Edexcel International AS/A Level

Chemistry

Welcome to Pearson

Event Code: YCH11-20IF2

First teaching in 2018, first assessment 2019

Pearson Edexcel

Welcome to today's event

- Introduction to your trainer
- Housekeeping
- What's in your pack?

Pearson
Edexcel

Today's Agenda

10.00 – 10.10	Welcome and introductions
10.10 – 11.15	Session 1 – Understanding the qualification and assessment
11.15 – 11.30	MORNING BREAK
11.30 – 12.45	Session 2 (Part 1) – Assessment objectives and exemplars
12.45 – 13.45	LUNCH
13.45 – 14.45	Session 2 (Part 2) – Assessment objectives and exemplars (cont)
14.45 – 15.00	AFTERNOON BREAK
15.00 – 16.00	Session 3 – Support

Pearson Edexcel

Aims and objectives

- To gain an understanding about how the qualification is devised
- To understand the content of the qualification
- To understand the assessment of the qualification and how to cover the content
- To explore how to plan the course
- To network and share ideas with other teachers

Pearson
Edexcel

Session 1

Understanding how the qualification and assessment are devised

Pearson
Edexcel

Welcome to Pearson Edexcel

Welcome to Pearson Edexcel, the world's leading learning company and the UK's largest awarding body.

We set the standard for worldwide recognised qualifications, built on the UK educational system and accepted by universities worldwide.

We have a simple mission: to help make a measurable impact on improving people's lives through learning.

"We judge ourselves – and invite others to judge us – not by the products that we make but by the impact on learners."

John Fallon,
Chief Executive Officer,
Pearson

Pearson
Edexcel

About Pearson Edexcel?

- As the UK's largest awarding organisation, we are best placed to provide qualifications that are most closely aligned to the British educational system.
- We are the most reliable awarding organisation in the UK, recognised and trusted by educators, learners and employers to provide high quality qualifications.
- By helping you to realise student potential, you can prepare and empower all your students to progress to further education, university and employment.
- Our technology capability allows us to provide you with more advanced support services, tools and resources to make life easier for school leaders, teachers and students.
- Pearson Edexcel are leading the way, challenging thinking and creating new ideas so you can be confident our qualifications will always be world-class.

Pearson
Edexcel

Key documents

There are two key documents needed to deliver the course:

- The specification
- The SAMS

Pearson Edexcel

What is the specification?

- The specification is the main document you need to teach the course.
- It outlines the aims of the course, the content you **MUST** cover and all the information you need about assessing your students.
- This document can be found on our website.

Pearson
Edexcel

What are the SAMS?

- SAMs is short for Sample Assessment Materials.
- This document is just as important as the specification
- The SAMs are examples of the question papers and mark schemes and show the question types and how they will be marked by the examiners.
- We base all of our future papers and assessments on these Sample Assessment Materials.

Pearson
Edexcel

Overview of the specification – IAS

UNIT 1	UNIT 2	UNIT 3
• Formulae, Equations and Amount of Substance • Atomic Structure and the Periodic Table • Bonding and Structure • Introductory Organic Chemistry and Alkanes • Alkenes	• Energetics • Intermolecular Forces • Redox Chemistry and Groups 1, 2 and 7 • Introduction to Kinetics and Equilibria • Organic Chemistry: Alcohols, Halogenoalkanes and Spectra	Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed in Units 1 and 2.

Overview of the specification – IAL

UNIT 4	UNIT 5	UNIT 6
• Kinetics • Entropy and Energetics • Chemical Equilibria • Acid-base Equilibria • Organic Chemistry: Carbonyls, Carboxylic Acids and Chirality	• Redox Equilibria • Transition Metals and their Chemistry • Organic Chemistry: Arenes • Organic Nitrogen Compounds: Amines, Amides, Amino Acids and Proteins • Organic Synthesis	Students are expected to develop further the experimental skills and the knowledge and understanding of experimental techniques that they acquired in Units 1 and 2 (tests for anions and cations, gases and organic functional groups) by carrying out a range of practical experiments and investigations while they study Units 4 and 5. This unit will assess students' knowledge and understanding of the experimental procedures and techniques that were developed in Units 4 and 5.

How is the content assessed?

IAS **Unit 1: Structure, Bonding and Introduction to Organic Chemistry**	***Unit code: WCH11/01**	
Externally assessed Written examination: 1 hour and 30 minutes Availability: January, June and October First assessment: January 2019 80 marks	40% of the total IAS	20% of the total IAL

Assessment overview
• This paper has two sections:
  ○ Section A: multiple choice questions
  ○ Section B: mixture of short-open, open-response and calculation questions.
• This paper will include a minimum of 18 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*).
• Students will be expected to apply their knowledge and understanding of experimental methods in familiar and unfamiliar contexts.		

Pearson Edexcel

How is the content assessed?

IAS **Unit 2: Energetics, Group Chemistry, Halogenoalkanes and Alcohols**	***Unit code: WCH12/01**	
Externally assessed Written examination: 1 hour and 30 minutes Availability: January, June and October First assessment: June 2019 80 marks	40% of the total IAS	20% of the total IAL

Assessment overview

- This paper has three sections:
  - Section A: multiple choice questions
  - Section B: mixture of short-open, open-response, calculations and extended-writing questions
  - Section C: contemporary context question.
- This paper will contain questions that require information from the Data Booklet (see *Appendix 9*).
- This paper will include a minimum of 18 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*).
- Students will be expected to apply their knowledge and understanding of experimental methods in familiar and unfamiliar contexts.
- This paper may contain some synoptic questions which require knowledge and understanding from Unit 1.

Pearson Edexcel

How is the content assessed?

IAS **Unit 3: Practical Skills in Chemistry I**	***Unit code: WCH13/01**	
Externally assessed Written examination: 1 hour and 20 minutes Availability: January, June and October First assessment: June 2019 50 marks	20% of the total IAS	10% of the total IAL
Content overview Students are expected to develop experimental skills, and a knowledge and understanding of experimental techniques, by carrying out a range of practical experiments and investigations while they study Units 1 and 2. This unit will assess students' knowledge and understanding of experimental procedures and techniques that were developed in Units 1 and 2.		
Assessment overview • This paper may include short-open, open-response and calculation questions. • This paper will include a minimum of 6 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*). • Students will be expected to apply their knowledge and understanding of practical skills to familiar and unfamiliar situations.		

