



- I will develop a curious mind and my excitement for science will be fuelled
- I will be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

In Year 11...

- I will explore genetics, looking at gene inheritance, the positive and negative effects of mutation, and how these concepts influence the evolution of organisms through natural selection.
- I will look at ethically complex genetic techniques, such as cloning, selective breeding, and genetic engineering.

In Year 10...

- I will explore the methods organisms have for producing energy, including photosynthesis, aerobic respiration and anaerobic respiration.
- I will examine the human control systems for temperature, pH, blood sugar and the menstrual cycle, and how these systems affect the internal environment of the body.
- I will explore the interactions between plants and animals within ecosystems, looking at the biotic and abiotic factors that influence them, and the human threat to biodiversity.

In Year 9...

- I will explore how structural differences between types of biological cells enable them to perform specific functions within organisms.
- I will learn how these cells form systems, such as the circulatory system and digestive system and the impact damage to these systems has on our health.
- I will learn how pathogens cause infectious disease and explore the function of our immune

In Year 8...

- I will learn about material cycles, body systems, genetics and evolution.
- My specialist vocabulary will be extended and I will be expected to use this vocabulary when describing and evaluating processes.

In Year 7...

- I will learn about the structure and function of living organisms and how they interact through the topics of: Cells, reproduction, plants and photosynthesis and interdependence.
- I will be challenged to describe processes using technical terminology accurately and precisely and I will build up a specialist vocabulary.
- I will study the foundations for understanding the world through the specific discipline of biology.