**AQA Chemistry GCSE**

**Specification code:** 8462

**Subject topics**

1. Atomic structure and periodic table
2. Bonding, structure and the property of matter.
3. Quantitative chemistry
4. Chemical changes
5. Energy changes
6. The rate and extent of chemical change
7. Organic chemistry
8. Chemical analysis
9. Chemistry of the atmosphere
10. Using resources

**Assessment**

This qualification is linear. Linear means that you will sit all your exams at the end of the course.

For Chemistry GCSE you will have two exams. Each exam is 1 hour 45 minutes, consists of 100 marks and is worth 50% of your overall GCSE. Questions can be multiple choice, structured, closed short answer and open response.

**Paper 1**- Topics 1-5 **Paper 2** Topics 6-10.

As well as the subject content in each topic you will also be assessed on your experimental and mathematical skills.

Throughout your course you will carry out many investigations to develop practical skills and techniques with a variety of apparatus. However, there are eight core required practicals that you must carry out. You will be asked questions about these practicals in your exams.

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| **Required practical activity** | **Title** |
| 1. Salts | Preparation of a pure dry sample of a soluble salt from an insoluble oxide or carbonate, using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution. |
| 1. Titration | Determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration. |
| 1. Electrolysis | Investigate what happens when aqueous solutions of electrolysed using inert electrodes. |
| 1. Reactions | Investigate the variables that affect temperature changes in reacting solutions such as, acid plus metals, acid plus carbonates, neutralisation, displacement of metals. |
| 1. Rates | Investigate how changes in concentration affects the rate of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity. |
| 1. Chromatography | Investigate how paper chromatography can be used to serrate and tell the difference between coloured substances |
| 1. Flame tests | Use of chemical flame tests to identify the ions in unknown single ionic compounds. |
| 1. Potable water | Analysis and purification of water samples from different sources, including pH, dissolved solids and distillation. |