Pearson Edexcel

How is the content assessed?

IA2 **Unit 4: Rates, Equilibria and Further Organic Chemistry**	***Unit code: WCH14/01**	
Externally assessed Written examination: 1 hour and 45 minutes Availability: January, June and October First assessment: January 2020 90 marks	40% of the total IA2	20% of the total IAL

Assessment overview

- This paper has three sections:
  - Section A: multiple choice questions
  - Section B: mixture of short-open, open-response, calculations and extended-writing questions
  - Section C: data or calculation question.
- This paper will contain questions that require information from the Data Booklet (see *Appendix 9*).
- This paper will include a minimum of 22 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*).
- Students will be expected to apply their knowledge and understanding of experimental methods in familiar and unfamiliar contexts.
- This paper may contain some synoptic questions which require knowledge and understanding from Units 1 and 2.

Pearson Edexcel

How is the content assessed?

IA2 **Unit 5: Transition Metals and Organic Nitrogen Chemistry**	***Unit code: WCH15/01**	
Externally assessed Written examination: 1 hour and 45 minutes Availability: January, June and October First assessment: June 2020 90 marks	40% of the total IA2	20% of the total IAL

Assessment overview

- This paper has three sections:
  - Section A: multiple choice questions
  - Section B: mixture of short-open, open-response, calculations and extended-writing questions
  - Section C: contemporary context question.
- This paper will contain questions that require information from the Data Booklet (see *Appendix 9*).
- This paper will include a minimum of 18 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*).
- Students will be expected to apply their knowledge and understanding of experimental methods in familiar and unfamiliar contexts.
- This paper may contain some synoptic questions which require knowledge and understanding from Units 1, 2 and 4.

Pearson Edexcel

How is the content assessed?

IA2 **Unit 6: Practical Skills in Chemistry II**	***Unit code: WCH16/01**	
Externally assessed Written examination: 1 hour and 20 minutes Availability: January, June and October First assessment: June 2020 50 marks	20% of the total IA2	10% of the total IAL
Assessment overview • This paper may include short-open, open-response and calculation questions. • This paper will include a minimum of 6 marks that target mathematics at Level 2 or above (see *Appendix 6: Mathematical skills and exemplifications*). • Students will be expected to apply their knowledge and understanding of practical skills to familiar and unfamiliar situations.		

Pearson
Edexcel

How do I make sure I cover the content?

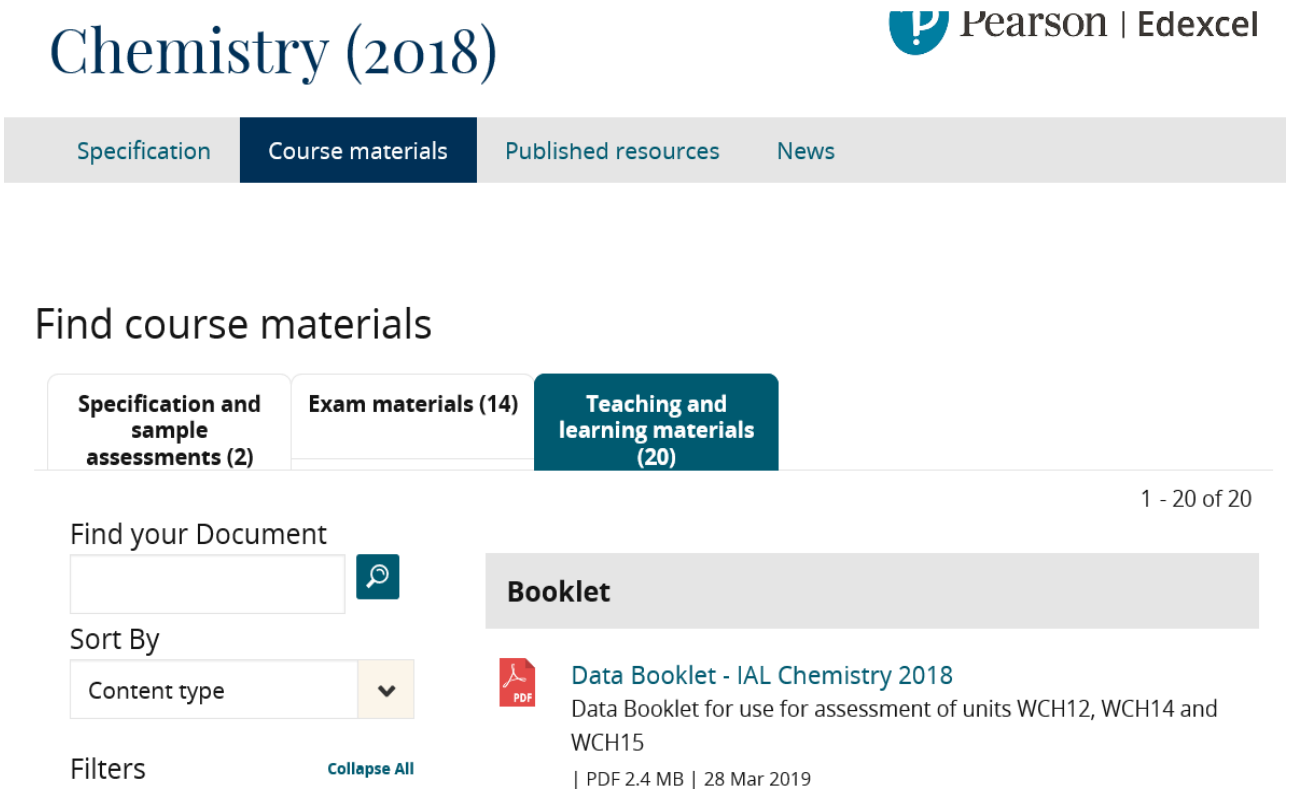
- Specification
- Schemes of work
- Lesson plans

Pearson
Edexcel

SUPPORT

Pearson
Edexcel

Teaching and learning materials



Pearson
Edexcel

Teaching and learning materials

Exemplar Material	Course Planner	**Getting Started Guide**
Teacher Mathematics Support	Teacher Practical Guide	**Transition Guide**
Scheme of Work	Topic Guide – Energetics: Energy & Entropy	**Topic Guide – Instrumental Analysis**

Pearson Edexcel

BREAK TIME!

