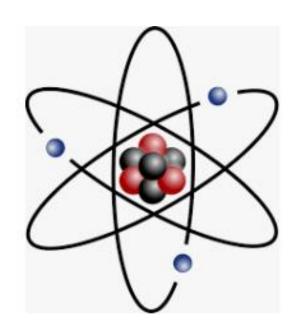
# The Science Department



How can you support your son/daughter in GCSE Science?

# Separate Science (AQA)

### 3 Separate GCSE qualifications

- → Biology
- → Chemistry
- → Physics

Where we think students will benefit more from doing Combined Science we will contact parents to discuss this further

6 exams total
1hr 45
100 marks
Grades 9-3

# Combined Science (AQA)

# 2 GCSE qualifications

- → 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**

#### <u>Paper 1:</u>

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

#### Paper 2:

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

# Physics Topics

#### <u>Paper 1:</u>

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

#### <u>Paper 2:</u>

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

## Equipment



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:

https://www.bbc.co.uk/bitesize/subjects/zrkw2hv

Seneca Learning: <a href="https://senecalearning.com/en-GB/">https://senecalearning.com/en-GB/</a>

Save my exams: <u>www.savemyexams.co.uk</u>

#### Past Papers

www.aqa.org.uk/find-past-papers-and-mark-schemes
https://www.physicsandmathstutor.com/past-papers/

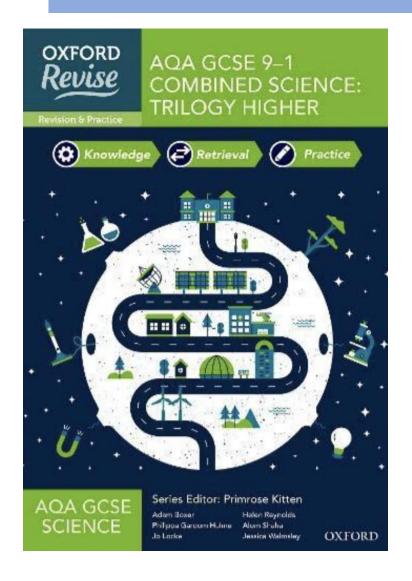
CGP revision guides and workbooks can be purchased from

www.cgpbooks.co.uk/secondary-books/gcse/science

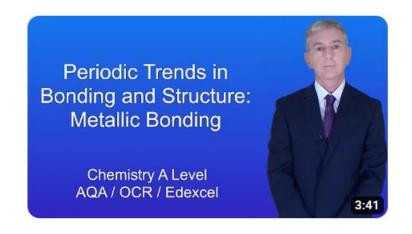
Students also have access to an online textbook on Kerboodle

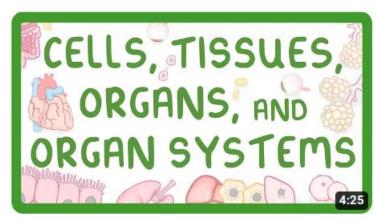
www.kerboodle.com

## Revision Resources



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





YouTube: Free Science Lessons

Cognito