



**LEARN, ACHIEVE, LEAD**  
AT NORLINGTON MIXED 6<sup>TH</sup> FORM

Welcome to A level Chemistry!

# Meet the team



Dr. I Saadoune  
PhD Physics & Chemistry

The department has two specialist teachers.  
You'll be supported and guided throughout  
your journey in A Level Chemistry.

You will be challenged and will  
develop analytical and problem  
solving skills.

Staff and students form a tightly knit  
community. We work hard together  
to become successful.



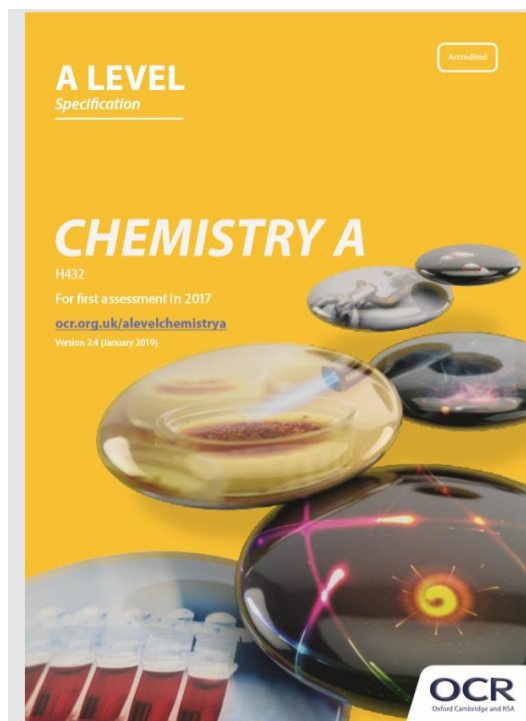
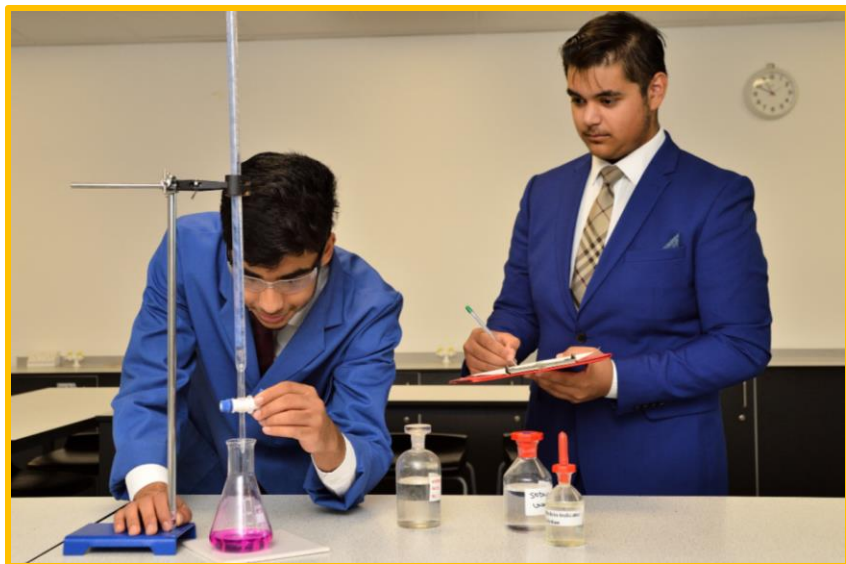
Mr. Y Hafesji  
BSc (Hons) Pharmaceutical  
Sciences

Studying Chemistry automatically makes  
you into a more interesting character.

We can use what we learn in  
chemistry to understand the world  
around us, and understand its  
Chemistry.



# ❖ What modules will I be studying?



## Content Overview

Content is split into six teaching modules:

- Module 1 – Development of practical skills in chemistry
- Module 2 – Foundations in chemistry
- Module 3 – Periodic table and energy
- Module 4 – Core organic chemistry
- Module 5 – Physical chemistry and transition elements
- Module 6 – Organic chemistry and analysis

The full A level specification can be downloaded here:

<https://www.ocr.org.uk/Images/171720-specification-accredited-a-level-gce-chemistry-a-h432.pdf>

