



Knowledge Organiser

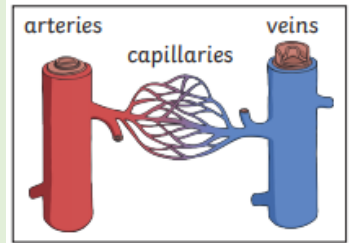
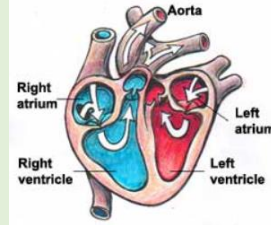
Science Year 6 Topic: Animals including humans

Prior Knowledge Knowledge and application

- Which things are living and which are not.
- Classification of animals
 - Animals that are carnivores, herbivores and omnivores.
 - Animals have offspring which grow into adults.
 - The basic needs of animals for survival (water, food, air)
 - The importance of exercise, hygiene and a balanced diet.
 - Animals get nutrition from what they eat.
 - Some animals have skeletons for support, protection, and movement.
 - The basic parts of the digestive system.
 - The different types of teeth in humans.
 - Respiration is one of the seven life processes.
 - The life cycle of a human and how we change as we grow

Mammals have hearts with four chambers. Notice how the blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated. again. **Human blood is red it is not BLUE:** we just show it like that on a diagram

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.



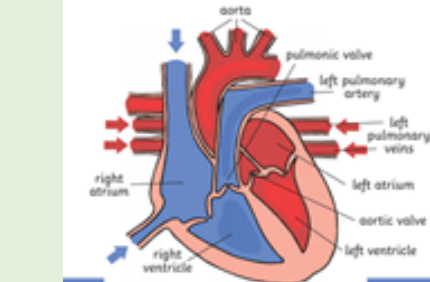
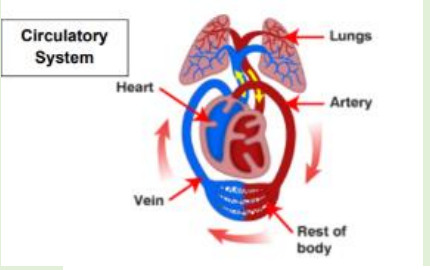
Blood transports:

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

The liquid part of blood contains water and protein. This is called plasma

What will I know by the end of this topic? Key Vocabulary


- Identify and name the main parts of the human circulatory system.
- Know the function of the heart, blood vessels and blood.
 - Know the impact of diet, exercise, drugs and lifestyle on health.
 - Know the ways in which nutrients and water are transported in animals



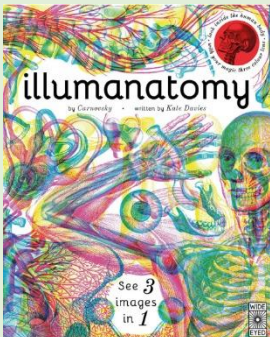
Circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
heart	An organ which constantly pumps blood around the circulatory system
Blood vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
oxygenated	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
Deoxygenated blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.
drug	A substance containing natural or man-made chemicals that have an effect on your body when it enters your system.
alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation
nutrients	Substances that animals need to stay alive and healthy
veins	Tubes that carry de-oxygenated blood back towards the heart
ventricles	The two lower chambers in the heart
arteries	Muscular-walled tubes that transport blood away from the heart to other parts of the body
atria	The two uppermost chambers of the heart. Blood is pushed from the atria to the ventricles
blood	Circulates in arteries and veins, carrying oxygen to and carbon dioxide from tissues of the body

Famous Scientist Books/ Websites

Daniel Hale Williams
<https://www.britannica.com/biography/Daniel-Hale-Williams>



Illumanatomy, Kate Davies



<https://www.bbc.co.uk/bitesize/articles/ztg6gdm>