YOUR JOURNEY

TO BECOMING EXAM READY

WELCOME TO AS/A LEVEL CHEMISTRY

wjec cbac

Studying GCE Chemistry provides the next step in understanding the interactions between materials. Most topic areas, such as atomic structure, bonding, the Periodic Table, energy, rates of reaction and organic chemistry, will be familiar from GCSE but explored in greater detail throughout the course.

PLANNING AHEAD...

You will cover a wide range of topics in GCE Chemistry. There are five units in total. Units 1 and 2 can be cashed-in to give an AS qualification. Units 3, 4 and 5 are completed in the second year of study and combined with scores from the first two units for the A level qualification.

Unit 1: The Language of Chemistry, Structure of Matter and Simple Reactions

- Formulae and equations
- Basic ideas about atoms
- Chemical calculations
- Bonding
- Solid structures
- The Periodic Table
- Simple equilibria and acid-base reactions

Unit 2: Energy, Rate and Chemistry of Carbon Compounds

- Thermochemistry
- Rates of reaction
- The wider impact of chemistry
- Organic compounds
- Hydrocarbons
- Halogenoalkanes
- Alcohols and carboxylic acids
- Instrumental analysis

Unit 3: Physical and Inorganic Chemistry

- Redox and standard electrode potential
- Redox reactions
- Chemistry of the p-block
- Chemistry of the d-block transition metals
- Chemical kinetics
- Enthalpy changes for solids and solutions
- Entropy and feasibility of reactions
- Equilibrium constants
- Acid-base equilibria

Unit 4: Organic Chemistry and Analysis

- Stereoisomerism
- Aromaticity
- Alcohols and phenols
- Aldehydes and ketones
- Carboxylic acids and their derivatives
- Amines
- Amino acids, peptides and proteins
- Organic synthesis and analysis

Unit 5: Practical Examination

This is made up of the Experimental Task and the Practical Methods and Analysis task. In the Experimental Task you will be given a set of apparatus and an exam paper containing a method to follow to solve a problem. The second task assesses your knowledge, understanding and skills linked to practical work from across the specification.

GIVE IT YOUR ALL!

TOP TIPS

If you don't understand a topic, remember that you're probably not alone! Have a look at whatever textbooks you have access to and check what you can find online. Make sure that you ask your teacher for help if things still don't quite fallen into place.

Make sure you keep key information at the tip of your fingers throughout the year as this will often be needed to understand subsequent topics. It'll also make the end-of-year revision much more manageable. Try producing flash cards e.g. for key definitions or reactions of Group 2 cations. Brightly coloured reaction pathway diagrams with reagents and conditions for organic reactions and mind maps, e.g. showing reactions of p-block elements, would also be helpful.

There are specified practical tasks in many topics. These are designed to help you understand the theory but also to develop your practical skills. Try to understand exactly what's going on in each step when you carry out experiments or watch demonstrations. Keep a record of your practical work in your lab book. This will be an important reference for revision as questions based on practical work will be set on all papers.

WELLBEING GUIDANCE

Take baby steps.
Remember this is a journey and you will pick skills and knowledge up along the way.

Take regular breaks from studying.
Exercise, meet friends, spend time with family.

Look after yourself.
Make sure you are getting a balanced diet and get enough sleep.

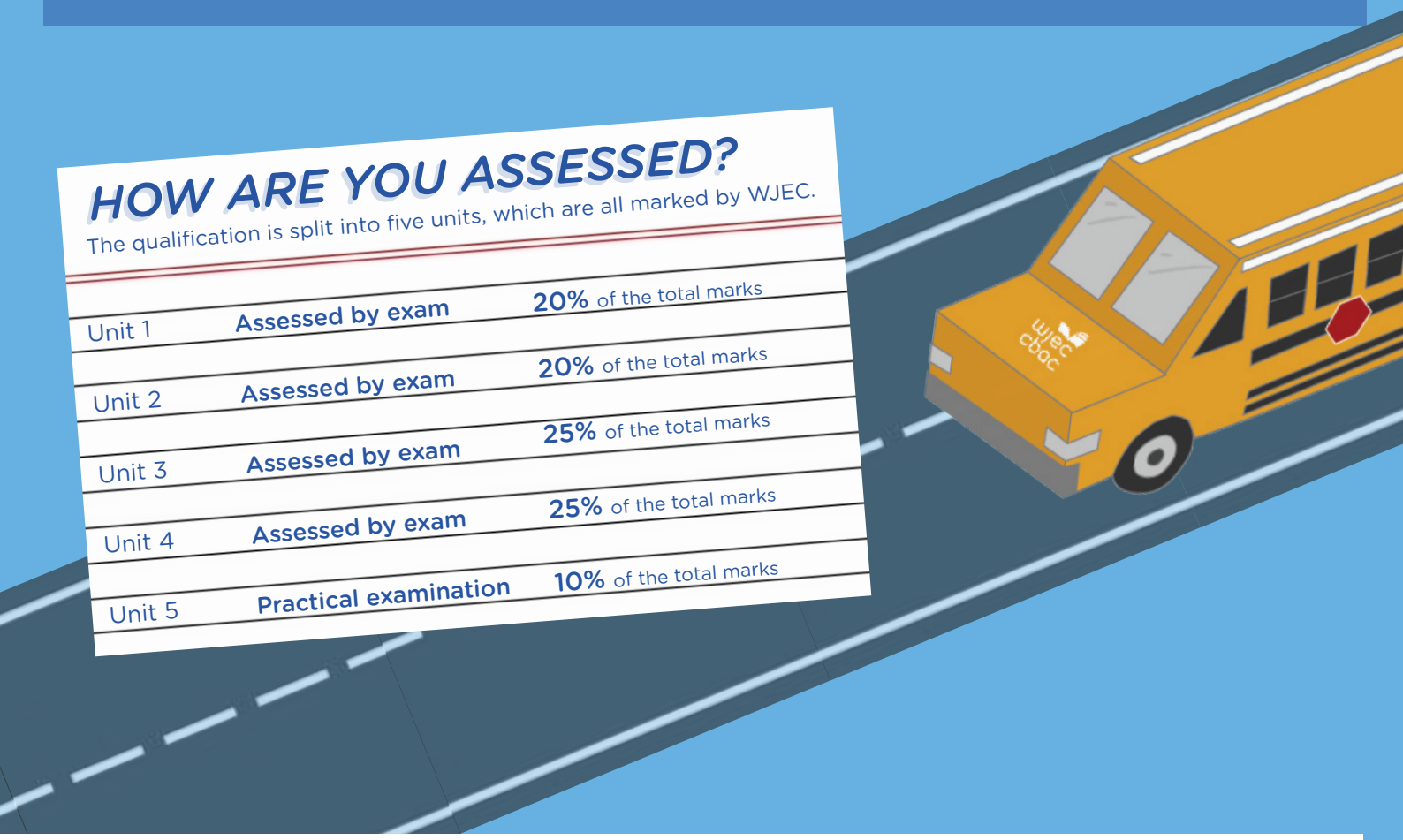
Try to stay positive.
Even if you don't feel like it, a positive attitude will help you.

Remember that everyone's different.
Try not to compare yourself to others.

HOW ARE YOU ASSESSED?

The qualification is split into five units, which are all marked by WJEC.

Unit 1	Assessed by exam	**20%** of the total marks
Unit 2	Assessed by exam	**20%** of the total marks
Unit 3	Assessed by exam	**25%** of the total marks
Unit 4	Assessed by exam	**25%** of the total marks
Unit 5	Practical examination	**10%** of the total marks



Find out more at **www.wjec.co.uk/qualifications/chemistry-as-a-level**