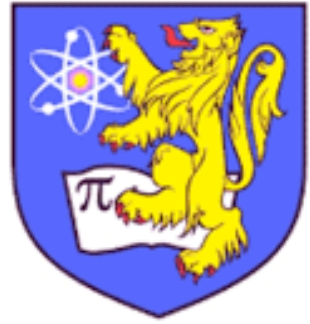


Woodkirk Academy

Course Handbook

Separate Science Route



GCSE

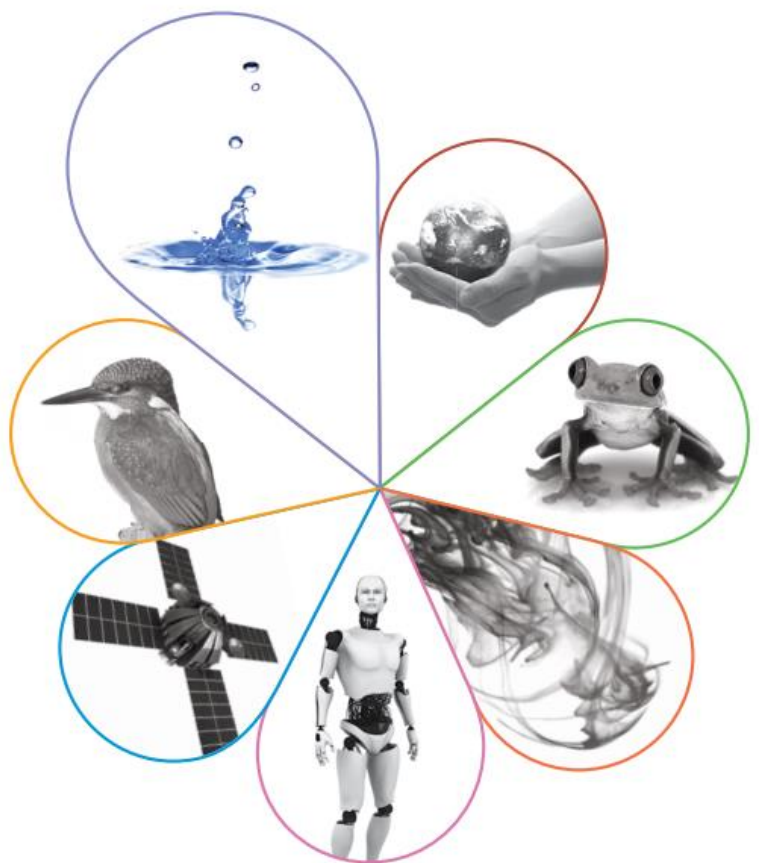
BIOLOGY

GCSE

CHEMISTRY

GCSE

PHYSICS



How is the Subject Examined?

- There are two papers for each subject that last 1 hour and 45 minutes. Each paper has questions on set topics.
- The style of questions are multiple choice questions, structured questions, open and closed answer questions.
- There is no coursework. As science is a practical subject there are a number of set practicals that the students have to do throughout their G.C.S.E. courses. There will be questions about these practicals on all the papers the students do. These practicals are emphasised throughout the course and will be revised in detail in year 11

The content of each paper is summarised [below](#)^[IR1]

Biology

Paper 1	+	Paper 2
What's assessed Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.		What's assessed Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.
How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE		How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE
Questions Multiple choice, structured, closed short answer and open response.		Questions Multiple choice, structured, closed short answer and open response.

Chemistry

Paper 1:	+	Paper 2:
What's assessed Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes.		What's assessed Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.
How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE		How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE
Questions Multiple choice, structured, closed short answer and open response.		Questions Multiple choice, structured, closed short answer and open response.

Physics

Paper 1:	+	Paper 2:
What's assessed Topics 1–4: Energy; Electricity; Particle model of matter; and Atomic structure.		What's assessed Topics 5–8: Forces; Waves; Magnetism and electromagnetism; and Space physics. Questions in Paper 2 may draw on an understanding of energy changes and transfers due to heating, mechanical and electrical work and the concept of energy conservation from Energy and Electricity .
How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE		How it's assessed <ul style="list-style-type: none">• Written exam: 1 hour 45 minutes• Foundation and Higher Tier• 100 marks• 50 % of GCSE
Questions Multiple choice, structured, closed short answer and open response.		Questions Multiple choice, structured, closed short answer and open response.

