

Chemistry Topic for each question on EVERY PAST PAPER A&AS LEVEL so far 2017-2023

**The number next to some questions like (4) means it contains a 4 marker and the words next it says what that question contains like chromatography**  
**If a question shows x2 like (5x2) that would mean there are two 5 marker questions in that specific question**  
**If you see ‘?’ then i'm not sure which topic the question is**

[AS and A Level - Chemistry B \(Salters\) - H033, H433](#)

**^For 2016-2023 new spec papers**

[A Level Chemistry Past Papers - The Exam Formula](#)

**^For 2009-2016 old spec papers**

[OCR A-Level Chemistry Past Papers - Revision Science](#)

**^- For 2009-2016 old spec papers with F332 inserts**

[OCR Chemistry Revision - THE DIVERSE](#)

## [COMPENDIUM OF NATURAL SCIENCES](#)

**^This is where you find the practice papers**

## [HO33 AS PAPERS](#)

AS June 2023  
Foundation of Chemistry

1. EL
2. DF
3. ES
4. EL
5. OZ
6. WM
7. DF
8. OZ
9. OZ
10. ES
11. ES
12. WM
13. EL
14. EL
15. EL
16. EL
17. EL(tricky one I think)
18. DF
19. WM
20. EL
21. EL
22. OZ (5) Break down of Ozone
23. DF (4) Bond enthalpy
24. DF+WM (4) Mass Spec

AS June 2023 Chemistry in depth

1. EL (4) Standard solution + (6) Percentage uncertainty + moles

2. ES (4) Thermal Decomp of Hydrogen halides
3. WM + EL (5) Bond angle + OZ (6) HB,Pd-pd,Id-id
4. ES(4)Ideal gas eq + OZ

AS June 2022  
Foundation of Chemistry

1. EL
2. EL
3. EL
4. DF
5. ES
6. ES
7. OZ
8. OZ
9. WM
10. ES
11. EL
12. DF
13. EL
14. WM
15. ES
16. DF
17. DF
18. WM
19. DF
20. DF
21. Sec B - DF + OZ (5) intermolec
22. OZ (4) het/hom fission
23. ES
24. ES

AS June 2022 Chemistry in depth

1. EL (4)
2. DF (4 Burning catalyst) + OZ kinda
3. WM (6) TLC chromato
4. DF (6)

AS Nov 2021

Foundations of Chemistry

1. EL
2. EL
3. ES
4. WM
5. ES
6. DF
7. DF
8. ES
9. ES
10. DF
11. OZ
12. WM
13. WM
14. EL
15. ES
16. DF
17. DF
18. OZ
19. OZ ppm qu
20. WM
21. SecB - EL (4)
22. WM
23. EL (5)
24. DF

AS Nov 2021 Chemistry  
in depth

1. DF (E/Z) and 3D shape
2. EL (4) + ES
3. OZ (6) intermolec + DF  
(Mechanism)
4. OZ + ES (6)

AS NOV 2020

Foundation of Chemistry

1. EL
2. DF
3. ES
4. EL
5. EL
6. EL
7. EL
8. DF
9. DF
10. WM
11. ES
12. OZ
13. OZ UV
14. WM
15. WM
16. WM
17. EL
18. EL
19. EL
20. EL
21. SecB - OZ (4)
22. DF + WM (4)  
mass spec
23. ES (5) + EL (5)
24. ES + DF

AS Nov 2020 Chemistry  
in depth

1. DF
2. EL (4)
3. WM (4+6)
4. DF (4+6 enth  
neutrali)

AS June 2019  
Foundation of Chemistry

1. EL
2. EL
3. EL
4. DF
5. DF
6. WM
7. DF
8. ES
9. DF
10. ES
11. OZ
12. OZ
13. EL
14. EL
15. EL
16. DF
17. WM
18. OZ
19. EL
20. ES
21. WM
22. EL (4)
23. DF
24. OZ + ES (5)

