

## Qualification: AQA (8464) GCSE Trilogy Combined Science Chemistry Higher

### What will be assessed in 2022?

Everything could be assessed in low tariff or 'linked' questions that bring together knowledge, skills and understanding from across the specification. But the main focus of higher tariff questions are shown below.

#### Paper Chemistry 1H 8464/C/1H

- 5.2.2 How bonding and structure are related to the properties of substances
- 5.3.2 Use of amount of substance in relation to masses of pure substances
- 5.4.1 Reactivity of metals
- 5.4.2 Reactions of acids
- 5.4.3 Electrolysis
- 5.5.1 Exothermic and endothermic reactions

Required practical activities that **will be assessed**:

- Required practical activity 8: 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.
- Required practical activity 9: investigate what happens when aqueous solutions are electrolysed using inert electrodes. This should be an investigation involving developing a hypothesis.
- Required practical activity 10: investigate the variables that affect temperature changes in reacting solutions such as, eg, acid plus metals, acid plus carbonates, neutralisations, displacement of metals.

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### Paper Chemistry 2H 8464/C/2H

- 5.6.1 Rate of reaction
- 5.6.2 Reversible reactions and dynamic equilibrium
- 5.7.1 Carbon compounds as fuels and feedstock
- 5.8.1 Purity, formulations and chromatography
- 5.9.1 The composition and evolution of the Earth's atmosphere
- 5.10.1 Using the Earth's resources and obtaining potable water

Required practical activities that **will be assessed**:

- Required practical activity 11: investigate how changes in concentration affect the rates of reactions by a method involving measuring the volume of a gas produced and a method involving a change in colour or turbidity. This should be an investigation involving developing a hypothesis.
- Required practical activity 12: investigate how paper chromatography can be used to separate and tell the difference between coloured substances. Students should calculate R<sub>f</sub> values.

### What won't be assessed in 2022?

- 5.8.2 Identification of common gases  
Test for hydrogen, Oxygen, Chlorine and Carbon Dioxide

Additional support provided by the exam board for the 2022 year only? None