PLEASE BE BACK IN 15 MINS

SESSION 2

Assessment objectives and exemplars

Pearson
Edexcel

Aims and objectives

- To understand the assessment objectives for the qualification.
- To understand the question types for the qualification.
- To understand the mark schemes for the qualification.
- To practise using the mark schemes using exemplar student work.

Pearson Edexcel

Why do we have assessment objectives?

- Help make exams fairer year on year
- Provide structure for question paper writers
- Make sure that exams are about skills, not just about knowledge
- Can provide students with some reassurance about the types of questions they will be asked

Pearson Edexcel

Assessment objectives

A01	A02a	A02b	A03
Demonstrate knowledge and understanding of science	Application of knowledge and understanding of science in familiar and unfamiliar contexts	Analysis and evaluation of scientific information to make judgements and reach conclusions	Experimental skills in science, including analysis and evaluation of data and methods

Pearson Edexcel

Assessment objectives

A01	A02a	A02b	A03
Questions requiring students to recall and use information that you have taught them	Questions requiring students to apply what you have taught them, or to use skills	Questions requiring students to analyse and make judgements	Questions on practical work and associated practical skills, such as planning, drawing graphs, analysing data, evaluating methods

Pearson Edexcel

Typical AO1 questions

Covalent bonding is best described as the electrostatic attraction between

- ☐ **A** oppositely charged ions
- ☐ **B** positive ions and delocalised electrons
- ☐ **C** a shared pair of electrons
- ☐ **D** two nuclei and a shared pair of electrons

(a) Draw an electron density map for a molecule of oxygen. (1)

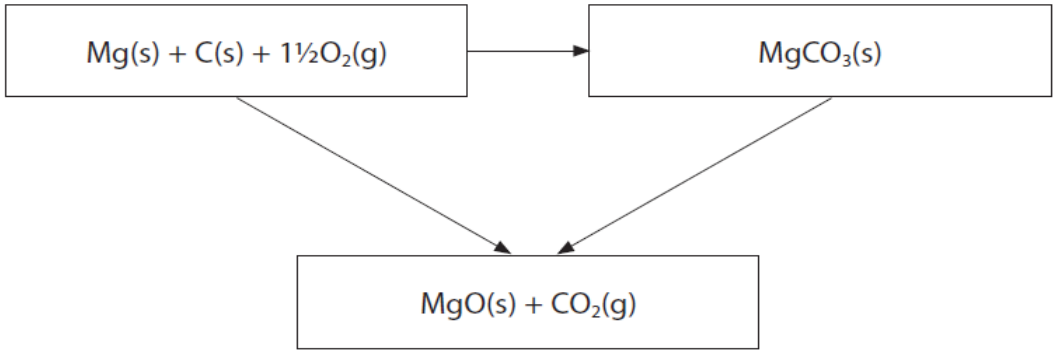
(b) Draw a diagram to show the shape of a water molecule. Give the bond angle. (2)

Typical AO2a questions

Which is the electronic configuration of the Sc^{3+} ion?

- ☒ **A** $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6$
- ☒ **B** $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^5\ 3d^1$
- ☒ **C** $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 3d^1\ 4s^2$
- ☒ **D** $1s^2\ 2s^2\ 2p^6\ 3s^2\ 3p^6\ 3d^4\ 4s^2$

The Hess cycle and data to calculate the enthalpy change for the thermal decomposition of $MgCO_3$ are shown.



Compound	$\Delta_f H^{\ominus}$ / kJ mol^{-1}
$CO_2(g)$	−394
$MgO(s)$	−602
$MgCO_3(s)$	−1096

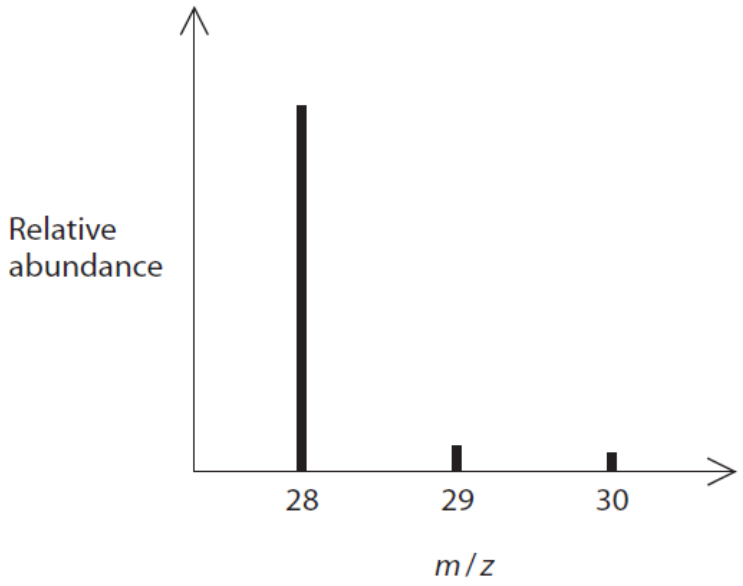
Calculate the enthalpy change for the thermal decomposition of $MgCO_3$.

(2)

Pearson Edexcel

Typical AO2b question

The mass spectrum of a sample of silicon is shown.



What is the **best** estimate for the relative atomic mass of silicon in this sample?