## ❖ What skills will I develop ?

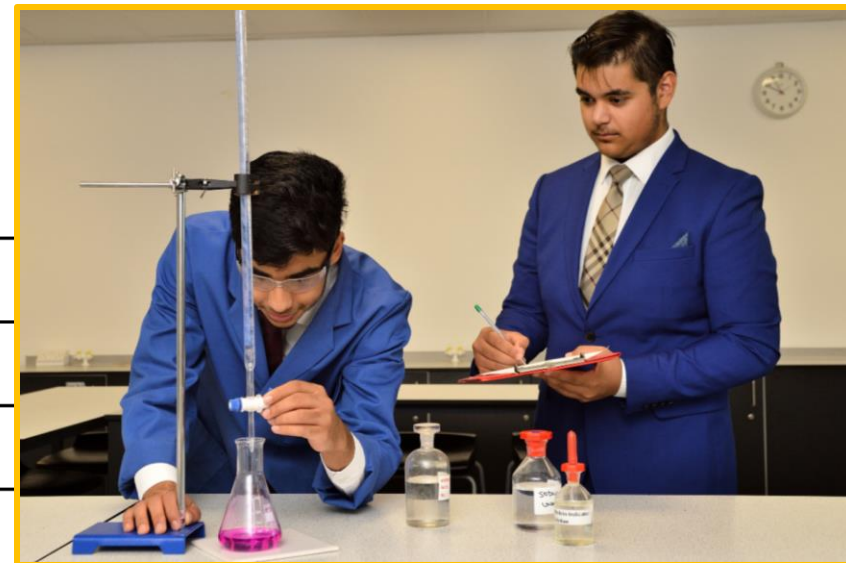


- Chemistry is a practical subject and the development of practical skills is fundamental to understanding the nature of chemistry.
- You will have opportunities to develop the fundamental skills needed to collect and analyse experimental data. Skills in planning, implementing, analysing and evaluating data.
- Practical skills are embedded throughout all the content of the course.

## MODULE 1 - DEVELOPMENT OF PRACTICAL SKILLS IN CHEMISTRY

### 1.1 - PRACTICAL SKILLS ASSESSED IN A WRITTEN EXAMINATION

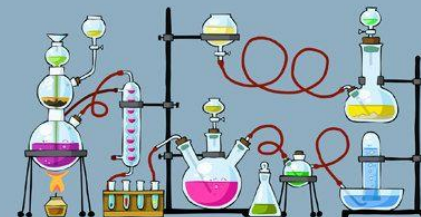
PAG 1	<a href="#">Moles determination</a>
PAG 2	<a href="#">Acid-base titration</a>
PAG 3	<a href="#">Enthalpy determination</a>
PAG 4	<a href="#">Qualitative analysis of ions</a>
PAG 5	<a href="#">Synthesis of an organic liquid</a>
PAG 6	<a href="#">Synthesis of an organic solid</a>
PAG 7	<a href="#">Qualitative analysis of organic functional groups</a>
PAG 8	<a href="#">Electrochemical cells</a>
PAG 9	<a href="#">Rates of reaction - continuous monitoring</a>
PAG 10	<a href="#">Rates of reaction - initial rates</a>
PAG 11	<a href="#">pH measurement</a>



*PAG 12: Research Skills*

# ❖ Formal Assessment

Component	Marks	Duration	Weighting	
<b>Periodic table, elements and physical chemistry (01)</b>	<b>100</b>	<b>2 hour 15 mins</b>	<b>37%</b>	Assesses content from modules <b>1, 2, 3 and 5</b>
<b>Synthesis and analytical techniques (02)</b>	<b>100</b>	<b>2 hour 15 mins</b>	<b>37%</b>	Assesses content from modules <b>1, 2, 4 and 6</b>
<b>Unified chemistry (03)</b>	<b>70</b>	<b>1 hour 30 mins</b>	<b>26%</b>	Assesses content from modules <b>1 to 6</b>
<b>Practical endorsement in chemistry (04)</b>	-	-	-	-



**KEEP  
CALM**  
*and*  
**LOVE  
CHEMISTRY**

# Assessments throughout the course

- You will be assessed multiple times and through multiple means throughout the course. These may include, but are not limited to; assignments, online quizzes, online exams, mock exams, practical skills, report writing.
- We use Moodle VLE (Virtual Learning Environment) for most of these assessments, as well as providing support materials throughout the course.



Moodle@Norlington



# How will I be supported ?

Moodle@Norlington

Dashboard / My courses / Chemistry / AS Chemistry

## General

- Announcements
- Specification
- Kerboodle
- Isaac Chemistry
- E-Lessons Chemistry
- Chemistry Lesson Video Library  
This is a library of videos to help you with revision and consolidation
- Support Forum

Administration

Online Assignment Submis...

