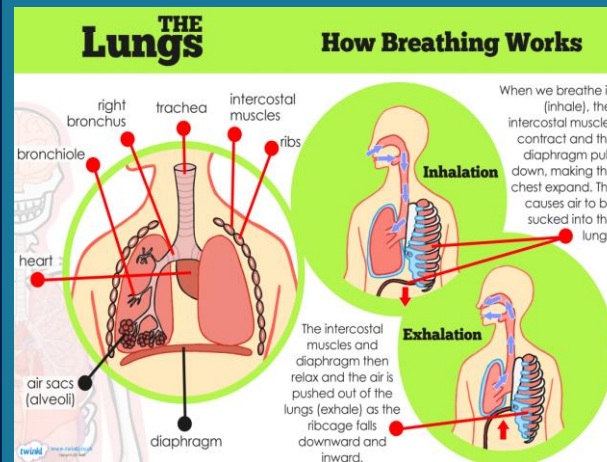
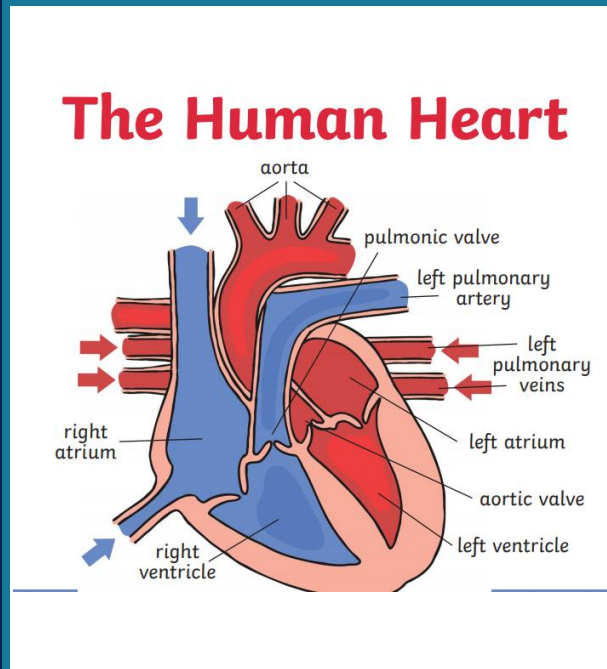


Key Vocabulary:

atrium	Upper chambers of the heart
ventricle	Lower chambers of the heart
artery	A large muscular blood vessel that carries blood away from the heart
vein	A type of blood vessel that carries blood to the heart
capillary	A very small blood vessel
valve	Valves act like gates that open and close, making sure that your blood travels in one direction – a bit like a one-way traffic system
aorta	Main artery leaving the heart
blood vessels	A tube that carries blood in the circulatory system. These include arteries, veins and capillaries
oxygenated blood	Blood carried away from lungs carrying lots of oxygen
deoxygenated blood	Blood that is not carrying a lot of oxygen
respiratory system	The respiratory system is the group of tissues and organs in your body that allow you to breathe.
circulatory system	The body system responsible for carrying blood, nutrients, and waste throughout the body
nutrients	Nutrients are the substances in food that our bodies process to enable it to function

Diagram of the human heart and lungs:



Key Facts:

Blood is circulated around the entire human body with the purpose of transporting nutrients, hormones and oxygen:

- Red blood cells which transport oxygen.
- White blood cells which protect against disease.
- Blood platelets which help the blood to clot and repair a cut.
- Plasma which is a liquid that carries these cells. It also transports important nutrients.

In the **lungs**, oxygen is breathed in and is absorbed into the blood via the air sacs (alveoli). Carbon dioxide in the blood is transferred back into the air, which then travels back out of the lungs.

The **heart** pumps constantly to ensure oxygenated and deoxygenated blood is transported to the required areas. On average the heart pumps 2.5 billion times in a lifetime.

A healthy and balanced **diet** is required for the human body to function effectively.

Exercise improves blood circulation, stamina and fitness, stronger bones and a whole host of other benefits.

A **drug** is something which is consumed causing a good or bad effect on your body.

What I should already know:

That a balanced diet is essential for healthy living.

Animals, including humans, need the right types and amount of nutrition as they cannot make their own food; they get nutrition from what they eat

Exercise is important to maintain physical fitness and wellbeing. After exercise, our bodies feel different.