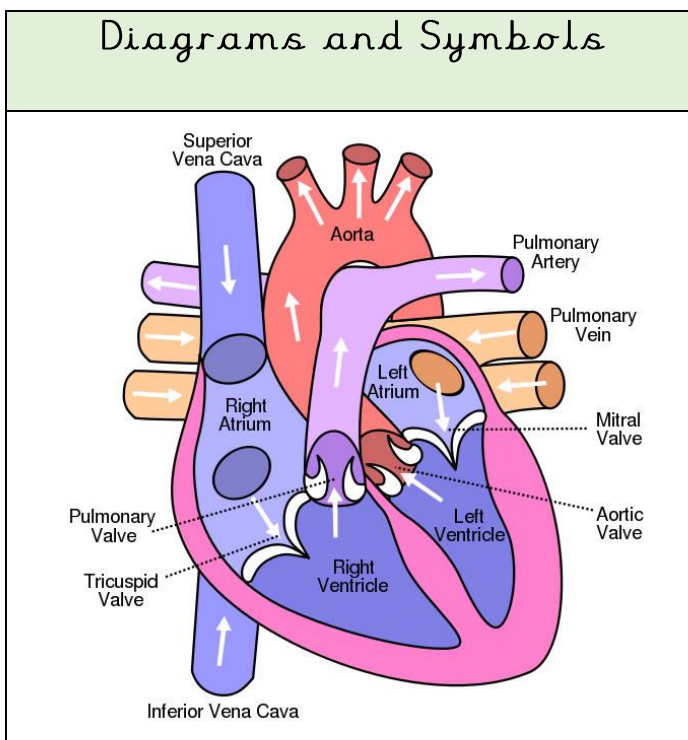


Annunciation Catholic Junior School:  
 KNOWLEDGE ORGANISERS  
 YEAR 6 Animals including Humans



What? (Key Vocab)	
Spelling	Definition
circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
heart	An organ which constantly pumps blood around the circulatory system.
veins	Veins carry de-oxygenated blood toward the heart.
vena cava	The largest vein in the body.
arteries	Arteries carry oxygenated blood away from the heart.
aorta	the largest artery in the body.
blood vessels	These are tubes which include a network of arteries, veins and capillaries. They transport blood, oxygen and nutrients throughout the human body.

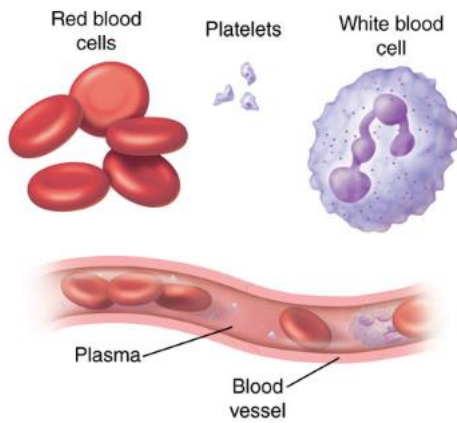
What? (Key Vocab)	
Spelling	Definition
capillaries	The smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.
atrium	Where the blood collects when it enters the heart.
ventricle	The ventricles pump the blood out of the heart to the lungs or around the body.
valves	These prevent the blood flowing backwards.
villi	Structures in the small intestine which help absorb nutrients.
nutrients	Substances that animals need to stay alive and healthy.



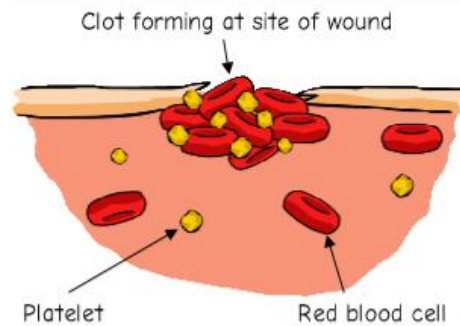
Possible Experiences

- After learning about the components of blood, create a pie chart showing the percentage of each component by volume in a typical sample of blood.
- Dissect a lamb's heart:  
[https://www.youtube.com/watch?v=yb\\_bYliuOwI](https://www.youtube.com/watch?v=yb_bYliuOwI)

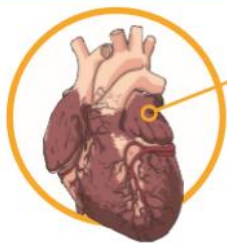
## Diagrams and Symbols



Platelets causing blood to clot at the site of a wound to slow and stop bleeding

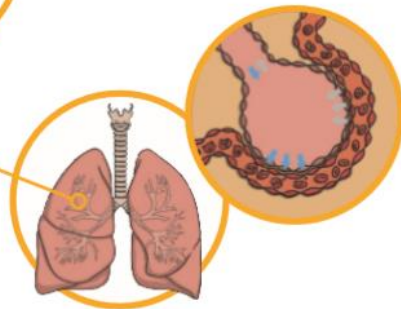


## Diagrams and Symbols

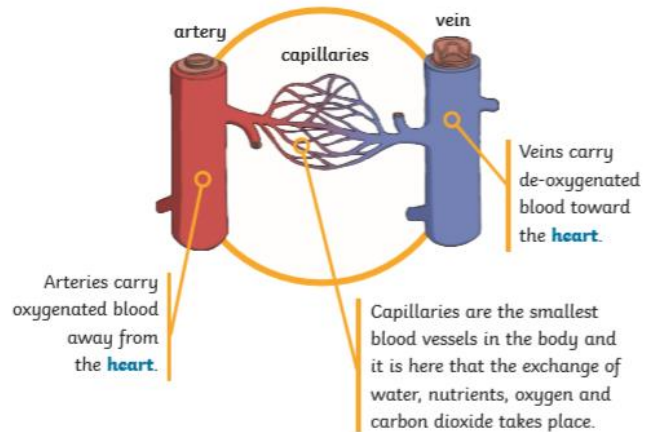


The **heart** pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.

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



### Blood Vessels



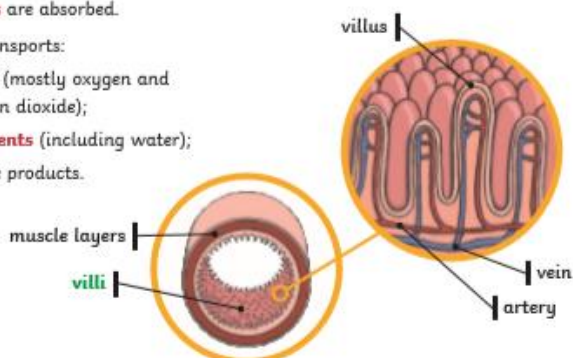
## Diagrams and Symbols

### 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.