Assignments

Module 1 Development of P...

Module 2 Foundations in C...

Module 3 Periodic Table an...

Module 4 Core organic Ch...

Experiments

Revision Packs

Past papers

# How will I be supported ?

## A2 Chemistry

Dashboard > My courses > Chemistry > A2 Chemistry

### General

 Announcements

 E-Lessons Chemistry

 Isaac Chemistry

Use this link to join your virtual group on Isaac Chemistry to complete online quizzes

 Video Library For All Chemistry Topics & Practicals

 Specification

 Support Forum

#### Administration



#### Online Assignment Submis...



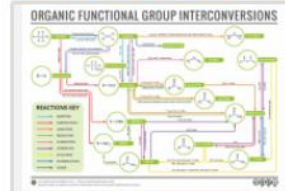
#### Assignments



#### Module 5 Physical Chemist...



#### Module 6 Organic Chemist...



#### Experiments



#### Revision Packs



#### Past Papers



# Timely and regular feedback

Settings ▾

◀ PAG 8 Electrochemical Cells Model Results

Keywords Revision Practice on Quizlet ▶

Display replies in nested form ▾

Move this discussion to ... ▾

Move



## Electrochemistry assignment feedback

by [Iman Saadoune](#) - Sunday, 22 November 2020, 12:59 AM

Dear A level students,

The electrochemistry assignment is marked .. please use the markscheme in the assignments folder to mark your work and include corrections from the mark scheme ..

Also you can watch this



to test your understanding of this topic further ..

Main areas to improve on: Descriptions of half cells, explanations of the shift to redox equilibria and Redox back titrations ..

keep practicing questions especially those in the tutorial redox booklet .. You will get better at it with more practice ..

Kind regards

Dr Saadoune

# Timely and regular feedback

Due date: 19 October 2020, 8:00 PM

Page 5 of 10

Show your working. Give your answer to 2 decimal places.

$K_a = \frac{[H^+][CH_3COO^-]}{[CH_3COOH]}$  ✓

Calculation

$1.74 \times 10^{-5} \times 0.0125 = [H^+]^2 = 2.175 \times 10^{-9}$

$[H^+] = 4.66 \times 10^{-4}$  ✓

$-\log_{10}(4.66 \times 10^{-4}) = 3.53$  ✓

(4)

(ii) Aqueous sodium hydroxide is added to beaker C until the pH of the solution becomes 4.84.

Name the salt formed in the reaction of ethanoic acid with sodium hydroxide.

sodium ethanoate ( $CH_3COONa$ ) ✓

(1)

(iii) Calculate the value of  $\frac{[salt]}{[ethanoic\ acid]}$  in the solution with the pH of 4.84.

$10^{-4.84} = 1.45 \times 10^{-5} = [H^+] = [CH_3COOH]$

$1.25 \times 10^{-3} - (Moles\ salt) = 1.45 \times 10^{-5}$  ✗

Moles of salt =  $1.24 \times 10^{-3}$

???

Explain

Here you need to use the PH value to calculate the [H+] ions, then using  $K_a/[H^+] = [salt]/[acid]$  to work out this ratio

