

SUMMER 2

Physics - Electricity, Magnetism and Waves

Pupils will be able to explain electricity in circuits and how that is transferred to useful applications in our homes. Pupils will investigate magnetism, explaining uses for electromagnets. Pupils will also learn about waves and how they transfer energy.

SUMMER 1

Chemistry – Chemistry in our World

Pupils will investigate the reactions of different acids and discuss how the rate of reaction is affected. Pupils will learn about energy in reactions and be able to explain the composition of the modern earth's atmosphere, as well as 4.5 billion years ago.

SPRING 2

Biology - Environment, Evolution and Inheritance

Pupils will learn about how plants produce their own food via Photosynthesis, while animals need to consume food to gain energy. Pupils will learn the reasons for plants and animals competing for food and territory and pupils will investigate theories of evolution, discussing the concept of natural selection that has led to the variety of organisms that exist.

SPRING 1

Physics – Energy, Forces and Structure of Matter

Pupils will learn about the conservation of energy, and how energy exists in different stores. Pupils will be able to explain a range of forces and be able to identify resultant force. Pupils will also look at nuclear energy and the structure of an atom.

SPRING 2

Biology – Environment, Evolution and Inheritance

Pupils will learn about how plants produce their own food via Photosynthesis, while animals need to consume food to gain energy Pupils will learn the reasons for plants and animals competing for food and territory and pupils will investigate theories of evolution, discussing the concept of natural selection that has led to the variety of organisms that exist.

SUMMER 1

Chemistry – Chemistry in our World

Pupils will investigate the reactions of different acids and discuss how the rate of reaction is affected. Pupils will learn about energy in reactions and be able to explain the composition of the modern earth's atmosphere, as well as 4.5 billion years ago.

SUMMER 2

Physics – Electricity, Magnetism and Waves

Pupils will be able to explain electricity in circuits and how that is transferred to useful applications in our homes. Pupils will investigate magnetism, explaining uses for electromagnets. Pupils will also learn about waves and how they transfer energy.

<u>AUTUMN 1</u>

Biology - The Human Body

Pupils will learn about the organisation of the body, learning about different organ systems which carry out key life processes. Pupils will also learn about health and disease, what we can do to stay healthy and how are body defends against diseases.

AUTUMN 2

Chemistry – Elements, Compounds and Mixtures

Pupils will learn about how our universe is made up of around 100 different atoms, known as elements and be able to show their location within the Periodic table. Pupils will be able to explain mixtures and compounds and explain how to separate mixtures.

SPRING 1

Physics – Energy, Forces and Structure of Matter

Pupils will learn about the conservation of energy, and how energy exists in different stores. Pupils will be able to explain a range of forces and be able to identify resultant force. Pupils will also look at nuclear energy and the structure of an atom.

AUTUMN 2

Chemistry – Elements, Compounds and Mixtures

Pupils will learn about how our universe is made up of around 100 different atoms, known as elements and be able to show their location within the Periodic table. Pupils will be able to explain mixtures and compounds and explain how to separate mixtures.

AUTUMN 1

Biology – The Human Body

Pupils will learn about the organisation of the body, learning about different organ systems which carry out key life processes. Pupils will also learn about health and disease, what we can do to stay healthy and how are body defends against diseases.

Y10