## Animals including Humans

## **Scientific Enquiries**













Karl Landsteiner

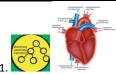


Year 3 & 4

Biology

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		Vocabulary	
circulatory system	The system that circulates blood around the body (the heart, lungs and vessels).	atrium	The two upper chambers of the heart.
pulse	The throbbing of the arteries as blood is pumped through the vessel.	ventricle	The two lower chambers of the heart.
oxygenated	Full of oxygen.	blood vessels	Tubes in the heart that carry blood e.g. arteries, veins and capillaries.
deoxygenated	Without oxygen.	osmosis	The movement of water from high concentration to low concentration.

## WHAT?



- Your heart is at the centre of your **circulatory system**.
- Your heart is split into 4 chambers: **left atrium, right atrium, left ventricle, right atrium.**
- Oxygenated blood is pumped to different body parts
- **Deoxygenated** blood is pumped to the lungs.





- Diffusion is where liquids and gases move from high concentration to low concentration.
- Osmosis is the movement of water from high concentration to low concentration.
- Nutrients are transported from the small intestine into the blood stream through diffusion.





- There are three main blood vessels: arteries, veins and capillaries.
- Arteries take oxygenated blood away from the heart
- Veins take deoxygenated blood back to the heart
- Capillaries are microscopic and connect the arteries and veins
- Poor lifestyle can make the arteries restrictive.





- **Diet** and **exercise** affects how healthy we are.
- BPM means 'beats per minute'.
- Resting heart rate is 60-100 BPM.
- Exercise strengthens bones, muscles and reduces risk of diseases.



- Blood is made up of red blood cells, white blood cells, platelets and plasma.
- Red blood cells carry oxygen to parts of the body.
- White blood cells fight off infection in the body.
- Platelets thicken and clot to stop us from bleeding.
- Plasma is the fluid that all of the above travels in.





- There are four types of drugs: painkiller, stimulant, depressant and hallucinogen.
- Drugs that are not medically prescribed are called recreational drugs.
- Alcohol is a type of drug and it is a depressant.

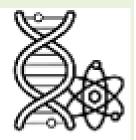
## Helpful links



Learn more about Karl Landsteiner



What is biology?





What does the heart do?



What are blood vessels?