AS June 2019

Chemistry in depth

1. DF -  $pV=nRT$  (4)  
+ Crack hydrocarbo Prac
- (4) + Biofuels (6)  
+ WM
2. ES (4)
3. EL
4. OZ (6)

AS June 2018

Foundation of Chemistry

1. EL

2. DF

3. ES

4. OZ

5. OZ

6. WM

7. WM

8. DF

9. EL

10. ES

11. OZ

12. OZ

13. EL

14. EL

15. EL

16. DF

17. WM

18. OZ

19. EL

20. ES

21. WM

22. EL (4)

23. DF

24. OZ + ES (5)

AS June 2018 Chemistry  
in depth

1. EL (6)
2. DF + WM (6)  
IR+Mass spec
3. OZ (4)
4. ES

AS June 2017

Foundation of Chemistry

1. DF

2. EL

3. ES

- |   |   |   |
|---|---|---|
| 4. ES                                   | 20. DF                                  | 5. DF   |
| 5. WM                                   | 21. EL (4)                              | 6. EL   |
| 6. WM                                   | 22. WM                                  | 7. DF   |
| 7. DF                                   | 23. ES                                  | 8. WM   |
| 8. ES                                   | 24. OZ (4 + 5)                          | 9. DF   |
| 9. OZ                                   | AS June 2016 Chemistry<br>in depth      | 10. ES  |
| 10. OZ                                  |   | 11. ES  |
| 11. WM                                  | 1. DF                                   | 12. OZ  |
| 12. WM                                  | 2. ES                                   | 13. WM  |
| 13. WM                                  | 3. WM (4 + 6)                           | 14. DF  |
| 14. DF                                  | 4. OZ (4) + WM (6)                      | 15. EL  |
| 15. EL                                  | IR + Mass spec                          | 16. EL  |
| 16. DF                                  | AS Sample Foundations<br>of chemistry   | 17. DF  |
| 17. WM                                  |   | 18. EL  |
| 18. OZ                                  | 1. DF                                   | 19. EL  |
| 19. EL                                  | 2. DF                                   | 20. OZ  |
| 20. OZ                                  | 3. OZ                                   | 21. WM + OZ (4)<br>destr of ozone                                 |
| 21. WM                                  | 4. OZ                                   | 22. WM (5) recrystal  |
| 22. EL                                  | 5. WM                                   | 23. EL  |
| 23. DF (4)                              | 6. ES                                   | 24. ES  |
| 24. OZ + EL (4)                         | 7. DF                                   |   |
| AS June 2017 Chemistry<br>in depth      | 8. EL                                   | AS Practice Paper<br>Chemistry in Depth                           |
|   | 9. EL                                   |   |
| 1. DF + OZ (6)                          | 10. ES                                  | 1. DF (6) enthalpy<br>combustion experi<br>+ EL                   |
| 2. WM                                   | 11. ES                                  | 2. EL (4) draw+exp<br>thermal decomp +<br>(4) 1st ionisat<br>ener |
| 3. ES                                   | 12. DF                                  | 3. ES (4) graph conc<br>+ (6) ozone<br>catalyst                   |
| 4. EL (4 + 6)                           | 13. DF                                  | 4. WM (4) alco -><br>ester table + (5)<br>IR + MS                 |
| AS June 2016<br>Foundation of Chemistry | 14. WM                                  |   |
| 1. EL                                   | 15. WM                                  |   |
| 2. EL                                   | 16. DF                                  |   |
| 3. EL                                   | 17. DF                                  |   |
| 4. ES                                   | 18. ES                                  |   |
| 5. OZ                                   | 19. SecB - EL                           |   |
| 6. OZ                                   | 20. DF (4)                              |   |
| 7. DF(Ideal gas qu)                     | 21. OZ (4x3 + 5)                        |   |
| 8. ES                                   | 22. OZ (4)                              |   |
| 9. OZ                                   | AS Sample Chemistry in<br>depth         |   |
| 10. ES                                  | 1. EL + DF (4)                          |   |
| 11. WM                                  | 2. DF (6)                               |   |
| 12. DF                                  | 3. OZ + ES (4)                          |   |
| 13. EL                                  | 4. WM (5+6)                             |   |
| 14. ES                                  | AS Practice Paper<br>Foundation of Chem |   |
| 15. OZ                                  | 1. WM                                   |   |
| 16. DF                                  | 2. EL                                   |   |
| 17. WM                                  | 3. DF                                   |   |
| 18. EL                                  | 4. DF                                   |   |
| 19. EL                                  |   |   |

## H433 A LEVEL PAPERS

A LEVEL June 2023

FundamentaL of  
chemistry

1. EL
2. EL
3. OZ
4. WM
5. ES
6. DM
7. O
8. CD
9. EL
10. CI
11. DF
12. DF
13. DF
14. DM
15. WM
16. WM
17. WM
18. DF
19. O
20. EL
21. ES
22. CI
23. PL
24. O
25. EL
26. DF
27. O
28. O
29. CD
30. OZ
31. SecB. El
32. DF (4)
33. O (4x2)
34. DM (6) redox titr