- ☒ **A** 28.0
- ☒ **B** 28.2
- ☒ **C** 28.8
- ☒ **D** 29.0

Pearson Edexcel

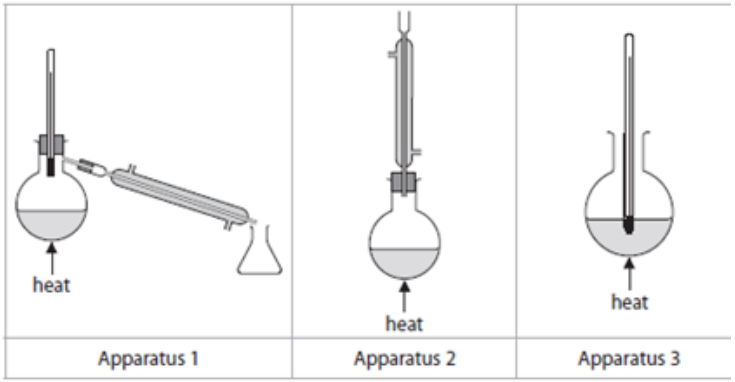
Typical AO3 questions

A group of students was asked to investigate a liquid organic compound **A**.
They were told that it was an alcohol with molecular formula $C_4H_{10}O$.

(a) A chemical test may be used to confirm the presence of the hydroxyl group in **A**.

Identify a suitable reagent for this test, giving the positive result. (2)

(b) The students suggested that oxidation of **A** would help to identify it.
The sets of apparatus shown below were provided for the students' use.



Apparatus 1	Apparatus 2	Apparatus 3

(i) Identify the reagent mixture that can be used to oxidise **A**. (1)

(ii) One student said that if **A** was a primary alcohol this could be shown by oxidising it to the corresponding aldehyde and testing the product.

Identify which apparatus (1, 2 or 3) should be used for this oxidation.
Justify your answer. (2)

(iii) A chemical test may be used to confirm the presence of an aldehyde.
Identify the reagent used, giving the positive result of the test. (2)

(iv) State whether or not a positive result for the test in (b)(iii), together with the molecular formula, would allow the alcohol **A** to be identified.
Justify your answer. (1)

(v) Another student said that if **A** was a secondary alcohol this could be shown by oxidising it to the corresponding ketone.

Identify which apparatus (1, 2 or 3) should be used for this oxidation.
Justify your answer. (2)

Pearson Edexcel

Command words

- Questions in our exam papers are designed to use a specific command word to guide students
- The command words represent a range of skills:
  - simple recall (Give…, Name…)
  - using knowledge (Describe…)
  - giving reasons (Explain…)
  - provide more detailed analysis (Evaluate, Justify)
  - show particular skills (Calculate…, Plot...)
- Is there a link between command words and AOs?

ACTIVITY 6 – Assigning Command Words to AOs

Your pack contains a list of command words used in IAL Chemistry question papers.

- Draw a table with 4 columns, one for each AO.

A01	A02a	A02b	A03

- Place command words into the columns, to show which command words can commonly be used to assess that AO.

Pearson Edexcel

AO2 QUESTIONS

Pearson
Edexcel

Why not look at AO1?

- AO1 is all about knowledge – and basic understanding
- This is not one that teachers can influence much…
- … students either go away and learn what you teach them or they do not!
- **BUT**… remember that students should still recognise AO1 questions and not spend time going beyond AO1.

Pearson Edexcel

AO2 in exams

- **Teaching approaches:** Is it better to present facts or to teach principles? Why?
- **Questioning styles:** Is it better to ask closed or open questions? Why?
- **Assessment activities:** Is it better to set formative or summative assessments? Why?
- **Exam preparation:** What else could you do to prepare your students to answer the AO2 exam questions?

AO2: question styles

- Think about one of the topics that you teach which often has AO2 questions in exams.
- What sorts of questions do you ask in class when teaching this topic?
- How do these questions help students to prepare for AO2 questions?

AO2: homework activities

- Why do you set homework?
- What sort of questions/problems do you set?
- What do you expect students to gain from the questions that you set?
- Will what they gain help them to answer AO2 questions?

LUNCH

Pearson
Edexcel

AO3 QUESTIONS

Pearson
Edexcel

What is AO3?

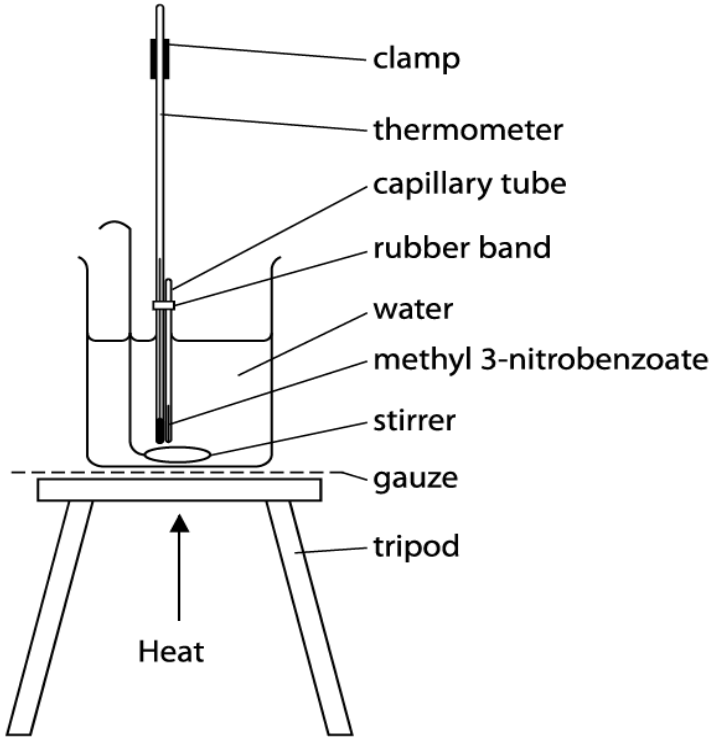
- AO3 assesses the practical skills and understanding gained by students as they undertake practical work.
- AO3 questions may require RECALL of practical techniques and understanding or APPLICATION of these to new situations.
- AO3 may also involve the use of experimental data, and the evaluation of experimental methods or results.

AO3: Recall of practical technique

The melting temperature of methyl 3-nitrobenzoate is 77 °C.

Describe how the students should use the apparatus shown to determine the melting temperature **range** of a sample of their crystallised methyl 3-nitrobenzoate.

