

Science

Year 10

In year 10 pupils study the combined (9–1) science course. This programme of study builds upon modules previously learnt at KS3. Pupils will deepen their knowledge and skills as they revisit and further explore the key concepts from previous modules. In addition, there is a focus on pupils completing a number of mandatory core practicals throughout their GCSE. Pupils will be assessed through the regular completion of examination style questions, low stakes quizzing and cumulative assessments.

The modules studied in biology are: Key concepts in biology, Cells and control, Genetics, Natural selection and genetic modification and Health, disease and the development of medicines.

The modules studied in Chemistry are: Key concepts in Chemistry, States of matter and mixtures, Chemical changes and Extracting metals and equilibria.

The modules studied in Physics are: Key Concepts of Physics, Motion and Forces, Conservation of Energy Waves, Light and the Electromagnetic Spectrum and Radioactivity.

A select number of pupils will be offered the option to study separate science following an application process. This pathway will provide pupils with the opportunity to both explore the modules studied in combined science in greater depth and study additional modules across chemistry and physics.

Year 11

In year 11 pupils will complete their study of the combined (9-1) science course. They will continue to build of their knowledge of scientific principles and practical elements through the study of biology, chemistry and physics disciplines. Pupils will continue to be assessed through the completion of examination style questions, low stakes quizzing and cumulative assessments.

The modules studied in biology are Key Concepts in Biology, Plant Structures and their Functions, Animal Coordination, Control, Homeostasis, Exchange and Transport in Animals, Ecosystems and Material Cycles.

The modules studied in chemistry are: Key Concepts in Chemistry, The Periodic Table and Rates of Reactions, Fuels and Earth and Atmospheric Science

The modules studied in physics are: Key Concepts of Physics, Energy and Forces, Electricity and Circuits, Magnetism, the Particle Model and Forces of Matter.

Extra-Curricular

The science faculty offer a number of different opportunities for pupils to further develop their understanding and skills across key stage 3 and 4. For example, there is a KS3 STEM club held every Tuesday after school

for pupils to develop their STEM associated skills. Furthermore, KS3 pupils have the opportunity to explore the wider principles of science during a Monday lunchtime in the science club. We offer 'Serious About Science' to our KS4 pupils to expose them to different fields of science and potential careers involved. Additionally, the faculty offer KS4 revision during Tuesday lunchtimes and after school on Wednesday.