

Inspiring and enabling our school community to live life to the full



YEAR 6

Subject: Science
Body health

Our Science curriculum aims to enthuse children and help them to be curious and develop a sense of excitement about the world. Through a range of teaching, learning and extra-curricular opportunities, children will develop scientific knowledge and conceptual understanding to recognise the uses and implications of Science, today and for the future. We encourage children to ask their own questions; predict how things will behave and analyse causes, using Science to explain what is happening.

Characteristics of an Effective Learner

Courage
Commitment
Collaboration
Creativity
Curiosity

Prior Learning:

- that we need the right types and amount of nutrition in order to be healthy, and that our skeletons and muscles allow us to move and provide support and protection (Year 3 Biology – Animals, including humans)
- about the main parts of the human circulatory system, and their functions (Year 6 Biology – Animals including humans).

Key Vocabulary taught in this unit:

Balanced, deficiency, recovery, arteries, heart rate, malnutrition, pulse, salt, veins, data, line graph, carbohydrates, fats, fibre, lungs, mineral, nutrient, oxygen, protein, vitamin.

Key Questions:

Q: How do we make healthy food choices?

A healthy diet helps maintain or improve general health. It should be low in sugar, salt and fat while providing all of the energy we need to keep active and the nutrients we need to help us grow and keep healthy.

Q: What can happen if you don't eat a balanced diet?

When people do not eat a balanced diet they are at risk of malnutrition. Malnutrition can result in unplanned weight loss, muscle loss or vitamin and mineral deficiencies.

Q: How does physical activity affect heart rate?

Our pulse increases when we are active, to meet the increased need for oxygen in our muscles. Regular physical activity prevents obesity, keeps heart, lungs and muscles healthy, increases flexibility and strength and helps to fight off infections.

Q: How does smoking or vaping affect your health?

Drugs are any substances that alter the way that the body works. Nicotine is a highly addictive drug that is found in cigarettes and vape products. Nicotine causes an increase in blood pressure, breathing and heart rate. The long-term effects of smoking can include lung diseases, heart disease and stroke. Vaping is considered less harmful than smoking, but it also has negative side effects.

Intent:

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood
- describe the ways in which nutrients and water are transported within animals, including humans.

Working Scientifically

- 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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Impact / Outcome:

What will the final product / result be?

Children will learn about the methods scientists use to build scientific knowledge about the human body.

They will learn that science helps us to understand the implications of decisions we make about our bodies, enabling us to take better care of ourselves and of others. They will learn that science is an ongoing endeavour, and that, over time, scientific understanding has changed around diet. It was not until 1747 that scientist James Lind discovered how vitamin C was crucial for preventing diseases such as scurvy. Scientific research into medicine is crucial for saving lives and improving the quality of our daily lives. Children will learn how a clinical trial works and relate this to their knowledge of science enquiry. They will develop an understanding of the following types of enquiry: research using secondary sources, pattern seeking.

P4C Inquiry (where appropriate)