(3)



Pearson Edexcel

AO3: Analysis of results

The inorganic compounds **A** and **B** contain the same Group 2 cation but different anions.

(a) Two tests were carried out on **A**. The observations made for each test are recorded in the table.

(i) Complete the statements in the inference column in the table by writing the names or formulae of the ions.

(3)

Test	Observation	Inference
Dilute sulfuric acid was added to an aqueous solution of **A**	A white precipitate formed	Two possible **cations** in **A** are ....
A sample of **A** was heated in a test tube A glowing splint was held in the mouth of the test tube	A brown gas was evolved The splint relit	The **anion** in **A** is .....

(ii) There were two gases evolved when **A** was heated; a brown gas **C**, and a gas **D** which relit the glowing splint.
Identify the gases **C** and **D** by giving their name or formula.

(2)

Gas **C** .....

Gas **D** .....

Pearson Edexcel

AO3: Analysis of results

The equation for the reaction between iodine and propanone in acidic solution is

$$I_2(aq) + CH_3COCH_3(aq) \rightarrow CH_3COCH_2I(aq) + H^+(aq) + I^-(aq)$$

The order of reaction with respect to iodine was investigated using a titration method.

The concentration of hydrogen ions and propanone were in large excess. 30 cm^3 of acidified aqueous propanone was added to a flask containing 30.0 cm^3 of 0.020 mol dm^{-3} aqueous iodine. At the same time, the contents were mixed thoroughly and a timer started.

A pipette was used to remove 10.0 cm^3 samples of the reaction mixture every 5 minutes. The samples were immediately run into flasks containing sodium hydrogencarbonate solution, which quenched the reaction.

The volume of sodium thiosulfate solution needed to react with the iodine in each quenched sample was then determined by titration.

(b) The results were recorded in a table

Volume of sodium thiosulfate / cm^3	Time the sample was quenched / minutes
	0
18.50	5
16.10	10
13.50	15
10.90	20
8.50	25

(i) Complete the table by estimating the volume of sodium thiosulfate that would be required for titration at time = 0. (1)

(ii) Plot a graph of volume of sodium thiosulfate on the vertical axis, against time on the horizontal axis. (3)

(iii) Calculate the gradient of the line drawn through the points. Include units in your answer. (2)

(c) Assume that the volume of sodium thiosulfate required is proportional to the amount of iodine in the reaction mixture.

Deduce the order of reaction with respect to iodine. Justify your answer. (1)

Pearson Edexcel

Evaluation of methods

Student 1 described how to carry out the recrystallisation in Step **7** to obtain a pure sample of methyl 3-nitrobenzoate.

Step A	*Dissolve the impure solid in some hot methanol.*
Step B	*Cool the solution in an ice-bath.*
Step C	*Separate the crystals using suction filtration.*
Step D	*Dry the crystals by mixing them with solid anhydrous sodium sulfate in a stoppered boiling tube.*

(i) The student's description of **Step A** omitted an important detail.
State how the method for **Step A** should be changed.
Justify your answer. **(2)**

(ii) Describe what the student should do after **Step A** and before carrying out **Step B**.
Justify your answer. **(2)**

(iii) Give a reason why **Step D** would not work and describe how the student should dry the crystals. **(2)**

Pearson
Edexcel

Evaluation of methods

Examiner's report

- Many candidates have a good knowledge of recrystallisation and have obviously carried this out as they knew the reasons for the errors in the description of Student 1.
- Others would benefit from more experience with this practical technique. Many candidates knew that the minimum amount of hot methanol should be used but all of them knew that this was to make a saturated solution.
- The use of hot filtration to remove the insoluble impurities was known by many candidates.
- The method described by the student to dry the crystals is seen frequently written by candidates when they are describing recrystallisation.
- It was interesting to see that some candidates understood why this would not work.

Use of data

(b) A sample of an aqueous solution of manganate(VI) ions is prepared from an aqueous solution of manganate(VII) ions and solid manganese(IV) oxide under appropriate conditions.

The relevant standard electrode potentials are

$$MnO_4^- + e^- \rightleftharpoons MnO_4^{2-} \qquad E^\ominus = +0.56\,V$$

$$MnO_4^{2-} + 2H_2O + 2e^- \rightleftharpoons MnO_2 + 4OH^- \qquad E^\ominus = +0.59\,V$$

$$MnO_4^{2-} + 4H^+ + 2e^- \rightleftharpoons MnO_2 + 2H_2O \qquad E^\ominus = +2.26\,V$$

(i) Choose appropriate standard electrode potentials to calculate $E^\ominus_{cell}$ for the formation of manganate(VI) ions in **acidic** solution.
Use your calculated value of $E^\ominus_{cell}$ to explain why manganate(VI) ions cannot be prepared under acidic conditions. (2)

(ii) Explain, in terms of standard electrode potentials, why manganate(VI) ions can be prepared in a **concentrated** alkaline solution. (2)

Use of data

Examiner's report

- The majority of candidates could select the correct two half-equations needed to calculate the $E^{\ominus}_{cell}$ value and realised that the reaction does not occur because it is negative.
- Those candidates who calculated a positive value should have checked their working as they were told that the reaction does not take place.
- There were some very good explanations about the effect of using concentrated alkali.
- However, many candidates wrote vague answers and did not make it clear which of the three half-equations they were writing about.
- Some candidates showed the working for $E^{\ominus}_{cell}$ to be negative for the formation of manganate(VI) ions under standard alkaline condition but they then wrote a positive sign so the reaction could be feasible.

Teaching AO3 – Terminology

validity

uncertainty

precision

anomaly

accuracy

reliability

error

Pearson
Edexcel

Accuracy vs. precision

- An **accurate** measurement is one which is close to the true or accepted value.

- If repeated measurements give the same result each time, the measurements are said to be **precise**.

Error vs. uncertainty

- **Error** is the difference between the measured value and the ‘true value’ of the thing being measured.

- **Uncertainty** is a quantification of the doubt about the measurement result.

