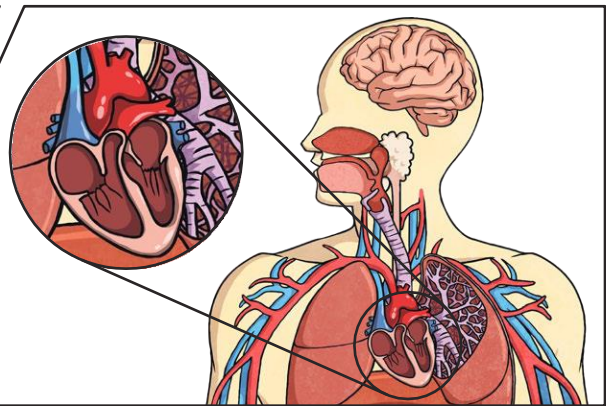


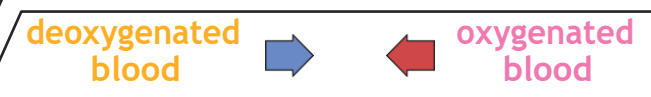
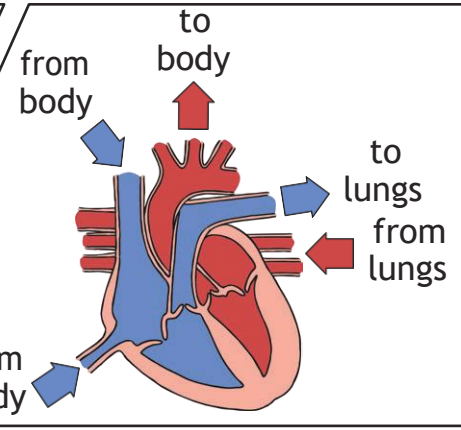
Key Vocabulary

| | |
|---------------------------|---|
| 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 the 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. |

The **heart** pumps blood to the lungs to get oxygen. It then pumps this **oxygenated blood** around the body.

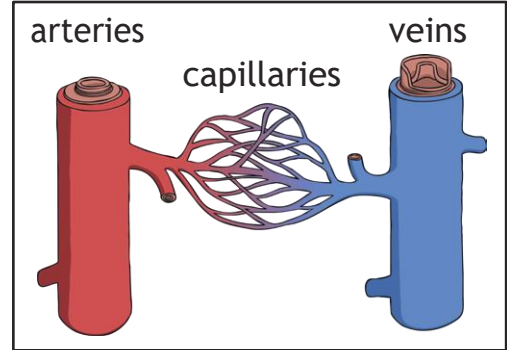


Mammals have **hearts** with four chambers. Notice how the blood that has come from the body is **deoxygenated**, and the blood that has come from the lungs is **oxygenated** again. The blood isn't actually red and blue: we just show it like that on a diagram.



Capillaries are the smallest **blood vessels** in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.

Arteries carry **oxygenated blood** away from the **heart**.

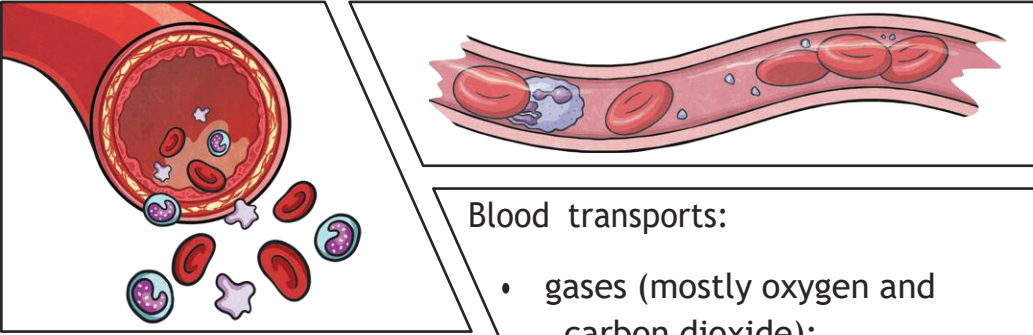


Veins carry **deoxygenated blood** toward the **heart**.

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

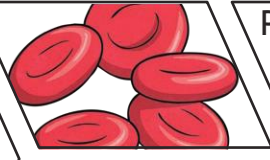
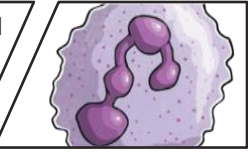
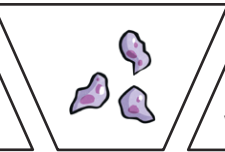
Key Vocabulary

| | |
|------------------|---|
| 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. |





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.

| | | | |
|--|---|---|--|
| 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. |

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:
- strengthens muscles including the heart muscle;
 - improves circulation;
 - increases the amount of oxygen around the body;
 - releases brain chemicals which help you feel calm and relaxed;
 - helps you sleep more easily;
 - strengthens bones.
- It can even help to stop us from getting ill.

