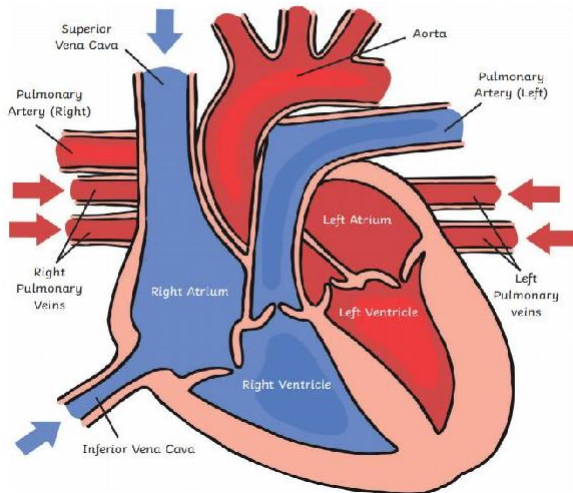


The function of the heart

1. **Deoxygenated** blood flows into the heart from the body through the veins
2. This blood is pumped out to the lungs through the **pulmonary artery**
3. Blood is then **oxygenated** in the lungs
4. Blood returns to the heart through the **pulmonary vein**
5. The oxygenated blood is then pumped out of the heart through the **aorta**
6. The blood travels around the body delivering oxygen and nutrients to the organs.

Deoxygenated blood from the body enters.

Oxygenated blood from the lungs enters the left atrium.



The circulatory system

The **circulatory system** is the system that circulates blood through the body

Diet and lifestyle

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

Exercise can improve the health of a person by removing **fatty deposits** from the body.

Some exercises are called **cardiovascular**, and are designed to improve the fitness of the overall circulatory system by **strengthening** the organs and **pulse rate**.

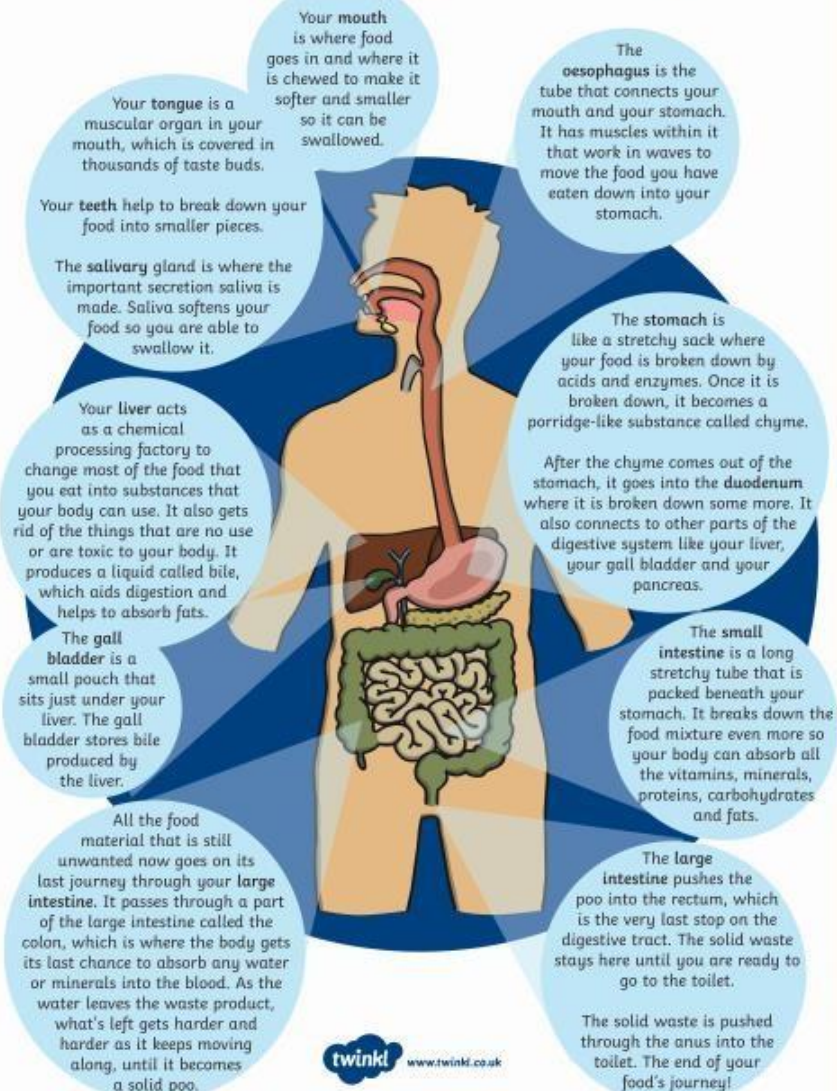
Phrases about blood

Bad blood	people have argued about something and dislike each other
bay for blood	demanding that someone should be hurt or punished.
blue blood	from a family that has a high social rank.
make blood boil	makes you very angry
blood out of a stone	people are not being very helpful when you are getting information or persuading someone to talk
blood, sweat and tears	a very hard thing to do and requires a lot of effort.
blood is thicker than water	loyalty to their family is greater than their loyalty to anyone else.
own flesh and blood	a member of your family.

Key Vocab

Heart	the organ in your chest that pumps the blood around your body
Blood vessels	the narrow tubes through which your blood flows includes the arteries, veins and capillaries
Blood	a red fluid that is pumped by the heart and supplies the body with nutrients and oxygen.
Veins	blood vessels that carry blood to the heart.
Arteries	blood vessels that carry blood away from the heart.
Capillaries	microscopic blood vessels found in the muscles and lungs
Oxygen	a colourless gas that exists in large quantities in the air. All plant and animals need oxygen in order to live.
Lungs	the two spongy organs inside your chest which fill with air when you breathe in. They remove carbon dioxide from blood and add oxygen.
Ribcage	the bony structure consisting of the ribs and their connective tissue that encloses and protects the lungs and heart
Carbon dioxide	carbon dioxide a gas produced by animals and people breathing out
Oxygenated	to be enriched with oxygen
Deoxygenated	deoxygenated to be depleted of oxygen

The Human Digestive System



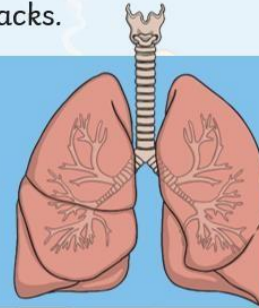
How Does Smoking Affect the Heart and Lungs?

As there is less oxygen in the blood, the heart starts to beat faster to create more oxygen to pump round the body.

This means that the heart is working harder than it normally does (sometimes up to 30% harder).



The longer a person smokes, the more fatty deposits build up in their blood vessels. This can cause problems like heart attacks.



The poisons and smoke in cigarettes also cause problems for the lungs. These problems can be as simple as a chesty cough or as serious as cancer.

- Heart rates vary between species. For example, a mouse's heart can beat up to 700 times in a minute whilst blue whale's heart can beat as low as 2 times in a minute.
- Heart rates vary between humans. Generally, people who exercise more can recover more quickly from exercise and their heart rate will return to normal faster than someone who does not exercise.
- Heart rates change based on what we are doing.