Teaching AO3 – doing practical work

- The specification for IAL Chemistry contains a number of practical activities that form part of the subject content.
- Exam questions expect students to be familiar with methods for these practicals.
- Questions also expect students to apply their knowledge of practical methodology to unfamiliar scenarios.

Teaching AO3 – doing practical work

- Why should students do practical work?
- Are students getting knowledge or skills from practical activities?
- When do you do practical activities: before or after teaching the theory of a topic?

BREAK TIME!

PLEASE BE BACK IN 15 MINS

SESSION 3

Support

Pearson
Edexcel

Support overview

ResultsPlus	examWizard	Post-results service
Subject Advisor	Published resources	Pearson International Schools Community

Pearson Edexcel

ResultsPlus

- Free online results analysis tool for teachers.
- Provides a detailed breakdown of student performance in Pearson Edexcel exams.
- Identify topics and questions where the student could benefit from further learning and inform teaching strategies and approaches.
- Benchmark your school's performance against other Pearson Edexcel schools in your country.
- Not just a post-results tool: Mock exam results can also be fed into the system to produce analysis.
- Find student results analysis from their previous Pearson Edexcel school.
- ResultsPlus Direct gives your students access to their final grades and performance breakdown, wherever they are.
- Schools can sign up for free ResultsPlus account in just a few quick and easy steps: https://qualifications.pearson.com/en/support/Services/ResultsPlus.html

Pearson Edexcel

ResultsPlus

- **ResultsPlus Direct** gives your students access to their final grades and performance breakdown, wherever they are.
- Sign up for free ResultsPlus account in just a few quick and easy steps **here**.
- Access additional video guides here:
- **ResultPlus - Individual Student Analysis**
  ResultsPlus - Cohort Analysis
  ResultsPlus - Mock Analysis
  ResultsPlus - Global Analysis

Pearson Edexcel

ResultsPlus

How ResultsPlus works

1.
Student takes exam on paper

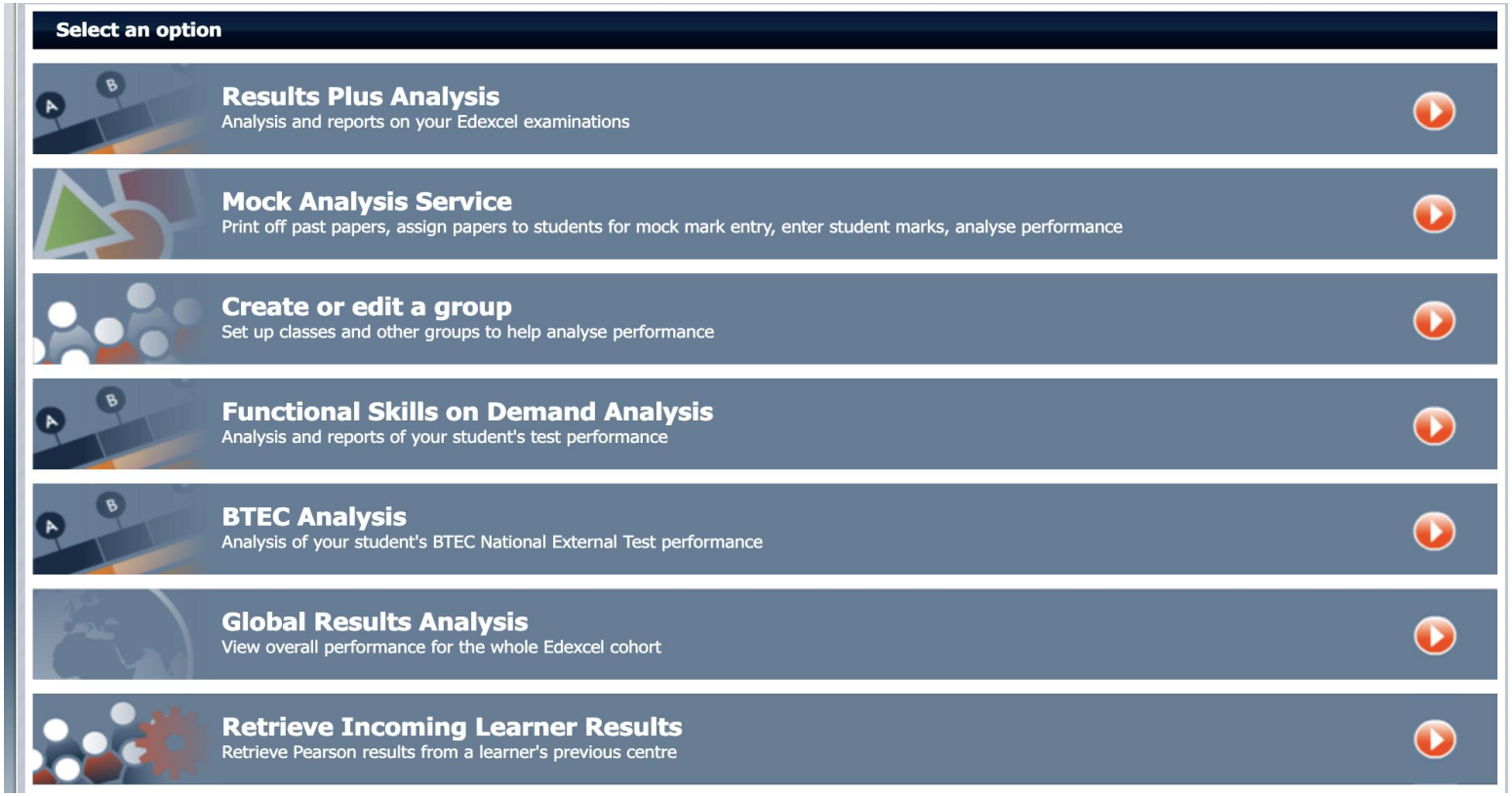
2.
Exam papers scanned

3.
Examiners mark papers online

4.
Performance reports shared

Pearson
Edexcel

ResultsPlus Home page



Pearson
Edexcel

examWizard

examWizard is a free tool for teachers containing a bank of past paper questions to help create their own bespoke mock exams and tests to focus on particular topic areas as needed:

