



GCSE CHEMISTRY

Science Department

Paper 1H 8462/1H

The format/structure of the papers remains unchanged. For each paper the list shows the major focus of the content of the exam. Each paper may cover some, or all, of the content in the listed topic. Another list shows which required practical activities will be assessed. Topics not assessed either directly or through 'linked' content have also been listed. Assessment of practical skills, maths skills, and Working Scientifically skills will occur throughout all the papers. Topics not explicitly given in any list may appear in low tariff questions or via 'linked' questions. Linked questions are those that bring together knowledge, skills and understanding from across the specification. Students will still be expected to apply their knowledge to unfamiliar contexts

For this paper, the following list shows the major focus of the content of the exam:

- 4.1.2 The periodic table
- 4.2.1 Chemical bonds, ionic, covalent and metallic
- 4.2.2 How bonding and structure are related to the properties of substances
- 4.2.3 Structure and bonding of carbon
- 4.3.2 Use of amount of substance in relation to masses of pure substances
- 4.4.1 Reactivity of metals
- 4.4.2 Reactions of acids
- 4.4.3 Electrolysis
- 4.5.1 Exothermic and endothermic reactions

Required practical activities that will be assessed:

- Required practical activity 1: 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 2: determination of the reacting volumes of solutions of a strong acid and a strong alkali by titration.
- Required practical activity 4: investigate the variables that affect temperature changes in reacting solutions such as, eg, acid plus metals, acid plus carbonates, neutralisations, displacement of metals.

Topic not assessed in this paper:

- 4.2.4 Bulk and surface properties of matter including nanoparticles