AQA GCSE Chemistry Higher Tier 8462

https://filestore.aqa.org.uk/content/summer-2022/AQA-8462-AI-22.PDF

Unlike some other subjects, chemistry has many links between topics, so very little content has changed.
Top tips from AQA:

- The format/structure of the papers remains unchanged.
- Each paper may cover some, or all, of the content in the listed topic.
- 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 (low scoring) 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.

Paper 1 Chemistry Higher 8462/1H 27.05.22 am	**Paper 2 Chemistry Higher 8462/2H 20.06.22 am**
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	For this paper, the following list shows the major focus of the content of the exam: • 4.6.1 Rate of reaction • 4.6.2 Reversible reactions and dynamic equilibrium • 4.7.1 Carbon compounds as fuels and feedstock • 4.9.1 The composition and evolution of the Earth's atmosphere • 4.10.1 Using the Earth's resources and obtaining potable water • 4.10.4 The Haber process and the use of NPK fertilisers
Required practical activities that will be assessed: • 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. • 2: determination of the reacting volumes of solutions of a strong acid and a strong alkali by **titration**. • 4: **investigate the variables that affect temperature changes** in reacting solutions such as, e.g., acid plus metals, acid plus carbonates, neutralisations, displacement of metals	**Required practical activities that will be assessed:** • 5: **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 developing a hypothesis. • 7: **use of chemical tests to identify the ions** in unknown single ionic compounds covering the ions from sections Flame tests through to Sulfates.
Topics not assessed in this paper: • 4.2.4 Bulk and surface properties of matter including nanoparticles	Topic not assessed in this paper: • 4.9.2 Carbon dioxide and methane as greenhouse gases