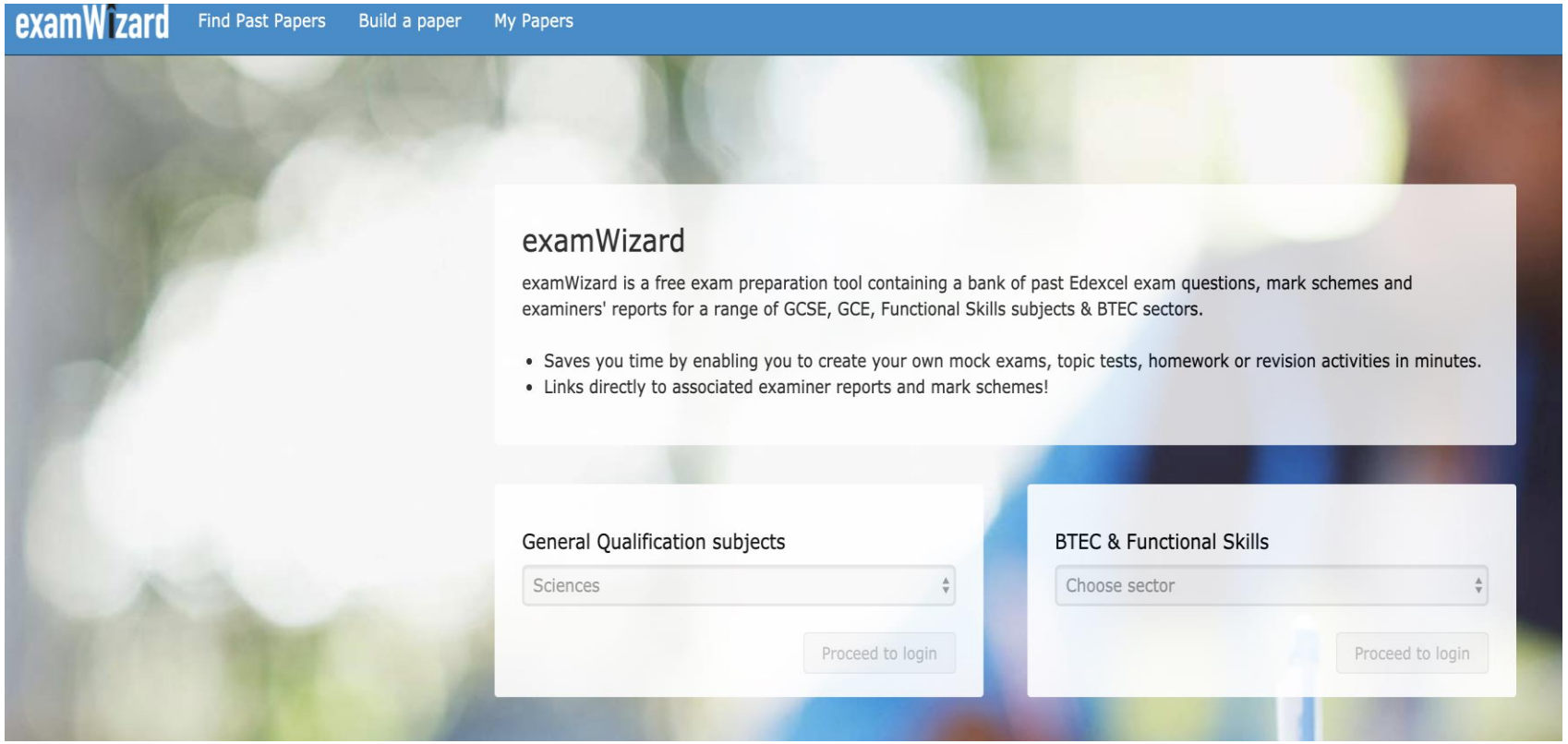
- use existing mark schemes for accurate marking
- use existing examiner report for insight
- use the results to understand where students need more support, informing teaching strategies.

Unlike other similar question banks, examWizard is:

- available free to all Edexcel centres
- updated with latest questions faster, following the exam series
- one-stop shop for assessment material with access to whole past papers and examiner reports as well as the ability to construct bespoke ones easily with content tagged to specific attributes.

Pearson
Edexcel

examWizard Home page



Pearson Edexcel

Post-results services

Reviews of marking and moderation (RoMM) | Access to scripts (ATS) | Appeals

Our Reviews of marking and moderation (RoMM) services allow you to request us to run additional checks that the grades we've issued your candidates are correct.

- Clerical check (Service 1)
- Review of marking of externally assessed components (Service 2)
- Priority review of marking of externally assessed components (Service P2)
- Review of moderation for internally assessed/externally moderated controlled assessment and coursework components (Service 3)
- If a centre is concerned about the marking of a centre cohort

Pearson Edexcel

New Access to Script (ATS) Online Portal

Access to Scripts (ATS) is a free online portal which allows teachers to immediately access electronically-marked exam papers.

Provides enhanced transparency and

- offers transparent approach to marking process
- provides better understanding of marking before requests for enquiries about results are made
- provides excellent aid for teaching and preparing other cohorts for examinations by helping you to evaluate a student's performance on particular questions in relation to what they have been taught.

Available instantly from results day for all our examination series, for a defined window, you can view and download scripts which have been marked online free of charge from our Self-Service Portal.

For more information on ATS, and the post results windows, visit our post-results pages.

Pearson Edexcel

Other useful links

1. **Grade Boundaries**

This page shows the minimum marks needed to achieve a certain grade for all UK and international examinations. Also refer to the Examiner's report which is available for download with other documents.

2. **Examination Results Statistics**

Results statistics summarise the overall grade outcomes of candidates sitting Pearson Edexcel examinations.

3. **Progress to University**

Here you can find information and guidance about how to progress to universities worldwide with Pearson Edexcel qualifications.

