

AQA A level Chemistry: 7404

A level Chemistry: Subject Content

- 3.1 Physical chemistry
 - 3.1.1 Atomic structure
 - 3.1.2 Amount of substance
 - 3.1.3 Bonding
 - 3.1.4 Energetics
 - 3.1.5 Kinetics
 - 3.1.6 Chemical equilibria, Le Chatelier's principle and K_c
 - 3.1.7 Oxidation, reduction and redox equations
 - 3.1.8 Thermodynamics (A-level only)
 - 3.1.9 Rate equations (A-level only)
 - 3.1.10 Equilibrium constant K_p for homogeneous systems (A-level only)
 - 3.1.11 Electrode potentials and electrochemical cells (A-level only)
 - 3.1.12 Acids and bases (A-level only)
- 3.2 Inorganic chemistry
 - 3.2.1 Periodicity
 - 3.2.2 Group 2, the alkaline earth metals
 - 3.2.3 Group 7(17), the halogens
 - 3.2.4 Properties of Period 3 elements and their oxides (A-level only)
 - 3.2.5 Transition metals (A-level only)
 - 3.2.6 Reactions of ions in aqueous solution (A-level only)
- 3.3 Organic chemistry
 - 3.3.1 Introduction to organic chemistry
 - 3.3.2 Alkanes
 - 3.3.3 Halogenoalkanes
 - 3.3.4 Alkenes
 - 3.3.5 Alcohols
 - 3.3.6 Organic analysis
 - 3.3.7 Optical isomerism (A-level only)
 - 3.3.8 Aldehydes and ketones (A-level only)
 - 3.3.9 Carboxylic acids and derivatives (A-level only)
 - 3.3.10 Aromatic chemistry (A-level only)
 - 3.3.11 Amines (A-level only)
 - 3.3.12 Polymers (A-level only)
 - 3.3.13 Amino acids, proteins and DNA (A-level only)
 - 3.3.14 Organic synthesis (A-level only)
 - 3.3.15 Nuclear magnetic resonance spectroscopy (A-level only)
 - 3.3.16 Chromatography (A-level only)

AS level Chemistry: How it's assessed

Paper 1

What's assessed?

- Relevant Physical chemistry topics (sections 3.1.1 to 3.1.4, 3.1.6 and 3.1.7)
- Inorganic chemistry (Section 3.2.1 to 3.2.3)
- Relevant practical skills

How it's assessed

- Written exam: 1 hour 30 minutes
- 80 marks
- 50% of the AS

Questions

- 65 marks of short and long answer questions
- 15 marks of multiple choice questions

Paper 2

What's assessed?

- Relevant Physical chemistry topics (sections 3.1.2 to 3.1.6)
- Organic chemistry (Section 3.3.1 to 3.3.6)
- Relevant practical skills

How it's assessed

- Written exam: 1 hour 30 minutes
- 80 marks
- 50% of the AS

Questions

- 65 marks of short and long answer questions
- 15 marks of multiple choice questions

A level Chemistry: How it's assessed

Paper 1

What's assessed?

- Relevant Physical chemistry topics (sections 3.1.1 to 3.1.4, 3.1.6 to 3.1.8 and 3.1.10 to 3.1.12)
- Inorganic chemistry (Section 3.2)
- Relevant practical skills

How it's assessed

- Written exam: 2 hours
- 105 marks
- 35% of A-level

Questions

- 105 marks of short and long answer questions

Paper 2

What's assessed?

- Relevant Physical chemistry topics (sections 3.1.2 to 3.1.6 and 3.1.9)
- Organic chemistry (Section 3.3)
- Relevant practical skills

How it's assessed

- Written exam: 2 hours
- 105 marks
- 35% of A-level

Questions

- 105 marks of short and long answer questions

Paper 3

What's assessed?

- Any content
- Any practical skills

How it's assessed

- Written exam: 2 hours
- 90 marks
- 30% of A-level

Questions

- 40 marks of questions on practical techniques and data analysis
- 20 marks of questions testing across the specification
- 30 marks of multiple choice questions