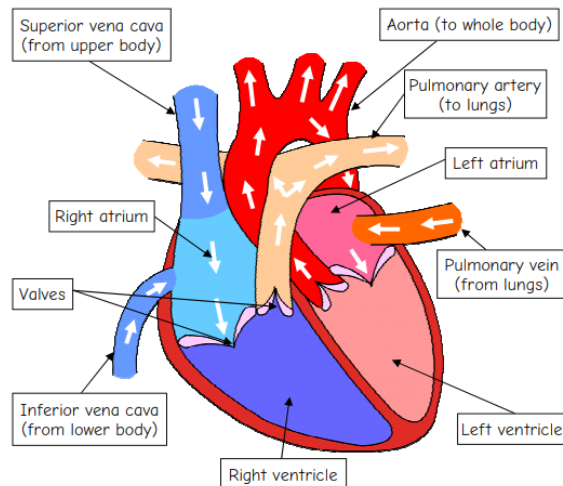


Year Six Knowledge Organiser- We are Alive and Kicking

Science	What should I already know?
	<ul style="list-style-type: none"> Understand the impact that nutrition and lifestyle can have on humans Describe the simple functions of the basic parts of the human body.
	Skills and knowledge I will develop this half-term:





- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function
- Plan scientific enquiries to answer your own questions.
- Use using a range of scientific equipment, with increasing accuracy and precision to record data.
- Use scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- Use test results to make predictions to set up further comparative and fair tests
- report and present findings from enquiries, including conclusions in both oral and written forms.



Vocabulary	
Arteries	Muscular-walled tubes that transport blood from the heart to other parts of the body
Blood	Red liquid that circulates in arteries and veins, carrying oxygen to and carbon dioxide from tissues of the body
Blood Vessel	A tubular structure carrying blood through the tissues and organs
Bones	Hard whitish tissue making up the skeleton in humans and other vertebrates
Capillaries	tiny blood vessels that connect the smallest arteries (arterioles) to the smallest veins
Circulatory System	The system that circulates blood through the body, including the heart, blood vessels and blood
Heart	A hollow muscular organ that pumps the blood through the circulatory system
Homeostasis	the ability to maintain a constant internal environment in response to environmental changes.
Lungs	Pair of organs situated within the ribcage where oxygen can pass into the blood and carbon dioxide be removed
Muscle	A band or bundle of fibrous tissues that have the ability to contract, producing movement in or maintaining positions of parts of the body
Nutrients	A substance that provides nourishment essential for the maintenance of life and for growth
Organs	Part of an organism that is typically self-contained and has a specific vital function (e.g. the heart and lungs)
Penicillin	The most famous of all antibiotics, named for the fungal mold <i>Penicillium notatum</i> from which it is derived.
Plasma	the liquid portion of blood. ... Plasma helps to distribute heat throughout the body and to maintain homeostasis, or biological stability
Platelets	An irregular, disc-shaped element in the blood that assists in blood clotting
Veins	Tubes forming part of the blood circulation system of the body, carrying mainly oxygen-depleted blood towards the heart
Vitamins	Organic compounds essential for normal growth and nutrition

Year Six Knowledge Organiser- We are Alive and Kicking



Topic Overview			
Science	History	PE	PSHE
<p>Explore the functions of blood and blood vessels.</p> <p>Identify the main parts of the human circulatory system and explain their functions.</p> <p>Explain in detail how the human heart works</p> <p>Investigate the effect of exercise on heart rate</p> <p>I can calculate how much alcohol is in different alcoholic beverages.</p> <p>I can describe and explain the effects our lifestyle, diet and exercise can affect our body weight.</p> <p>Research the preferred forms of exercise in our class</p> 	<p>To learn about who Alexander Fleming was and his discovery of penicillin.</p> <p>Learn how antibiotics work.</p> <p>Discuss the impact that the discovery of penicillin has had.</p> <p>Learn about how discoveries like this has changed science, medicine and affected people's lives.</p>  <p>To understand the process Fleming went through once he had noticed the reduced Bacterial growth around the mould.</p> <p>Question and challenge the process followed by Fleming.</p> <p>Study the different pieces of equipment that Fleming was likely to have used in comparison to what might be used today.</p>	 <p>Explore and try different training methods to prepare for the Sponsored 5K challenge.</p> <p>Set targets and accurately measure your own improved fitness.</p> <p>Explore the methods the school and wider environment try to support children in having a healthy and active lifestyle.</p>	<p>British heart foundation campaign to persuade people to give blood and help others in need.</p> <p>Explore different ways of supporting charities, through sponsorship, fundraisers and regular donations.</p> <p>Decide upon your own method to raise money for the Class' chosen charity.</p> 



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