1-4 criterion remark

Insert frequently used comment

4 / 4

5

5 criterion remark

Insert frequently used comment

15 / 15

6

6 criterion remark

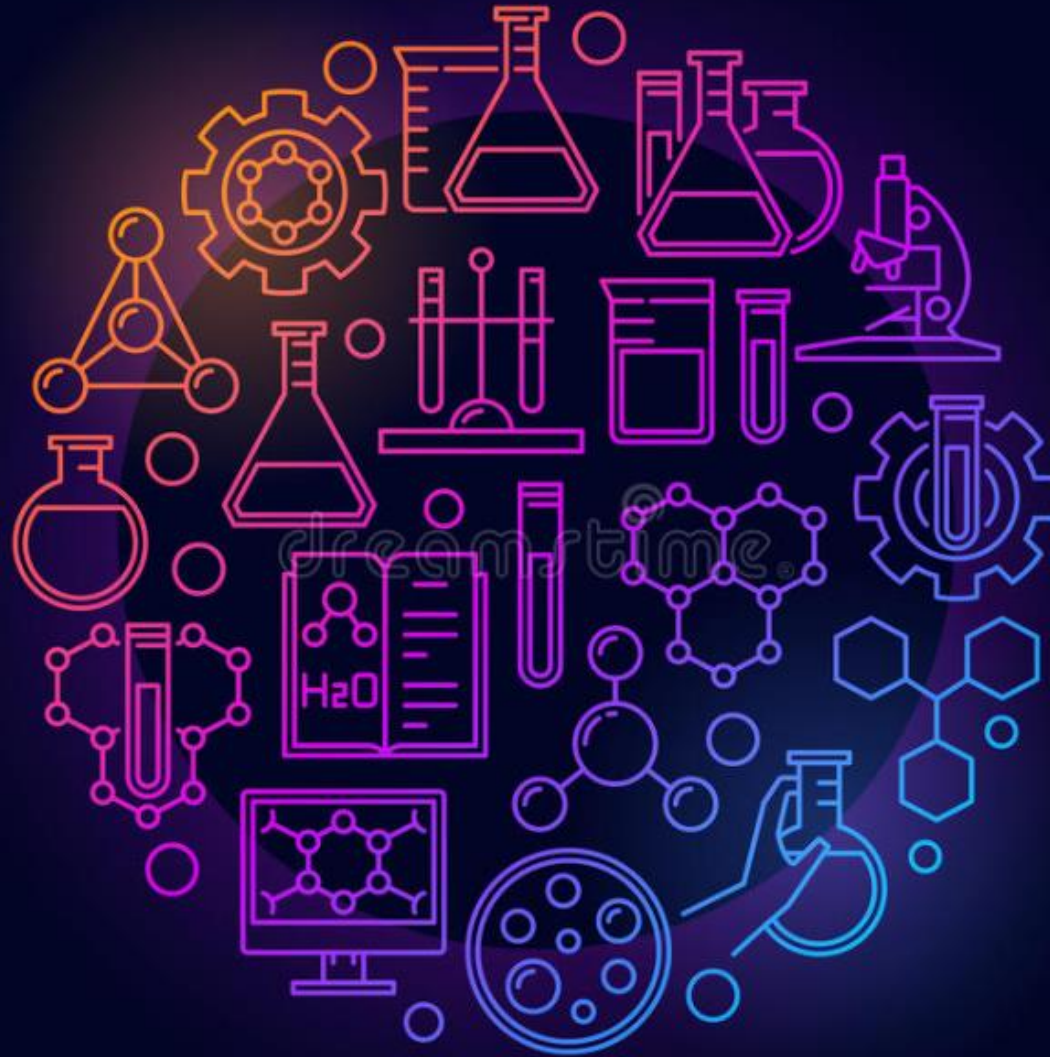
- show that  $K_w = [H^+][OH^-]$
- convert  $K_a$  values to  $pK_a$  and vice versa

Insert frequently used comment

15 / 20

Draft annotations saved

## ❖ What background do I need?



An interest in the properties of matter and how it interacts. An enthusiasm for practical science and experiments

Grade 6 or above at GCSE Chemistry, Grade (6,6) in Combined science and GCSE Maths, and grade 5 in English language and literature

Competent mathematical skills: you need to be confident in presenting data in graphs and performing multi-steps calculations

## WHERE WILL CHEMISTRY TAKE ME ?



1. Medicinal Chemist
2. Experimental Chemist
3. Quality Assurance Chemist (Cadbury Trebor Bassett)
4. Chemical Patent Lawyer
5. Chemical Industrial Placement
6. Head of Chemistry, Teacher

# WHERE WILL CHEMISTRY TAKE ME ?

The classes of 2019  
and 2020



Medicine



Pharmacy,  
Kingston University

Kingston  
University  
London



Chemical  
Engineering  
UCL



# What do Norlington Chemistry Students Say ?

*" I came to Norlington for sixth form due to my past experience during secondary school. The warm-hearted and loving nature of the teachers made me feel comfortable to trust the teachers. It allowed me to get personalised attention from the teachers whilst also being in small classes so if i didn't understand something the teachers would be quick to help.*

*I chose to study chemistry as it was my most preferred science out of the three and I also needed it for my university choice in the future. Nevertheless, due to my past experiences with the teachers I felt comfortable taking on a difficult subject like this as I would get the support I need. I enjoyed the practicals and practicing the questions as in chemistry there is little content so practice really helped me understand harder questions. Practical were of great use also as I got to see and understand them so I could apply this to my tests. I also enjoyed the personal connection with the teachers, this made me feel so comfortable.*

