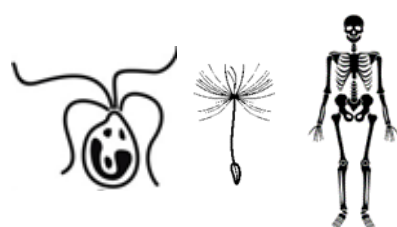


The purpose of the Science curriculum is to provide high-quality science education as a foundation for understanding the world by teaching knowledge, methods, processes and uses of science. Students are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena, understanding how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

The Science curriculum aims to ensure that all pupils develop **scientific knowledge and conceptual understanding** of the **nature, processes and methods of science** enabling them to answer scientific questions about the world around them. They will be equipped with the scientific knowledge required to understand **the uses and implications** of science, today and for the future.



Key
Stage 3

PHYSICS UNIT 1

Energy, forces and the structure of matter 1
Energy stores and transfers.
Reducing unwanted energy transfers. Energy resources - renewable and non-renewable.



BIOLOGY UNIT 1

The Human Body 1
Digestion.
Circulatory system.
Respiration.
Cells and levels of organization.



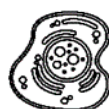
BIOLOGY UNIT 2

Infectious diseases and the immune system. Medical drugs.
The nervous system and endocrine systems.



CHEMISTRY UNIT 2

Elements, Mixtures and compounds 2.
Metals and alloys.
Polymers.



PHYSICS UNIT 2

Types and effects of forces.
Speed and stopping distances.
Radioactivity.



CHEMISTRY UNIT 1

Elements, Mixtures and compounds 1.
Atoms and elements.
Chemical reactions. Compounds and mixtures.
Separating mixtures.



KS4:
Year 10

BIOLOGY UNIT 1

The Human body 1
Digestion and enzyme action.
Circulatory system.
Respiration. Cells and levels of organization. Infectious diseases and immune system.



PHYSICS UNIT 1

Energy, Forces and the structure of matter 1.
Energy stores and transfers.
Reducing unwanted energy transfers.
Calculating electricity bills.



BIOLOGY UNIT 2

Medical drugs.
The nervous and endocrine systems.
Contraception.



KS4:
Year 11

CHEMISTRY UNIT 2

Elements, Mixture and Compounds 2
Metals and alloys.
Polymers.



PHYSICS UNIT 2

Energy, Forces and the structure of matter 2.
Speed and stopping distances.
Types and effects of forces.
Radioactivity.
Energy resources—renewable and non-renewable.
Separating mixtures.



CHEMISTRY UNIT 1

Elements, Mixture and Compounds 1
Atoms and elements.
Chemical reactions.
Compounds and mixtures.
Chemical bonding.



BIOLOGY UNIT 1

Environment, evolution and inheritance 1.
Plants and photosynthesis.
Adaptations and feeding.
Relationships.
Environmental change and pollution.

CHEMISTRY UNIT 1

Chemistry in our world 1.
Acids and metals.
PH and neutralization.
Rates of reaction.

BIOLOGY UNIT 2

Environment, evolution and inheritance 2.
Evolution, natural selection and artificial selection.
Sexual and asexual reproduction.
Genetics and genetic engineering.

CHEMISTRY UNIT 2

Chemistry in our world 2.
The Earth's atmosphere.
Crude oils and fuels.
Revise polymerization.
Water for drinking.

SUMMER TERM 1
CONSOLIDATION AND REVISION.

SUMMER TERM 2
EXAMS

Where will your Biology Qualifications take you?

Next Steps:

A-levels in Biology, Chemistry and Physics. BTECS in Animal care, Sports Science

Further Education:

Degrees in Biology, Sports Science, Health Care, Veterinarian

Career:

Nutritionist, Animal Researcher, Zookeeper, Food Scientist.