



# CAMBRIDGE HOUSE GRAMMAR SCHOOL REVISION CHECKLIST

## YEAR 10: CHEMISTRY

### Summer 2026

Your Summer Examination will assess your knowledge and understanding of the topics listed (below).

Use this checklist to help you with your revision and identify any gaps in your knowledge.

*This list covers the key areas for revision; it is for guidance only – other questions may be asked from the Safety, Atomic Structure and Acids topics*

I can:	✓	✗
1. Recall hazard symbols and know about safety in the lab		
<b>Topic 1: Atomic structure:</b>		
2. Describe the position and properties of subatomic particles		
3. Define the terms 'atomic number' and 'mass number'		
4. Work out the number of protons, neutrons and electrons in atoms		
5. Explain why atoms are neutral		
6. Write electronic configurations for the first 20 elements		
7. Explain what 'ions' are and how they are formed		
8. Be able to explain how to practically carry out 'flame tests' to test for ions		
9. Know the colours of flames produced by different ions		
10. Work out the charge on ions		
11. Define 'isotopes' and identify isotopes from the number of protons and neutrons		
<b>Topic 2: Acids and Alkalis</b>		
12. describe general properties of acids and alkalis		
13. name some common acids and alkalis, including those used in the lab		
14. Explain the difference between using litmus indicator and universal indicator		
15. Use results from indicator tests to identify substances as acids, alkalis or neutral and give strength and pH		
16. Be able to describe how acids react with metals, bases, alkalis and carbonates		



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17. Be able to name SALTS made in acid reactions		
18. Know the importance of neutralisation reactions in everyday life		
<b>Topic 3: Bonding</b>		
19. Define the terms cation and anion		
20. Use dot and cross diagrams to show how ions are formed and how ionic bonding takes place in simple ionic compounds		
21. Understand that ionic bonding involves attraction between oppositely charged ions, that ionic bonds are strong and that substantial energy is required to break ionic bonds		
22. Recognise that ionic bonding is typical of metal compounds		
23. Describe a single covalent bond as a shared pair of electrons		
24. Show using dot and cross diagrams how covalent bonding occurs in H <sub>2</sub> , Cl <sub>2</sub> , HCl, H <sub>2</sub> O, CH <sub>4</sub>		
25. Recognise covalent bonding as typical of non-metallic elements and compounds		
26. Understand that diatomic means that there are two atoms covalently bonded in the molecule		
27. Understand that covalent bonds are strong and substantial energy is required to break covalent bonds		
28. Understand that metallic bonding results from the attraction between the positive ions in a regular lattice and the delocalised electrons		
<b>Topic 4: Formula</b>		
29. Name simple chemical substances from their formula – eg K <sub>2</sub> SO <sub>4</sub> is potassium sulfate		
30. Identify elements which make up a chemical compound		
31. write formulas of elements and simple compounds using chemical symbols and numbers		
32. construct word equations for reactions		



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