

Course Tier Information:

Students are taught by two teachers over the two years, each will be a specialist in one of the three sciences. They will share the third science between them.

Two tiers are available for this qualification, Foundation and Higher. The most appropriate tier will be decided following discussions between your child and their science teacher. The content is the same for both tiers.

The qualification will be graded on a 17-point scale: 1–1 to 9–9 – where 9–9 is the best grade.

A student taking Foundation Tier assessments will be awarded a grade within the range of 1–1 to 5–5.

A student taking Higher Tier assessments will be awarded a grade within the range of 4–4 to 9–9.

Course Assessment:

There is no coursework for Combined Science. It is 100% based on examinations at the end of Year 11.

This qualification is linear. Linear means that students will sit all their exams at the end of the course. As all of the exams take place in the Summer term of Year 11 (May/June 2018), there are no opportunities for resitting.

There are six papers: two Biology, two Chemistry and two Physics. Each of the papers will assess knowledge and understanding from distinct topic areas. Each exam is 1 hour 15 minutes long, consists of 70 marks, is 16.7% of the GCSE and contains multiple choice, structured, closed short answer, and open response questions. The topics below refer to the examination board specification and NOT the Kerboodle textbook.

Biology Paper 1 assesses Biology topics 1–4: Biology Paper 2 assesses Biology topics 5–7

Chemistry Paper 1 assesses Chemistry topics 8-12: Chemistry Paper 2 assesses Chemistry topics 13-17

Physics Paper 1 assesses Physics topics 18-21: Physics Paper 2 assesses Physics topics 22-24

General Course Information:

There is a greater emphasis on application and maths skills questions in this course than the previous GCSE. Students must learn 21 Physics equations off by heart.

Teachers will set Key Assessed Pieces (KAPs) which will be carried out under examination conditions or as homeworks. The tests will contain cumulative questions that will be used to judge what has been committed to students' long-term memory. Please enquire regularly from your child when these are and ask to see the marked test papers so you can be aware of how they are progressing.

There are a minimum of 21 Required Practicals which must be carried out and written up in Laboratory Books. 15% of the exams will draw on the knowledge and understanding that students have gained by carrying out these practical activities.

Useful resources/ways to improve:

The three textbooks that we recommend are all published by Oxford University Press:

AQA Biology for Combined Science: Trilogy ISBN-13: 9780198359265

AQA Chemistry for Combined Science: Trilogy ISBN-13: 9780198359272

AQA Physics for Combined Science: Trilogy ISBN-13: 978019835928 9

These textbooks are available digitally (for free) at www.kerboodle.com and the department sells CGP revision guides at a discounted rate.

We thoroughly recommend buying access to the online revision website, Tassomai (via Wisepay) which is a proven to improve exam results.

COURSE OVERVIEW — COMBINED SCIENCE: Trilogy

YEAR 10

SEPT 2019 - JULY 2020 Topics (from Kerboodle) to be studied during the first year of the course.

Biology covered in Year 9

B1 Cell structure and transport
B2 Cell division

Year 10

B3 Organisation and the digestive system
B4 Organising animals and plants
B5 communicable disease
B6 Preventing and treating disease
B7 Non-communicable diseases
B8 Photosynthesis
B9 Respiration
Mock examination preparation

Chemistry covered in Year 9

C1 Atomic structure
C2 The Periodic table

Year 10

C3 Structure and bonding
C4 Chemical calculations
C5 Chemical changes
C6 Electrolysis
C7 Energy changes
C8 Rates and equilibrium

Mock examination preparation

Physics covered in Year 9

P1 Conservation and dissipation of energy

P2 Energy transfer by heating

Year 10

P3 Energy resources
P4 Electric circuits
P5 Electricity in the home
P6 Molecules and matter
P7 Radioactivity
P8 Forces in balance
P9 Motion
P10 Force and motion
P11 Force and pressure
Mock examination preparation

YEAR 11

SEPT 2020 - JUNE 2021 Topics (from Kerboodle) to be studied during the second year of the course.

Biology

B10 The nervous system
B11 Hormonal coordination
B12 Reproduction
B13 Variation and evolution
B14 Genetics and evolution
B15 Adaptations, interdependence, and competition
B16 Organising an ecosystem
B17 Biodiversity and ecosystems

Examination preparation

Chemistry

C9 Crude oils and fuels
C10 Chemical analysis
C11 The Earth's atmosphere
C12 The Earth's resources

Examination preparation

Physics

P12 Wave properties
P13 Electromagnetic waves
P14 light
P15 Electromagnetism

Examination preparation



“Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.” **Pele**

Course Tier Information:

Students are taught by subject specialists as three separate GCSEs. All triple science students will be entered for the Higher tier. Grades will be awarded within the range of 4–4 to 9–9.

