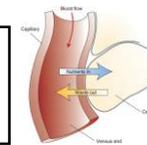




CIRCULATORY SYSTEM

Strand:
Biology



KEY KNOWLEDGE

Key knowledge 1

The **circulatory system** includes the **heart**, **blood** and **blood vessels**.

Key knowledge 2

The **heart** is a muscle with four chambers and it pumps the blood around the body.

Key knowledge 3

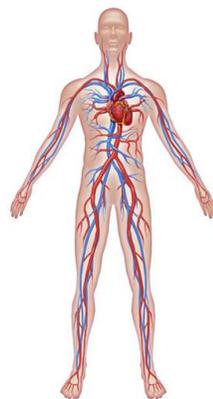
Blood is mainly water and it **transports nutrients** (from our food), **water** and **oxygen** (from our lungs) around the body.

Key knowledge 4

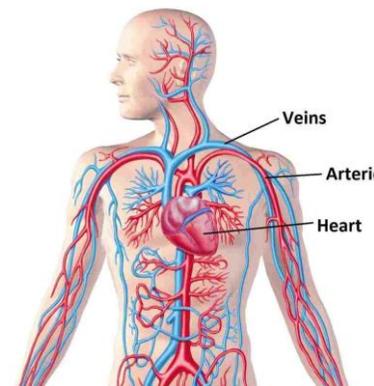
Blood vessels are tubes that the blood travels through and there are 2 types: **arteries** which carry blood away from your heart around your body and **veins** which bring blood back to your heart.

Key knowledge 5

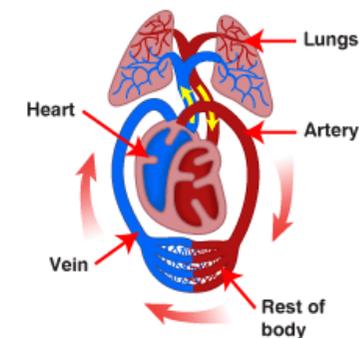
The way your body **functions** can be changed depending on diet, exercise, drugs which are taken and lifestyle.



The blood vessels transport blood with oxygen, nutrients and water all around the body to where they are needed.



Arteries take the blood away from the heart and are shown as red. The veins take the blood back to the heart when everything has been used and are shown as blue.



The heart pumps blood to the lungs to get oxygen then pumps it around the body.

What a real heart looks like



Tier 2 vocabulary

- Affect** – something which causes a change
- Associate** – make a link between two things
- Causal relationship** – explain how one thing impacts on another
- Effect** – a change which happens because of something else
- Explain** – say why or how something happens
- Identify** – able to say what something is

Tier 3 vocabulary

- Arteries** – tubes that carry blood away from the heart around the body to transport nutrients, water and oxygen to where it is needed.
- Blood** – liquid that is mainly water which carries nutrients, oxygen and food for the body
- Blood vessels** – tubes that blood travels through
- Circulatory system** – group of organs and vessels that transports blood around the body
- Function** – how something works or appears
- Heart** – a muscle that acts as a pump to pump blood around the body
- Nutrients** – things you need from food to keep you healthy
- Transports** – moves around or carries
- Veins** – tubes that carry blood back to the heart

Diet

- *Balanced diet reduces risk of illness and disease
- *Carbohydrates give energy
- *Protein builds and repairs muscles but too much can cause indigestion and intestinal problems

Exercise

- *Breathe quicker to get more oxygen for our muscles
- *Heart rate increase to transport oxygen quickly
- *Keeps our bones and muscles strong

Drugs

- *Some can help people to stay healthy
- *Illegal drugs can kill
- *Alcohol is a depressant and damages liver and brain
- *Cigarettes damage lungs and heart