

Study Guide – how to make the best use of your time

Time and place

Study requires time commitment.

- Plan your week to include time slots that you are going to set aside for the study of this book. Make them high priority periods, which can only be changed in very exceptional circumstances.
- Analyse your degree of alertness or readiness to study, to see which parts of the day are the best for you to spend studying for one-hour, intensive study periods . . . before breakfast . . . lunch-time . . . evening, *etc.* Never study when you know that tiredness will win. This is frustrating and leads to de-motivation.
- Select a suitable place to study, probably with a writing table, but not in a comfortable, sleep-inducing armchair. If a place cannot be found in the home, enquire about the use of a local library; they often have 'reading/study areas'. I know of someone who found that the only place of peace and quiet was in his van, and he drove to a local lay-by and set up his books in the van. It worked for him.
- Study periods should be about one hour in length and it is probably better to have a break between hour-long sessions than to go on for two hours non-stop and drop off to sleep. If you are studying other subjects, then break up the time with interchange of the different subjects.
- Some people who know about physical exercise say that if you are feeling tired you should stand up and jog on the spot for about two minutes; it wakes up the body. A bit difficult in a library! But a brisk 10 minute walk could do the trick.
- Quiet music is said by some to be helpful, but distracting music that might cause you to 'sing along' can be disruptive. Research has shown that stimulating music played for about 10 minutes before a study period, then turned off, can cause your brain to wake up and be ready for study.
- How much studying per week, you ask? The reading and accompanying study will take a considerable time commitment covering a whole year or even two years, but try to cover the work of a unit within a week. Some weeks you might have more time than others, but put aside prime study time to do this work. This book is designed to prepare you in chemistry for entry into a science-related university course, or to give you the basic theory behind any practical chemistry that you use in your work. It is trying to encourage you to become a quality, self-motivated student, not a reluctant or 'forced' student.

Revision and reminders

You should put together a set of your own notes as you go through the modules and units. Your notes together with this book should be studied in a systematic manner; use, say, one hour per week to review the previous chapters. As you do this the material will become much more familiar to you. The start of any study regime can be difficult, but eventually it becomes easier and hopefully enjoyable.

Assignments and essays and self-assessment

It is essential that everyone is able to express themselves in a cogent, logical and clear way. Employers expect it when you write your reports. So it is good to practise these skills yourself, and even to impose an essay on yourself as a means of revision.

Remember that no one is going to 'spoon feed' you on this course; you have to 'feed yourself' if you use the content as a self-study text.

Questions don't have to be set by teachers or lecturers: try writing some questions when you finish a section or unit. Put these to one side and refer back to them when revising the material. Share questions with friends doing the same course. This is like a self-help group. For example, write, say, 500 words or 2–3 pages (no more) on any of the following:

- Discuss how the modern periodic table has been developed.
or
- What is meant by covalent and ionic bonding.
or
- Discuss how carbon compounds containing C=C bonds are industrially important.

If you are working in a self-help group, then to mark other people's work you will have to know what you are looking for and how you are going to give the marks. A discussion afterwards of your work and that of others will be invaluable. Make sure the writer sticks to the question asked, NOT what they thought should have been asked, and watch out for deviations from the point of the question.

A tutor with chemical knowledge is often delighted to help someone who shows an interest in the subject, so have your work overseen by such a person.

When attempting to answer questions that require long answers, remember what they told you in other subjects. Plan your essay answers to contain:

- an introduction; followed by
- an account of the main points; and
- end with a short summary.

Increasingly, students are asked to express their views in good English.

The questions in this text are usually of the short-answer type, but you will need to practise the longer answers within a set time limit.

Need for chemists

There is a great need for professional chemists and scientists with sound chemical knowledge and even many non-science-based professions will be enhanced by having people in them with relevant chemical knowledge.

The chemical industry is one of the major income generators for Britain, and its products are one of our major exports. It is because the country needs to educate everyone on chemical matters, and also to prepare people on foundation and access courses for future university science courses involving some chemistry that the Royal Society of Chemistry has initiated this and other books.

Good luck with your studies.