Course Assessment:

There is no coursework for Triple Science. It is 100% based on examinations at the end of Year 11.

This qualification is linear. Linear means that students will sit all of their exams at the end of the course. As all of the exams take place in the Summer term of Year 11 (May/June 2018), there are no opportunities for resitting.

There are six papers: two Biology, two Chemistry and two Physics. Each of the papers will assess knowledge and understanding from distinct topic areas. Each exam is 1 hour 45 minutes long, consists of 100 marks, is 50% of EACH GCSE and contains short answer and extended response questions. The topics below refer to the examination board specification and NOT the Kerboodle textbook.

Biology Paper 1 assesses Biology topics 1–4: Biology Paper 2 assesses Biology topics 5–7

Chemistry Paper 1 assesses Chemistry topics 1-5: Chemistry Paper 2 assesses Chemistry topics 6-10

Physics Paper 1 assesses Physics topics 1-4: Physics Paper 2 assesses physics topics 5-8

General Course Information:

Triple science covers much of the same content as Combined Science: Trilogy. Some of the topics are extended and there are additional topics such as Space Physics.

There is a greater emphasis on application and maths skills questions in this course than the previous GCSE.

Teachers will set Key Assessed Pieces (KAPs) which will be carried out under examination conditions or as homeworks. The tests will contain cumulative questions will be used to judge what has been committed to students' long-term memory. Please enquire regularly from your child when these are and ask to see the marked test papers so you can be aware of how they are progressing.

There are Required Practicals (10 for Biology; 8 for Chemistry; 9 for Physics) which must be carried out and written up in Laboratory Books. 15% of the exams will draw on the knowledge and understanding that students have gained by carrying out these practical activities.

Students must learn 23 Physics equations off by heart.

Useful resources/ways to improve:

The three textbooks that we recommend are all published by Oxford University Press:

AQA GCSE Biology Student Book (Third Edition) ISBN 978-0-19-835927-2

AQA GCSE Chemistry Student Book (Third Edition) ISBN 978-0-19-835927-2

AQA GCSE Physics Student Book (Third Edition) ISBN 978-0-19-835939-5

These textbooks are available digitally (for free) at www.kerboodle.com and the department sells CGP revision guides at a discounted rate.

We thoroughly recommend buying access to the online revision website, Tassomai (via Wisepay) which is a proven to improve exam results.

COURSE OVERVIEW — TRIPLE SCIENCE

YEAR 10

SEPT 2019 - JULY 2020 *Topics (from Kerboodle) to be studied during the first year of the course.*

Biology

Studied in Year 9

- B1 Cell structure and transport
- B2 Cell division

Year 10

- B3 Organisation and the digestive system
- B4 Organising animals and plants
- B5 Communicable disease
- B6 Preventing and treating disease
- B7 Non-communicable diseases
- B8 Photosynthesis
- B9 Respiration

Mock examination preparation

Chemistry

Studied in Year 9

- C1 Atomic structure
- C2 The Periodic table

Year 10

- C3 Bonding, structure and matter
- C4 Chemical calculations
- C5 Chemical changes
- C6 Electrolysis
- C7 Energy changes
- C8 The rate and extent of chemical change

Mock examination preparation

Physics

Studied in Year 9

- P1 Conservation and dissipation of energy
- P2 Energy transfer by heating

Year 10

- P3 Energy resources
- P4 Electric circuits
- P5 Electricity in the home
- P6 Molecules and matter
- P7 Radioactivity
- P8 Forces in balance
- P9 Motion
- P10 Force and motion
- P11 Force and pressure

Mock examination preparation

YEAR 11

SEPT 2020 - JUNE 2021 *Topics (from Kerboodle) to be studied during the second year of the course.*

Biology

- B10 The nervous system
- B11 Hormonal coordination
- B12 Reproduction
- B13 Variation and evolution
- B14 Genetics and evolution
- B15 Adaptations, interdependence, and competition
- B16 Organising an ecosystem
- B17 Biodiversity and ecosystems

Examination preparation

Chemistry

- C9 Crude oils and fuels
- C10 Organic reactions
- C11 Polymers
- C12 Chemical analysis
- C13 Earth's atmosphere
- C14 Earth's resources
- C15 Using resources

Examination preparation

Physics

- P12 Wave properties
- P13 Electromagnetic waves
- P14 light
- P15 Electromagnetism
- P16 Space

Examination preparation



"I am always doing that which I can not do, in order that I may learn how to do it." **Pablo Picasso**