

The Science Department

How can you support your child in GCSE Science?





- **3 Separate GCSE qualifications**
- \rightarrow Biology \rightarrow Chemistry
- \rightarrow Physics
- Where we think students will benefit more from doing Combined Science we will contact parents to discuss this further
- 6 exam total 1hr 45 100 marks Grades 9-3

Combined Science (AQA)



2 GCSE

qualifications

- \rightarrow Average Paper 1
 - Grade
- → Average Paper 2 Grade

6 exams total 1hr 15 70 marks Grades: Higher 9-9 to 4-3 Foundation 55 to 1-1

Where we think students will benefit more from doing a different tier we will contact parents to discuss this further



Both courses will allow students to study **A Level Sciences**

End of Year Mocks



Paper 1 One paper for each science

3 exams total 1hr 15 70 marks

Biology Topics



Paper 1: 1. Cells 2. Organisation 3. Infection & Response 4. Bioenergetics

Paper 2: 5.Homeostasis & Response 6.Inheritance, Variation and **Evolution** 7. Ecology

Chemistry Topics



Paper 1:

- **1. Atomic structure**
- 2. Bonding and structure
- 3. Quantitative chemistry
- 4. Chemical changes
- 5. Energy changes

Paper 2:

- Rate & extent of reactions
- 7. Organic chemistry
- 8. Chemical analysis
- 9. Chemistry of the earth & atmosphere
- 10. Using Resources

Physics Topics

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Paper 1:

- 1. Energy
- 2. Electricity
- 3. Particle model
- 4. Atomic structure

Paper 2:

- 5. Forces
- 6. Waves
- Magnetism & electromagnetism
- 8. Space Physics (GCSE Physics only)





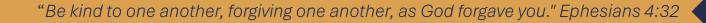


Black pens, pencils (at least two of each)



A ruler (30cm) and protractor

Calculator – scientific, like the one used for Maths



Useful Resources



4.1.1.5 Microscopy

Content

Students should be able to:

- understand how microscopy techniques have developed over time
- explain how electron microscopy has increased understanding of sub-cellular structures.

Limited to the differences in magnification and resolution.

An electron microscope has much higher magnification and resolving power than a light microscope. This means that it can be used to study cells in much finer detail. This has enabled biologists to see and understand many more sub-cellular structures.

https://filestore.aqa.org.uk/resources/ science/specifications/AQA-8464-SP-2016.PDF

- BBC GCSE Bitesize:
- <u>https://www.bbc.co.uk/bitesize/subjects/zrkw2hv</u>
- Seneca Learning: https://senecalearning.com/en-GB/
 - Save my exams: www.savemyexams.co.uk
 - Past Papers
- www.aqa.org.uk/find-past-papers-and-mark-schemes
- <u>https://www.physicsandmathstutor.com/past-papers/</u>
- CGP revision guides and workbooks can be purchased from
 - <u>www.cgpbooks.co.uk/secondary-books/gcse/science</u>

Students also have access to an online textbook on Kerboodle

www.kerboodle.com

Revision Resources





AQA GCSE SCIENCE Series Editor: Primrose Kitten Adam Boxar Hakan Reynolds Prilippa Garcom Hulma Alom Shuha Ja Larke Jessina Walmsley OXFORD

Parents will be informed by letter when these resources will be available to purchase at a discounted price



YouTube: Free Science Lessons

Cognito