

Paper 2 - Ten tips to give your students

Preparation

1. Revision. As for Paper 1 go through the syllabus thoroughly checking that you know and understand each Assessment Statement on the Core for SL and on the Core and AHL for HL.

2. Practice. Practice with past Paper 2 questions in two ways. As you revise each topic test yourself with past Section B questions on that topic. Once you have revised (UK) or reviewed (US) all topics, practice with past Section A questions paying particular attention to the data response question. Time yourself so that you spend the correct ratio of time on Sections A and B. If you cannot answer a question or get it wrong try to understand what the problem is. You can do this by reading around the topic, discussing with other students or by asking your teacher. Learn from your mistakes.

During the exam

3. Use the reading time wisely. You will have five minutes reading time before the exam starts. During this time you are not allowed to write. As you have to answer all the questions on Section A use this time to read Section B thoroughly and decide which **one** question (SL) or which **two** questions (HL) in Section B you will attempt.

4. Read each question carefully. Pay particular attention to the command term used. A question which asks you to *explain* an observation will have a very different answer to a question that asks you to *describe* the observation. It may sound obvious but if the question asks for **two** examples then do not give three. If all three are correct then you will not be penalised but if two are correct and one is wrong you will only score one of the possible two marks. If the question asks you to **name** a product do not just give its formula. When you are asked to define or explain a phrase that is in italics remember to address **all** the words in italics. For example *average bond enthalpy* needs an explanation as to what bond enthalpy is as well as what is meant by the word average in this context.

5. Timing. In both SL and HL Section A is compulsory. At SL it carries slightly more marks than Section B. It therefore makes sense to spend slightly more than half the time on Section A. However be sure to allocate enough time to try to answer all that is required on Section B and also leave some time spare at the end to check over everything you have written. At HL roughly equal time should be spent on the two sections.

6. Check the mark allocation. The available marks are given for every question and part question. If there are two marks for a question then there will be two different marking points that are necessary to give in the answer in order to gain both of the marks.

7. Use the correct terminology. Provided you can be understood you will not be penalised for incorrect English. However, you may lose marks if you do not use the correct chemical or scientific language. If you mean *potential difference* (as in an electrochemical cell) then do not use the word *current*. Chemicals should have the correct formulas and equations should be balanced. Although it is good practice to include state symbols in equations you will not be penalised if you omit them unless they have been specifically asked for.

8. Show your working. Whenever you do a calculation show how you arrived at your final answer. If the answer is wrong you may still score many of the available marks for using the correct method. This can be especially important if the value from one sub-question is needed for a subsequent question as the same mistake will not be marked wrong twice (this is known to examiners as ECF - error carried forward).

9. Use of Periodic Table. The periodic table gives atomic masses to two decimal places. Because you are able (and expected) to use a calculator you must use the values given to two decimal places whenever they are needed in a calculation.

10. Units and significant figures. For each numerical answer you give check that you have included the correct units (if any) and also check that you have given the answer to the correct number of significant figures. In fact you do have a leeway of one significant figure either way. For example, if the answer should be 1.674 g then 1.67 g, 1.674 g or 1.6742 g would all be acceptable. You can only be penalised once (i.e. lose one mark) on the paper for omitting or giving the wrong units and again only once on the whole paper for giving the wrong number of significant figures.