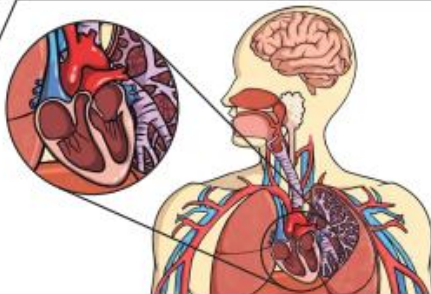
What does a vein do?

They carry **DE-OXYGENATED** blood to the heart.

This is where most of the oxygen has already been transferred to the rest of the body.

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

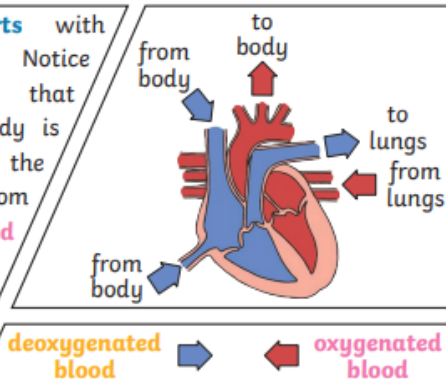
It then pumps this **oxygenated blood** around the body.



- Capillaries are the smallest blood vessels in the body.
- The exchange of water, nutrients, oxygen and carbon dioxide take place here.

- If you linked up all the body's arteries, veins and capillaries, they would measure of 60,000 miles.

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.

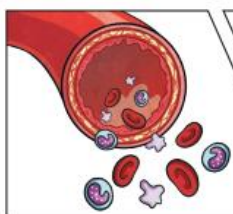


DID YOU KNOW?

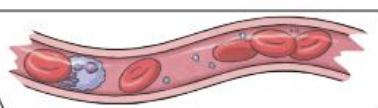
Red blood cells carry oxygen around your body.

White blood cells fight infection when you are sick.

Platelets, in your blood, help you stop bleeding when you get hurt.



The liquid part of blood contains water and protein. This is called plasma.



Blood transports:

- gases (mostly oxygen and carbon dioxide);
- **nutrients** (including water);
- waste products.