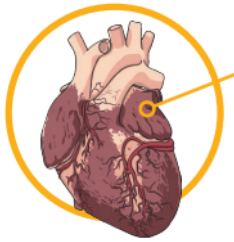
Science— Animals inc. humans

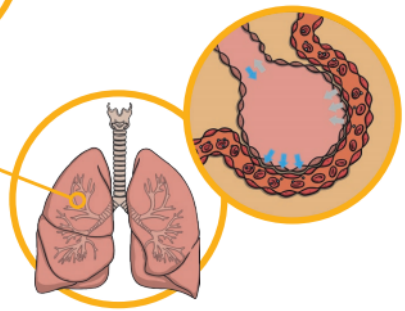
Key Vocabulary	
alcohol	A drug produced from grain, fruit or vegetables when they are put through a process call fermentation .
alveoli	Tiny air sacs in the lungs where gas exchange occurs.
arteries	Tubes that carry oxygenated blood around the body.
blood	The red liquid in our body made up of red and white blood cells and plasma. The red blood cells carry the oxygen and make it look red.
circulatory system	A system which incudes the heart, veins, arteries, and blood transporting substances around the body.
carbon dioxide	The gas our bodies produce and must get rid of.
deoxygenated	Bloody with little or no oxygen left in it.
drugs	A chemical that can be used by doctors to make people better, and some drugs are illegal and can be dangerous to peoples' health.
gas exchange	When carbon dioxide leaves the blood through the lungs and oxygen enters our blood.
heart	The organ that pumps blood to the lungs and around the body.
kidneys	Organs which filter blood and make urine from the waste and excess water.
liver	An organ which processes waste from the blood and produces bile.
oxygen	The gas we need to breathe to live.
oxygenated	Blood filled with oxygen.
pulmonary	Anything relating to the lungs.
valve	Part of a vein which stops blood flowing back the wrong way down the tube between pumps of the heart.
veins	Tubes that carry the deoxygenated blood back to the heart ready to go to the lungs to collect more oxygen.
villi	Structures in the small intestine that help absorb nutrients.



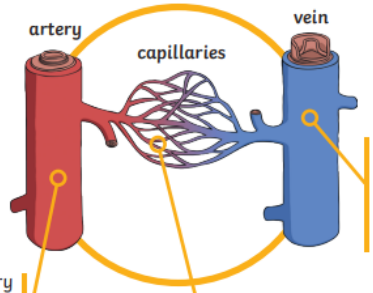
The **heart** pumps blood to the lungs to get oxygen.

It then pumps this oxygenated blood around the body.

Gas exchange takes place in the **alveoli** in the lungs.



Blood Vessels



Veins carry de-oxygenated blood toward the **heart**.

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

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.

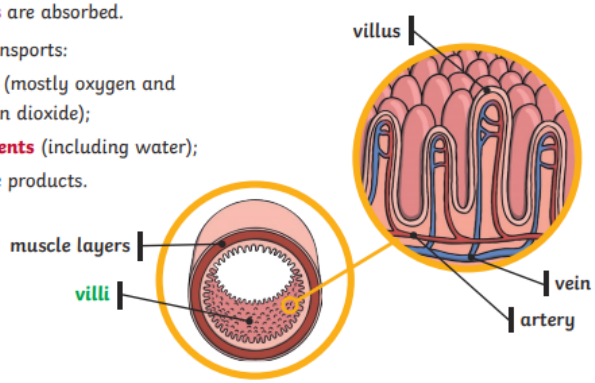
Inside the Small Intestine

The **nutrients** pass through the **villi** and are absorbed into the blood vessels.

Water is absorbed in the small intestine in exactly the same way as other **nutrients** are absorbed.

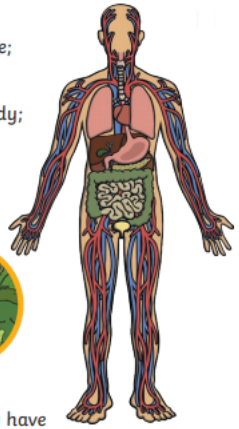
Blood transports:

- gases (mostly oxygen and carbon dioxide);
- **nutrients** (including water);
- waste products.



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.



A healthy diet involves eating the right types of **nutrients** in the right amounts.





Drugs, **alcohol** and smoking have negative effects on the body.

Tier 2 Vocabulary
