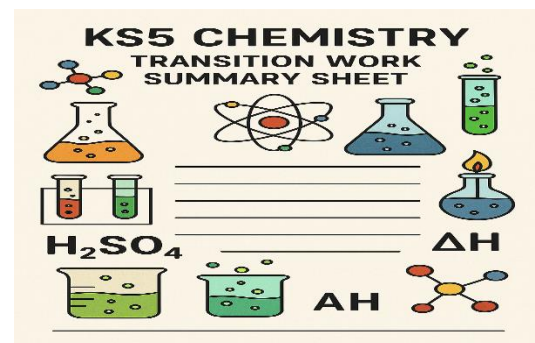
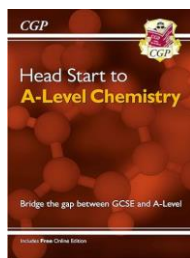
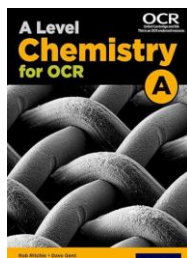
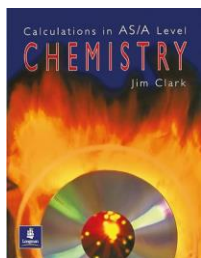


OCR A, A level Chemistry: Transition work– Year 11 into 12

OCR: Transition guides and tasks



Our core textbooks above are recommended to help support you in your transition into A level chemistry.

There are four guides provided by OCR, each focusing on key topic areas in chemistry.

1. [Amount of substance KS4-KS5 transition guide](#): The transition from KS4 to KS5 chemistry calculations is tricky. You the link you should access OCR transition to ks5 pages and complete the checkpoint tasks located on the grey tab.
2. [Atomic structure KS4-KS5 transition guide](#): You should describe how an atom is structured, and how its charge is neutral overall. You should explain how an atom may become an ion using example from various metal and non-metal groups, and then finally explain what an isotope is (with an example of how isotope calculations are carried out).
3. [Bonding and structure KS4-KS5 transition guide](#): You need to be very familiar with the bonding types, metallic, ionic and covalent. For this task you must read how bonds are formed, you should produce a comparative essay of no less than 750 words on the structure and bonding types, along with the properties of Li, Be, B, N₂ and Ne. You should include diagrams for each and discuss the boiling points and relative bond strengths and intermolecular forces where appropriate.
4. [Enthalpy changes KS4-KS5 transition guide](#): You should explain how energy can go up or down in exothermic and endothermic reactions and why this happens, you should make reference to bond formation and decomposition in the different reaction types. You should draw and label reaction profile diagrams and be familiar with the term enthalpy. You should research standard enthalpy changes and conditions necessary for this. You may wish to look at combustion or neutralisation reactions too.

Your to do list:

- 1) Complete an essay task on bonding and structure of period 2 elements Li, Be, B, N and Ne should be discussed (750 words minimum expectation). You should list your sources of information.
- 2) Complete a range of calculation practice questions provided.
- 3) Explain in detail how the Dynamic equilibrium works and investigate the Maxwell Boltzmann distribution curves. Explain how changing factors will affect a reaction.
- 4) Explain the purpose of an acid-base titration. You should describe how to carry out a titration and the data which must be collected. Use data to calculate the concentration of unknown solutions using a known concentration. Explain, using exemplary data (found online), how to analyse the titration.