35. PL (6) mechanism enzyme-cata + OZ	17. CD
A LEVEL June 2023	18. CD
Scientific literacy	19. O
1. ES + DF (4)	20. PL
2. PL (6)	21. O
NMR+Mass	22. O
3. CI (4) $K_c$ +O+ES	23. O
4. WM+PL+OZ(6) bondenthalpy/pola rise + CD	24. EL
5. DF + EL	25. CD
A LEVEL June 2023	26. EL
Practical Skills	27. EL
1. OZ	28. CD
2. EL + DM (6)	29. DM
Ligand, complexes	30. CI
3. WM+OZ+CD (6)	31. B. EL+ES+DF(4) Ideal gas eq
Benzene + (4)	32. OZ (4) + DF
Mechanism	33. OZ + O (5)
4. CI (4x2) k with units, rate	34. ES (4) + CI (6) equili + $K_c$ (4)
A LEVEL June 2022	35. CD (6)
Scientific literacy	
1. EL (5)? + ES	
2. DF	
3. CI (6) calc k from data + mech + (4) arrhenius plot	
4. PL	
5. O (6) article	
A LEVEL June 2022	
Practical Skills	
1. WM+OZ (6) hydrolysis	
2. EL+ DF (6)	
3. DM (4)	
4. Insert - DM (4)	
A LEVEL NOV 2021	
FundamentaL of chemistry	
1. EL	
2. EL	
3. EL	
4. DF	
5. DF	
6. O	

7. ES	A LEVEL NOV 2020	A LEVEL NOV 2020
8. EL	Fundamental of chemistry	Practical Skills
9. EL?		1. EL (6) group 2 carbonates + O (4)
10. DF	1. EL	2. WM + PL (4)
11. DF	2. EL	3. DF (combustion)
12. PL	3. EL	4. Insert - PL (6 titre) + Cl
13. EL	4. ES	A LEVEL June 2019
14. EL	5. WM	Fundamental of Chemistry
15. WM	6. DF	1. EL
16. WM	7. O	2. EL
17. ES	8. DM	3. WM
18. PL	9. CD	4. WM
19. O	10. EL	5. DF
20. EL	11. OZ	6. ES/WM
21. CI	12. OZ	7. EL
22. PL	13. WM	8. DM
23. CI	14. DM	9. ES
24. OZ	15. PL	10. OZ
25. EL	16. EL	11. OZ
26. ES	17. O	12. CI
27. EL	18. PL	13. WM
28. WM	19. EL?	14. O
29. CD	20. DF	15. PL
30. WM	21. CI	16. O
31. CI + EL (5) % by mass + O	22. WM	17. DM
32. OZ (6) imforces	23. PL	18. O
33. EL + DM (4 formula of complex + 6 using solid and colorimetry)	24. PL	19. EL
34. PL (4)	25. O	20. EL
35. CI	26. DF	21. DF
A LEVEL NOV 2021	27. DF	22. O
Scientific literacy	28. WM	23. CD
1. CD + DF (5)	29. CD	24. ES
2. DM (4)	30. CD	25. O
3. CD + PL (6)	31. DM +Cl (4x2)	26. EL
4. DF (4x2) + O (4) + Cl (6)	32. ES (4)	27. ES
5. EL + CI IDK	33. DF + CD (6)	28. OZ
A LEVEL NOV 2021	34. CD (4) solub of dyes + DM (6) method for dyes colori	29. PL
Practical Skills	35. ES + O	30. PL
1. DF (4) + WM (6)	A LEVEL NOV 2020	31. ES+Cl (6)
2. PL	Scientific literacy	32. PL (6) enzyme inhibitor
3. ES (4) + O (4)	1. PL (4)	33. OZ + DF
4. Insert - O (4+6)	2. DM (4)	34. EL + ES
	3. O (4)	35. PL + WM
	4. DF+WM+PL(6)	
	5. DM (6)	