For a more detailed breakdown of the subject content use the link to the specifications below

Biology

<http://filestore.aqa.org.uk/resources/biology/specifications/AQA-8461-SP-2016.PDF>

Chemistry

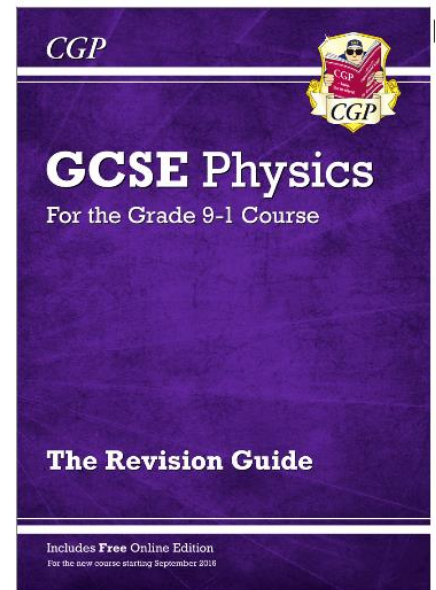
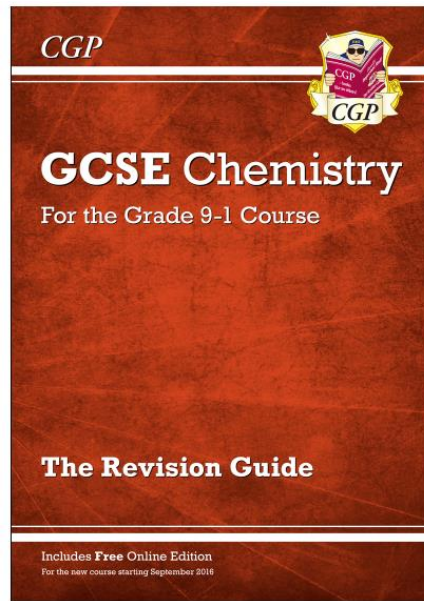
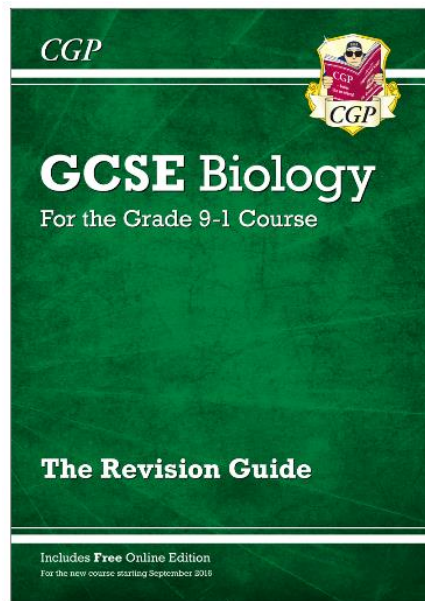
<http://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-8462-SP-2016.PDF>

Physics

<http://filestore.aqa.org.uk/resources/physics/specifications/AQA-8463-SP-2016.PDF>

Other Resources Available to Support them

- Revision guides - there may be some available in school but the AQA revision guide for GCSE Biology, Chemistry and Physics can be bought from Amazon fairly cheaply. Make sure that you buy a new guides for the 1-9 grade course.



Revision Top Tips

1.) **Avoid Distractions**

Revise away from the TV and especially your phone as this is a major distraction. Distractions such as checking phones has been proven to reduce the information absorbed. So put that phone away, turn off the T.V and find a quiet place to revise.



2.) **Flash Cards**

Ensure you practice and learn key definitions and formulas. Repetition is key to remembering key facts. Flash cards are available from your teacher, Quizlet or even better make your own. Test yourself on them then check the answer – repeat. You could even get someone else at home to test you on these.



3.) Look, Cover, Write, Check

Another way to revise key points and core practical's is look at the thing you are revising. Cover it over so you can't see it. Write it out and check whether you have done it correctly. Doing this with mind maps help to revise large chunks of information.



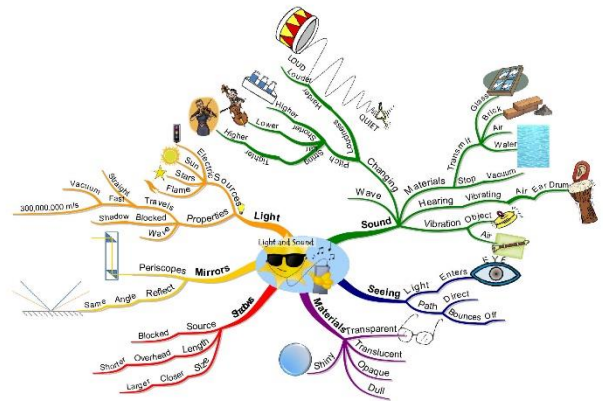
4.) Be organised

You have a large amount to revise. This can be daunting but with a bit of organisation plan out your revision. Be realistic about how long you will spend on each topic. Use the specification or tick lists to check you have covered everything. Don't try and cram everything in a short time period remember repetition is key.



5.) Don't just read or write out notes

The ability of the brain to remember visual information is much better than just text. Summarise notes using diagrams or use mind-maps. These are great when combined with the Look, Cover, Write, Check technique



6.) Attend Revision Sessions

Revision is every Wednesday after school. Teachers are there to help and guide you with bits that you are finding difficult.

7.) Practice Exam Questions

Booklets of exam questions are available on pupil share. You don't have to print these off. Just use a scrap piece of paper and complete these then mark your answers using the mark scheme.



Useful online Resources

There is a wealth of information available online to help you revise – here are just a few of our favourites

<https://chemrevise.org/>

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

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

<https://www.youtube.com/user/virtualschooluk>

<https://www.youtube.com/user/ChrisThorntonUK>