



Science – Animals, including humans (Year 6)

Outcome: Use research to create a model/ poster explaining the functions of the heart, blood vessels and blood, recognising the impact of external features on these parts.

Link to RSE week

Biology

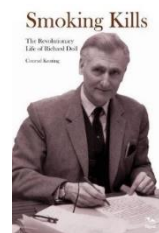


Prior Knowledge and Skills

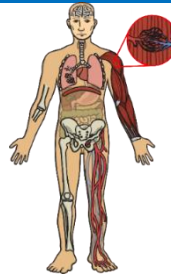
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. (Y2 - Animals, including humans).
- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Y3 - Animals, including humans).
- Describe the simple functions of the basic parts of the digestive system in humans. (Y4 - Animals, including humans).
- Identify the different types of teeth in humans and their simple functions. (Y4 - Animals, including humans).

Ideas and inspiration:

Richard Doll (Doctor who proved the link between lung cancer and smoking).



Ruth Ella Moore
(Bacteriologist who researched immunology, blood groups and tuberculosis).



Vocabulary:

Circulatory system:
circulation, heart, pulse, heartbeat, heart rate, lungs, breathing, blood vessels, blood, pump, transported, oxygenated blood, deoxygenated blood, oxygen, arteries, veins, capillaries, chambers, plasma, platelets, white blood cells, red blood cells.

Lifestyle:

drug, alcohol, smoking, disease, calorie, energy input, energy output.

Other:

water transportation, nutrient transportation, waste products.

Previously introduced vocabulary: carbon dioxide

Enquiries

Observing over time
-Observe pulse rates before, during and after exercise.



Pattern seeking
-Children generate questions for investigation such as:
o Do older people have lower pulse rates?
o Do boys have higher pulse rates?

Comparative/ fair testing
- Complete different activities to compare the impact on their own heart rate.



Researching
- Generate questions to research about the human circulatory system. (Children present what they've learned in different ways: create a model, write a song, write a story, create a PPT, etc.)

Developing Knowledge and Skills

Scientific Knowledge:		Working Towards	Within	Expected	Above
	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.				
	Describe the ways in which nutrients and water are transported within animals, including humans.				
Working Scientifically (Skills): Plan:		Working Towards	Within	Expected	Above
	Plan different types of scientific enquiries to answer questions, including recognise and controlling variables where necessary.				
Working Scientifically (Skills): Record:					
	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.				

How can your learning help you in PE?

Is there anything else you would like to know about animals? _____

Highlights: _____
