



Curriculum Overview

Curriculum Area: Biology, Chemistry and Physics (Triple) Year: 11

Curriculum covered This curriculum is due to change in 2024 to adapt to changes in our KS3 Curriculum

Autumn Term

Biology – (B5 Paper 2) Homeostasis and response: Homeostasis, nervous system & hormones.

Chemistry – (C7 Paper 2) Organic Chemistry: Crude oil, hydrocarbons and alkanes, fractional distillation, cracking & alkenes

Chemistry – (C8 Paper 2) Chemical analysis: Pure substances, formulations, chromatography & common gas tests.

Physics – (P6 Paper 2) Waves: Transverse, longitudinal, wave properties, sound waves, electromagnetic waves, lenses, light, & black body radiation

Spring Term

Biology – (B6 Paper 2) Inheritance: Reproduction, variation, Evolution, development of genetics & classification.

Chemistry – (C9 Paper 2) Chemistry of the atmosphere: Composition and evolution of Earth's atmosphere, greenhouse gases, climate change & pollutants.

Chemistry – (C10 Paper 2) Using resources: Sustainable development, potable & waste water, reducing use & life cycle assessments

Physics – (P7 Paper 2) Magnetism and electromagnetism: Permanent magnets, induced magnets, fields, electromagnetism, the motor effect, induction, generator effect, microphones & transformers.

Physics – (P8 Paper 2) Space Physics: Solar System, Stability of orbital motions, satellites, life cycle of stars, red shift, and the big bang.

Internal Assessment

In lesson time pupils will use formative assessments to check understanding at the point of learning to allow immediate intervention.

After every topic there will be an end of topic test that follows a similar structure to the GCSE exam papers. These will be approximately every term for each of Biology, Chemistry and Physics. Each topic test has been designed to be in line with exam board requirements for demand and mathematical content. The feedback from these tests will be used to improve the pupil's knowledge in this topic.

Year 11 pupils will sit 2 mock exams before the final may examinations; The mock 1 at the end of term 1 will be a paper 1 style GCSE paper for each Biology, Chemistry and Physics.

The mock 2 during term 2 will be a paper 2 style GCSE paper for each Biology, Chemistry and Physics.

Exam Board/Exam Paper Requirements/% Weighting

Key dates (mocks and final exams)

AQA Biology GCSE

AQA Chemistry GCSE

AQA Physics GCSE

Each subject has two papers sat in May/June of year 11.

Each paper is 1 hour 45 minutes each and 100 marks.

Each paper is 50% of the individual GCSE award.

Each subject has paper 1 and paper 2.

Each of the papers will assess knowledge and understanding from distinct topic areas.

Questions will comprise of multiple choice, structured, closed short answer, and open response.

Helpful resources/revision guides/websites/exam preparation

Specification GCSE Biology:

www.aqa.org.uk/subjects/science/gcse/biology-8461

GCSE Chemistry:

www.aqa.org.uk/subjects/science/gcse/chemistry-8462

GCSE Physics:

www.aqa.org.uk/subjects/science/gcse/physics-8463

BBC GCSE Bitesize Science

<http://www.bbc.co.uk/education/subjects/zrkw2hv>

Educake Science

<http://www.educake.co.uk>

Revision guides

AQA Biology, Chemistry and Physics science revision guides are sold from school or many other versions are available elsewhere.



Curriculum Overview

Curriculum Area: Combined Science (Trilogy)

Year: 11

Curriculum covered This curriculum is due to change in 2024 to adapt to changes in our KS3 Curriculum

Autumn Term

Biology – (B5 Paper 2) Homeostasis and response: Homeostasis, nervous system & hormones.

Chemistry – (C7 Paper 2) Organic Chemistry: Crude oil, hydrocarbons and alkanes, fractional distillation, cracking & alkenes

Chemistry – (C8 Paper 2) Chemical analysis: Pure substances, formulations, chromatography & common gas tests.

Physics – (P6 Paper 2) Waves: Transverse, longitudinal, wave properties & electromagnetic waves.

Spring Term

Biology – (B6 Paper 2) Inheritance: Reproduction, variation, Evolution, development of genetics & classification.

Chemistry – (C9 Paper 2) Chemistry of the atmosphere: Composition and evolution of Earth's atmosphere, greenhouse gases, climate change & pollutants.

Chemistry – (C10 Paper 2) Using resources: Sustainable development, potable & wastewater, reducing use & life cycle assessments

Physics – (P7 Paper 2) Magnetism and electromagnetism: Permanent magnets, induced magnets, fields, electromagnetism & the motor effect.

Internal Assessment

In lesson time pupils will use formative assessments to check understanding at the point of learning to allow immediate intervention.

After every topic there will be an end of topic test that follows a similar structure to the GCSE exam papers. These will be approximately every term for each of Biology, Chemistry and Physics. Each topic test has been designed to be in line with exam board requirements for demand and mathematical content. The feedback from these tests will be used to improve the pupil's knowledge in this topic.

Year 11 pupils will sit 2 mock exams before the final may examinations; The mock 1 at the end of term 1 will be a paper 1 style GCSE paper for each Biology, Chemistry and Physics.

The mock 2 during term 2 will be a paper 2 style GCSE paper for each Biology, Chemistry and Physics.

Exam Board/Exam Paper Requirements/% Weighting

Key dates (mocks and final exams)

AQA Combined Science Trilogy GCSE (2 GCSEs) –

There are six papers sat in May/June of year 11.

Each paper is 1 hour 15 minutes each and 70 marks.

Each paper is 16.7 % of the overall double GCSE award.

The six papers are Biology paper 1, Biology paper 2, Chemistry paper 1, Chemistry paper 2, Physics paper 1 & Physics paper 2.

Each of the papers will assess knowledge and understanding from distinct topic areas.

Questions will comprise of multiple choice, structured, closed short answer, and open response.

Helpful resources/revision guides/websites/exam preparation

Specification GCSE Combines Science (Trilogy):

www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464

BBC GCSE Bitesize Science

<http://www.bbc.co.uk/education/subjects/zrkw2hv>

Educake Science

<http://www.educake.co.uk>

Revision guides

AQA Trilogy combined science revision guides are sold from school, or many other versions are available elsewhere.