



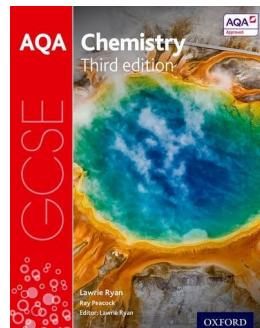
Chemistry Overview

Term: Autumn

Year: 9

Teacher: Ms Fatima Mamache & Mr Alamgir Islam

Textbook title: AQA GCSE Chemistry Oxford



What will we be covering this term?

1st Half Term:

Atomic structure - This topic is a key concept that students should be confident with. It has significant overlapping contents between Key Stage 3 and Key Stage 4 which will be covered this term. Students will revise and develop their understanding of atoms as fundamental chemical building blocks. They will learn that a mixture consists of two or more elements or compounds not chemically combined together. They will be able to describe, explain and give examples of the specified processes of separation and suggest suitable separation and purification techniques for mixtures when given appropriate information.

The periodic table - Students will revise and develop their understanding of electronic structures from *Atomic structure*, and apply this to the arrangement of the periodic table and the chemical properties of Group 0, Group 1, and Group 7 elements. They should also be able to identify trends in properties and reactivity, and higher-tier students should be able to explain these in terms of the electronic structure of the elements.

2nd Half Term:

Structure and bonding - Students will revise and develop their understanding of the states of matter from KS3. They will build upon their understanding of the particle model, using this to explain the energy transfers involved when substances change state.

2nd Half Term:

Chemical changes: This topic is a fundamental concept that students should be confident with. It has significant contents between key stage 3 and key stage 4 which will be covered this term. Students will revise and develop their understanding of the reactivity series. They will apply their understanding of the reactivity series to displacement reactions and the extraction of metals.



Teacher's Marking Key:

Mark code	Means
SP	Spelling error
//	New paragraph needed
Work underlined	Indicate a word or phrase does not make sense
?	Not clear. Rewrite this section again to improve the expression.
FS	Write in full sentences
EX	Develop your explanation further using scientific keywords.
D	You need to add more detail.
EBI	Even better if
www	What went well
GR	Grammar error
P	Punctuation error

How will my child be assessed this term?

There will be at least 2 assessed pieces this term.

In more detail;

1st Assessment: Atomic structure

2nd Assessment: periodic table & Structure and bonding

At the end of the term there will be a summative exam that will test their knowledge for what they've covered during the course of the entire term.

How can I help my child in this subject?

- Ensure homework is complete; you can track students' homework assignments at <https://www.showmyhomework.co.uk>
- Encouragement, praise, ensuring that they do their homework; and checking their student planner.
- Encouraging them to read around the subject.
- Their notes must be in order; discipline is essential.



Resources

Useful Websites

For independent study the following websites are recommended:

- Decimal places and significant figures: <https://www.my-gcse-science.com/decimal-places-significant-figures/>
- Describing, explaining and comparing graphs <https://www.my-gcse-science.com/describing-explaining-comparing-graphs/>
- AQA specification:
<https://filestore.aqa.org.uk/resources/chemistry/specifications/AQA-8462-SP-2016.PDF>
- BBC Bitesize: http://www.bbc.co.uk/schools/gcsebitesize/science/add_aqa/
- Revision GCSE chemistry: <http://www.gcse-science.com/pe.htm>
- Assessment resources:
<https://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/assessment-resources>
- GCSE exam questions organised by Topics & difficulty:
<https://www.savemyexams.co.uk/gcse-chemistry-aqa/>

Communications

Who do I contact if I have concerns about my child's progress in this subject?

Please feel free to contact us at the school from 9.00-15:00 if you have any questions or concerns or contact me by email

fatima.mamashe@alkhairschool.org.uk & alamgir.islam@alkhairschool.org.uk



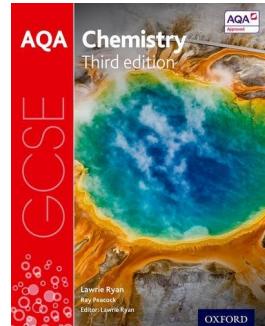
Chemistry Overview

Term: Spring

Year: 9

Teacher: Ms Fatima Mamache & Mr Alamgir Islam

Textbook title: AQA GCSE Chemistry Oxford



What will we be covering this term?

1st Half Term:

Chemical changes (cont.): Students will learn about salts and how they are prepared, including from metals and acids, acids and bases, and acids and carbonates. Students should be able to prepare a pure, dry sample of a salt from an insoluble metal oxide or carbonate as part of the required practical.

2nd Half Term:

Energy changes - This topic is a key concept that students should be confident with. It has significant overlapping contents between Key Stage 3 and Key Stage 4 which will be covered this term. Students will be able to distinguish between exothermic and endothermic reactions on the basis of the temperature change of the surroundings. They will be able to evaluate everyday uses of exothermic and endothermic.

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How will my child be assessed this term?

There will be at least 2 assessed pieces this term.

In more detail;

1st Assessment: Chemical changes

2nd Assessment: Energy change

At the end of the term there will be a summative exam that will test their knowledge for what they've covered during the course of the entire term.

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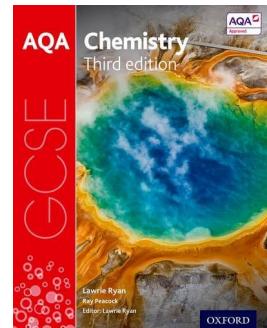
Chemistry Overview

Term: Summer

Year: 9

Teacher: Ms Fatima Mamache

Textbook title: AQA GCSE Chemistry Oxford:



What will we be covering this term?

1st Half Term:

The Earth's atmosphere: In this chapter, students have learnt about the Earth's atmosphere. Students only need to be able to describe the volcanic activity theory of the origin of the atmosphere, but they should be able to interpret evidence concerning other theories, and be able to evaluate them. To describe the history of the atmosphere students will need to have a sense of the timescales involved.

Along with an understanding of the origins of the atmosphere, students should also understand how it has evolved over time. This includes both how the general composition of the atmosphere has changed and how the atmosphere is currently being affected by human activity. Students should be able to describe the human activities that are thought to cause global warming, and be able to explain some of the effects this has on the climate of the Earth.

2nd Half Term:

The Earth's resources: In this chapter, students will be learnt about the difference between finite and renewable resources. It is important that students understand that renewable resources are not an infinite supply, but are replaceable at a rate similar to the rate they are used up, whereas finite resources are used up faster than they can be replenished.



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How will my child be assessed this term?

There will be at least 2 assessed pieces this term.

In more detail;

1st Assessment: The Earth's atmosphere

2nd Assessment: The Earth's resources

At the end of the term there will be a summative exam that will test their knowledge for what they've covered during the course of the entire term.

How can I help my child in this subject?

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