

National Curriculum:

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.

Prior Knowledge:

Pupils have a secure knowledge of life cycles and what animals, including humans, need to survive.

Pupils know that humans and some other animals have skeletons and muscles for support, protection and movement.

Pupils know the functions of the basic parts of the digestive system and the functions of different types of teeth in humans.

Previous learning includes the changes a human goes through as they develop across their lifetime

Key Vocabulary:

heart	vein
artery	capillary
lung	circulation
digestion	blood
teeth	intestine
oesophagus	anus
prediction	variable
conclusion	result

Subject: Science

Year: 5&6

Animals including humans

(Eureka it's Europe!)



Context:

They should use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas and should talk about how scientific ideas have developed over time.

Sticky Knowledge:

The human circulatory system is made up of the heart, veins, arteries, vessels, capillaries, the lungs (1)

The heart is a muscle which is used to pump oxygenated blood around the body (artery) and to help move deoxygenated blood back to get oxygenated again (vein) (1/2)

Blood is transported in arteries, capillaries and veins (1/2)

Digestion is the process of breaking down of the food we eat into other substances that we can absorb and use (3)

The digestive system begins at the teeth and ends at the anus (3)

Exercise directly affects the performance of the lungs, heart, muscles and joints (5/6/7)

Diet directly affects the performance and function of the body. Different diets exist ie vegan, pescatarian and vegetarian. (8)

Non prescribed drugs are harmful to the body affecting performance and longevity (9)

Enquiry Questions:

- 1) Which organs of the body make up the circulation system?
- 2) What are the functions of the heart, blood vessels and blood?
- 3) What ways are nutrients and water transported within animals, including humans?
- 4) What is the impact of diet, exercise, drugs and lifestyle on the way the body functions?
- 5) How does my heart rate change over the day?
- 6) Is the recovery rates for boys and girls the same?
- 7) Which type of exercise has the greatest effect on our heart rate?
- 8) Is there a pattern between what we eat and drink and how fast we can run?
- 9) Are all drugs bad for you?

Skills:

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and **written forms such as displays and other presentations.** (1/2/3/9)

Planning different types of scientific enquiries to answer question, including recognising and controlling variables where necessary (4/5/6/7)

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking readings when appropriate (4/5/6/7)

Using test results to make predictions to set up and further comparative and fair tests (4/5/6/7)