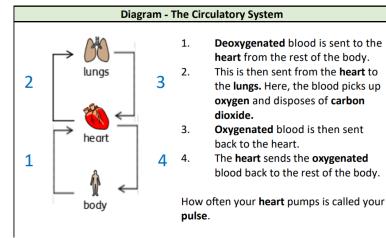
Caroline Haslett Primary School - Science Topic: Animals Including Humans Year 6

What should I already know?

- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates)
- 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.

What will I know by the end of the unit?	
What is the circulatory system?	 The circulatory system is made of the heart, lungs and the blood vessels. Arteries carry oxygenated blood from the heart to the rest of the body. Veins carry deoxygenated blood from the body to the heart. Nutrients, oxygen and carbon dioxide are exchanged via the capillaries.
Choices that can harm the circulatory system	 Some choices, such as smoking and drinking alcohol can be harmful to our health. Tobacco can cause short-term effects such as shortness of breath, difficulty sleeping and loss of taste and long-term effects such as lung disease, cancer and death Alcohol can cause short-term effects such as addiction and loss of control and long-term effects such as addiction and so from the such as addiction and loss of control and long-term effects such as addiction and loss of control and long-term effects such as addiction and loss of control and long-term effects such as organ damage, cancer and death
Why is exercise so important?	Exercise can: • tone our muscles and reduce fat • increase fitness • make you feel physically and mentally healthier • strengthens the heart • improves lung function • improves skin

Vocabulary		
aorta	the main artery through which blood leaves your heart before it flows through the rest of your body	
arteries	a tube in your body that carries oxygenated blood from your heart to the rest of your body	
blood vessels	the narrow tubes through which your blood flows. Arteries, veins and capillaries are blood vessels.	
capillaries	tiny blood vessels in your body	
carbon dioxide	a gas produced by animals and people breath- ing out	
circulatory system	the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste prod- ucts such as carbon dioxide .	
deoxygenated	blood that does not contain oxygen	
heart	the organ in your chest that pumps the blood around your body	
lungs	two organs inside your chest which fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.	
nutrients	substances that help plants and animals to grow	
organ	a part of your body that has a particular purpose	
oxygen	a colourless gas that plants and animals need to survive	
oxygenated	blood that contains oxygen	
pulse	the regular beating of blood through your body. How fast or slow your pulse is depends on the activity you are doing.	
respiration	process of respiring; breathing; inhaling and exhaling air. In KS3 science, this process is referred to as ventilation.	
vein	a tube in your body that carries deoxygenated blood to your heart from the rest of your body	
vena cava	a large vein through which deoxygenated blood reaches your heart from the body	
ventilation	The exchange of air between the lungs and the atmosphere so that oxygen can be exchanged for carbon dioxide	
via	through	



Investigate!

- How does your **pulse** change with exercise? What is the most efficient way of presenting this data?
- Analyse line graphs that show the change in **heart** rate over time before, during and after exercise.
- Which exercise produces the fastest **pulse**? How would you make this a fair test?
- Identify the parts of the **circulatory** system and explain their functions
- Create a presentation to show how our blood is pumped around the body.
- Write a persuasive text explaining the importance of exercise.

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