*I wish I knew the amount of effort required to be successful in this subject as the jump from GCSE and A-level is quite daunting. So then I would be more mentally prepared and not stress as much when coming close to important exams. Also especially for chemistry it would be useful to make sure the student understands that the math questions can vary and be quite difficult so extra studying is required." **Umar Faruq Y13***



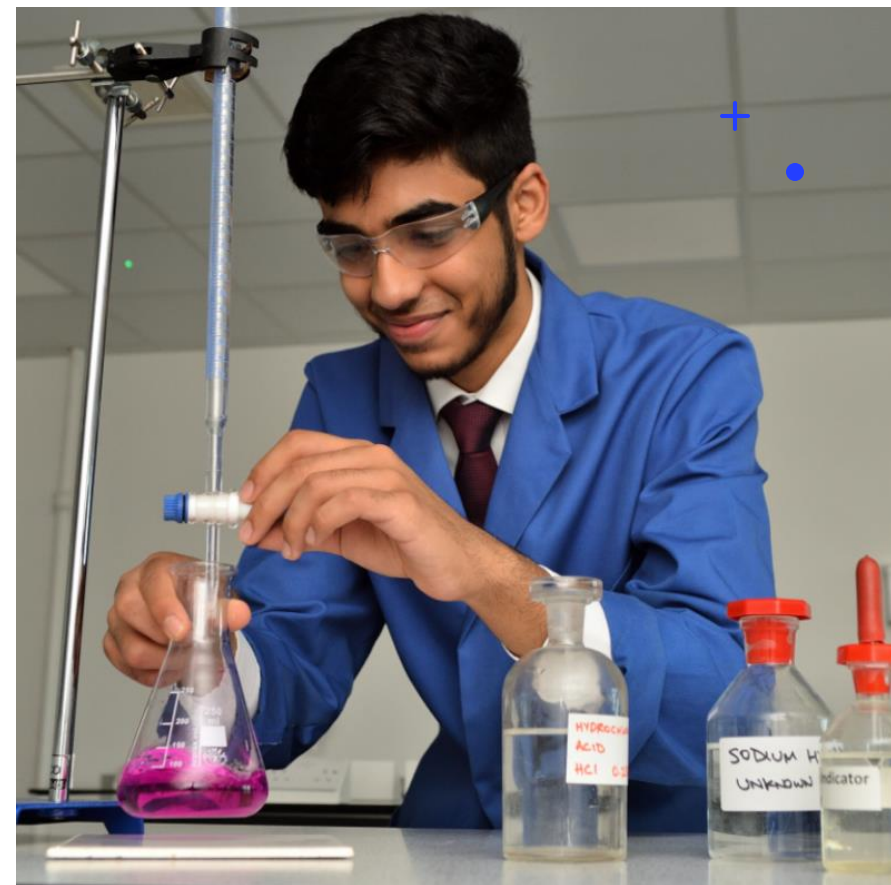


# What do Norlington chemistry students say ?

*"I chose Norlington because I knew it had very good teachers who had taught me in secondary school. I also knew that the classes were going to be small and this proved to be very useful as I got individual attention from my teachers. Having small classes also meant that revision could be tailored to suit every student's needs and that content can be finished quicker. I chose to study A level chemistry because it was one of my favourite subjects in GCSE.*

*I chose to study chemistry for A level as it is a very fun subject and lots of problem solving. Fun lessons as well with small classes enabled space for good conversations. There was also lots of fun experiments as well and lots of useful skills learnt that I learnt.*

*I wish I knew that I should have not messed around too much in year 12. There is a lot of content and thinking back I can only advise myself to stay on top of it and make sure I understand every lesson before the next one. This would've been very useful as it would've meant that I would not have been overloaded with work in year 13. "* **Moonis Y13**

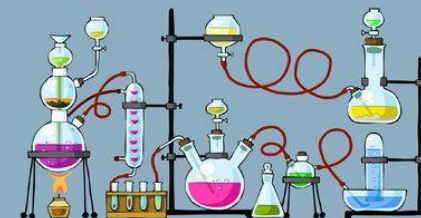


# Q & A

If you can any question please email me on:

Dr Saadoune

[isaadoune@norlington.school](mailto:isaadoune@norlington.school)



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