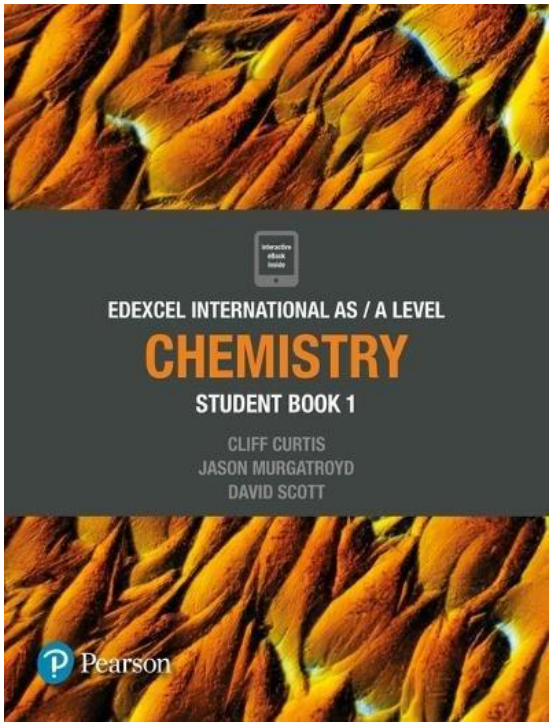
4. **Access to scripts**

Make an informed enquiry about results (EARs) using our free access to scripts portal.

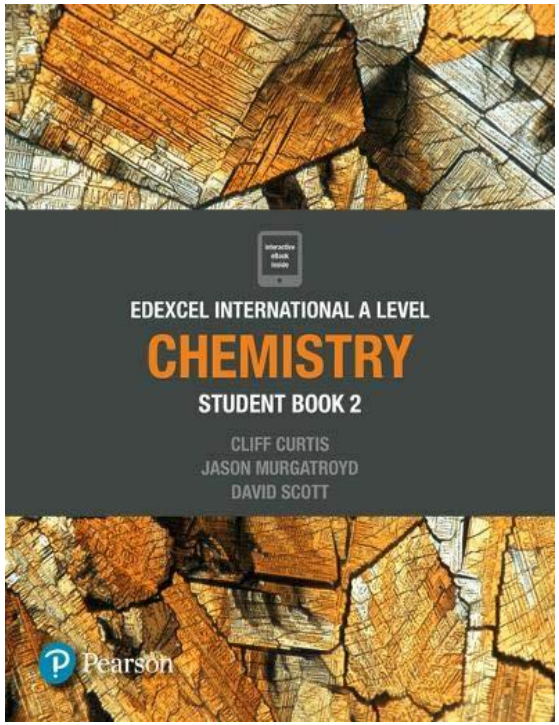
Pearson
Edexcel

Published resources

Pearson have published two student books to cover the IAS and IAL courses.



SB1 covers AS content

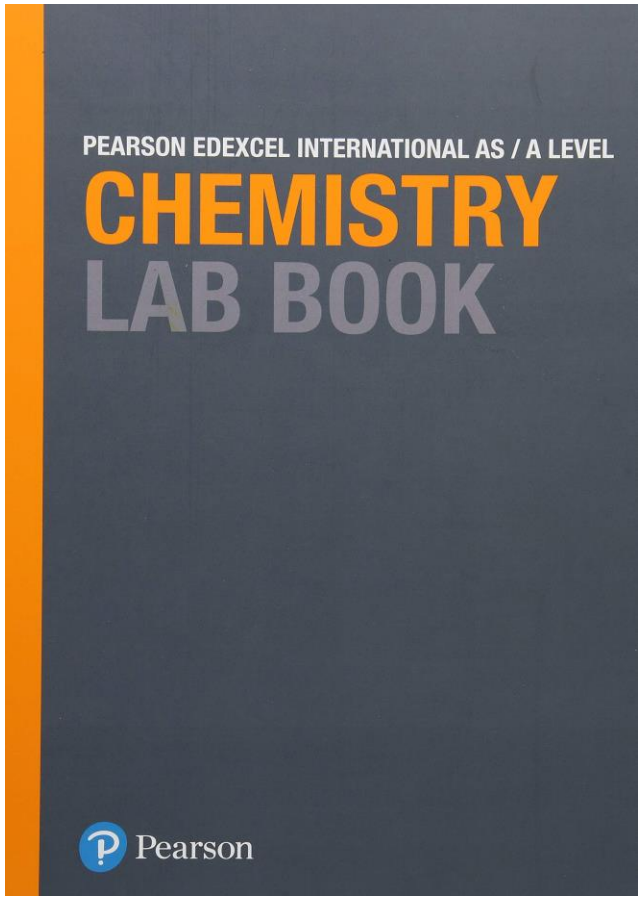


SB2 covers A2 content

Pearson Edexcel

Published resources

Pearson have also published a Lab Book that covers all of the Core Practicals.



Pearson
Edexcel

Published resources

Finally, Pearson have published two Teacher Resource Packs to cover both the IAS and the IAL content.

Edexcel International Advanced Level Chemistry Teacher Resource Pack 1
Publisher: Pearson
Author:
Licence
ISBN:

£150.00

VIEW SAMPLE PAGES AND ORDER

Edexcel International Advanced Level Chemistry Teacher Resource Pack 2
Publisher: Pearson
Author:
Licence
ISBN:

£150.00

VIEW SAMPLE PAGES AND ORDER

Pearson Edexcel

Contact your dedicated Subject Advisor

Subject Advisor details

Your subject advisor is Irine Muhiuddin
Phone: UK: 0344 463 2934
Intl: +44 (0)344 463 2934
Twitter: **@PearsonSciences**

Sign up for monthly newsletters to stay on top of qualification updates, training, course materials and industry news.
Contact us:
https://qualifications.pearson.com/en/contact-us/teachers.html

Pearson Edexcel

Pearson International Schools Community

Connect with international teachers around the world.

- Connect with other teachers working in international schools and join groups who have shared interests, subjects or location
- Read topical news and articles and share yours
- Advertise jobs at your school or find job opportunities
- Download free resources
- Sign up for events

Sign up today at:
community.pearsoninternationalschools.com

Pearson Edexcel

Thank you

Find out more about us at:
http://qualifications.pearson.com

Pearson
Edexcel

ALWAYS LEARNING