Wraysbury Primary School

No Limits
To Learning!

Topic Title: Superhuman **Year Group**: 6 **Academic Year**: 2021/2022

Science Intent:

What makes us Superhuman?

Let's explore the human circulatory system and discover how exercise and diet can improve performance**.**

Prior Scientific Learning/Linked Topics:	**Literacy Links (including texts/media used):**	**Maths Links:**
Pupils will build on their learning from years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system) to explore and answer questions that help them to understand how the circulatory system enables the body to function.	**WRITING TO INFORM:** • Non chronological report about the circulatory system **WRITING TO ENTERTAIN/INFORM:** • Blood smoothie cooking show **WRITING TO PERSUADE:** • Letter to the government to increase junk food prices/sugar tax **VIPERS:** Wonder by R G Palacio	• Statistics • Measures inc conversion • Decimals • Averages

Scientific Knowledge	**Working Scientifically**
• 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 (Covered in PSHE) • describe the ways in which nutrients and water are transported within animals, including humans	• planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • using test results to make predictions to set up further comparative and fair tests • reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identifying scientific evidence that has been used to support or refute ideas or arguments

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Content:

- Lesson 1
  Using strawberries, marshmallows, sprinkles and pineapple juice, the children will use clues about the components of blood to decide what each ingredient represents. To demonstrate their understanding, the children will plan, write and present a short TV show.

- Lesson 2
  The children will follow a step by step guide to build their own paper heart and use this to explain its function.

- Lesson 3
  To reinforce the children's understanding of the heart, the children will dissect lamb's hearts and complete a job description.

- Lesson 4
  Role Play circulatory system and using their knowledge and experience, the children will write a page from a non-fiction text about the circulatory system.

- Lesson 5 (Pattern Seeking)
  The children will learn how to take their resting heart rate, plot data on a graph and draw conclusions from their findings.

- Lesson 6 (Comparative/Fair testing)
  Investigate how and why their bodies change with exercise. Develop a greater awareness of their hearts and how they work. Collect evidence by making observations and measurements.

- Lesson 7 (Pattern Seeking)
  Investigate and analyse how the body recovers after exercise. Collect evidence by making observations and measurements.

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- Lesson 8
  The children will investigate the heart rates from different animals as well as different ages and levels of fitness of humans. Why do the heart rates vary?

- Lesson 9
  In a fun and practical way, the children will learn and explore how water and nutrients are transported through the body.

- Lesson 10

  Children will explore the benefits of a healthy lifestyle through exploration of different foods and sugary snacks. The children will help to create a school-wide display for the lunch hall.

Key Vocabulary: At the beginning of each topic, the children have the opportunity to explore, learn and understand the key vocabulary.

circulatory system, heart, blood, blood vessels, capillaries, veins, arteries, valve, pumps, oxygen, oxygenated, deoxygenated, carbon dioxide, lungs, nutrients, water, diet, exercise, drugs, lifestyle, heart rate

Stunning Start/Marvellous Middle/Fabulous Finish:	**OAA/Trips/Visits/Visitors:**
Blood smoothies	**Medical Mavericks**