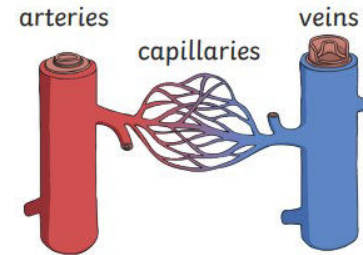
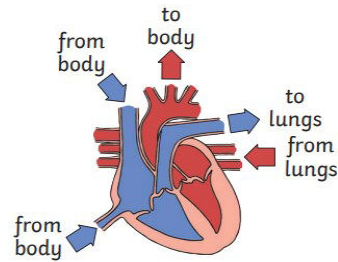
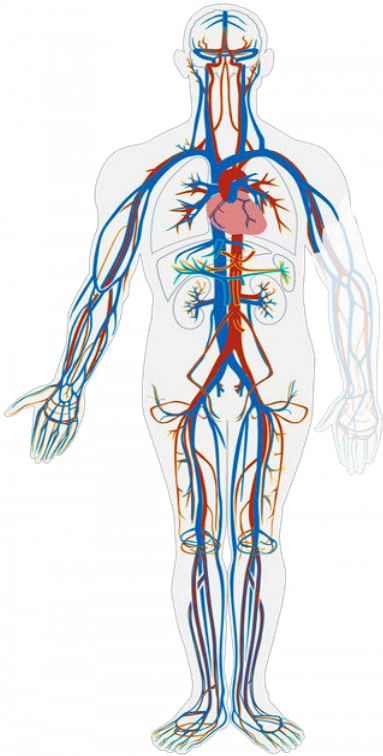


# Why should you love your heart?



The circulatory system is the system that circulates blood (containing oxygen, nutrients and water) through the body. The blood is pushed around your body by your heart, a muscle which acts like a pump, beating about 100,000 times a day! As the blood cells reach your heart, they pass through valves, which are like doors and only open one way, keeping blood pumping in the same direction.

Blood is pumped to the lungs to pick up oxygen (O<sub>2</sub>) which has been inhaled (breathing in). The oxygenated blood then goes back to the heart to get pumped to every other part of the body. As it drops off oxygen around the body and becomes deoxygenated, it picks up carbon dioxide (CO<sub>2</sub>) to take back to the lungs for the lungs to exhale (breathing out).



Fatty rich foods can clog arteries and veins, preventing blood from delivering what is needed.



Smoking results in less oxygen entering the blood, causing the heart to work harder.



Drugs and alcohol can cause damage to the heart as a rise in a person's blood pressure.



Regular exercise helps to strengthen your heart making it more efficient and better able to pump blood around your body.

## Leonardo Da Vinci – artist, inventor, scientist

He dissected dead bodies and discovered:

- that blood travelled around the body in a circuit.
- that the heart was a muscle and that it was connected to the pulse you can feel in your wrist.
- that the heart has valves that stop the blood flowing backwards.
- that the heart twists as it beats to help push the blood out.
- that arteries that became 'furred' up were a health risk.

Heart	The organ in your chest that pumps the blood around your body
Blood vessels	The narrow tubes through which your blood flows (the arteries, veins and capillaries)
Arteries	Blood vessels that take blood AWAY from the heart to the body organs and tissues
Veins	Blood vessels that take blood TOWARDS the heart from body organs and tissues
Capillaries	Tiny blood vessels which take the blood into organs and tissues
Plasma	The liquid part of the blood
Red blood cells	Carry oxygen
Platelets	Help you stop bleeding when you get hurt
White blood cells	Fight infections