A LEVEL June 2019	29. CD	16. OZ
Scientific literacy	30. CD	17. WM
1. PL	31. DF+PL(6)+CD(4)	18. WM
2. EL(4) + DF(4)	32. PL (4 + 6	19. CI
Ideal gas + O (6)	hydrolysis)	20. PL
3. DM (4) + EL	33. PL	21. OZ/ES
4. OZ + CI (4)	34. OZ	22. OZ
5. Insert- OZ (6) +	35. DM	23. EL
DF (4)	36. O + WM + CI (4)	24. EL?
A LEVEL June 2019	A LEVEL June 2018	25. O
Practical Skills	Scientific literacy	26. DF
1. PL + OZ	1. EL	27. O
2. CD + PL (6)	2. PL (4) + DF + CD	28. DM
NMR/IR	(6 comparing	29. DM
3. O	cyclohexene to	30. PL
4. Insert (4) + DM (6)	benzene)	31. ES + OZ
A LEVEL June 2018	3. PL + CI (4 + 6?)	32. EL (6 light) + DF
Fundamental of	4. O	33. CI + O
Chemistry	5. PL (4)	34. CD (4x2)
1. EL	A LEVEL June 2018	35. EL(6 hysalt)+ O(4)
2. EL	Practical Skills	A LEVEL June 2017
3. EL	1. CD (4)	Scientific literacy
4. DF	2. DM (6+5)	1. PL + O (4)
5. CI	3. ES + DM (6)	2. WM (4) + PL
6. DF	method using	3. PL (6)
7. ES	colorimeter or	4. ES (4+6) + DM
8. ES	visible	5. CD insert (6)
9. ES	spectrophotomete	A LEVEL June 2017
10. WM	r + EL	Practical Skills
11. OZ	4. Insert - WM (4)	1. PL (6) paper
12. DM	A LEVEL June 2017	chromato
13. DM	Fundamental of	2. CI (5 rate of
14. EL	Chemistry	reaction + 6graph)
15. EL	1. EL	3. DF (4x2) + ES idk
16. CI	2. EL	4. Insert - ES (4 + 6
17. WM IDK weird qu	3. EL	titre)
18. EL	4. PL	A LEVEL June 2016
19. WM	5. DF	Foundations of chemistry
20. PL	6. CI nitrate	modified These papers
21. OZ	7. CI/ES	don't exist only old spec
22. ES	8. PL	A LEVEL Sample
23. DM	9. PL	Fundamental of Chem
24. CI	10. DM	1. WM
25. WM	11. DM	2. DM
26. O	12. CD	3. CD
27. ES	13. EL	4. OZ
28. PL	14. DF	5. WM
	15. OZ	

6. EL	tests+ colour change + EL	26. DM
7. EL		27. CD
8. EL		28. OZ
9. EL	A level Sample Practical Skills	29. CD
10. EL/OZ		30. CD
11. EL	1. WM(4) recrystal + PL	31. EL
12. ES	2. EL(6) experiment thermalstabilis of carbonate + O + DF	32. EL (6) emission
13. ES	3. DF	33. O (4) hydration enth cycle calc
14. CI	4. DM(4) %of iron in paper clip + (6)colorimetry with calibration	34. WM + CD (5) dye is yellow benzene is colourless
15. WM		35. PL (6) enzyme + substrate rate determin
16. PL		A Level Practice Paper
17. PL		Set 1
18. PL		Scientific Literacy
19. PL		1. DF + PL + OZ (4) IMB
20. PL		2. O
21. PL		3. DM (6) manganate titration + (5) mass calc
22. O		4. CI (4) equ yield +(4) Kc calc qu
23. O		5. CD + PL + O (6) def of soap and more soluble in water
24. DF		A level Practice Paper
25. OZ		Set 1 Practical skills
26. O	A Level Practice paper set 1	1. WM + PL (6) NMR/IR
27. DM		2. DM (4) conc of O2 + O
28. DM	Fundamental of Chem	3. OZ (6) rate of hydro + CI
29. OZ	1. ES	4. Insert - DM (5) graph complex ion + (4) chem equi of ppt
30. O	2. EL	
31. DM + EL(5)	3. WM	
%purity + DF(4) hetero model	4. OZ	
32. DF + PL(6) NMR	5. DF	
33. O(5) mass calc + (4) Ka + Cl(4) Kc	6. DF	
34. WM(6) hydroxyl +CD(4)	7. ES	
Mechanism	8. PL	
35. ES + DM	9. PL	
A level Sample Scientific Literacy	10. DM	
	11. DM	
1. CD (5 azo dye) + O(4)solubility of dye + Cl(5) arrhenius	12. DF	
2. O + DM	13. ES	
3. DF + WM + PL(6) HNMR+IR	14. ES	
4. DM + Cl + ES	15. DM	
5. DF + PL(6) lock&key theory + CD(4) chemical	16. CD	
	17. DF	
	18. EL	
	19. DF	
	20. DF	
	21. ES/Cl	
	22. OZ	
	23. Cl	
	24. Cl	
	25. Cl	