**HOW TO GET EXCELLENT GRADE IN CHEMISTRY**

**[September 2021]**

**A: HOW TO STUDY CHEMISTRY**

At first, studying Chemistry is like learning a new language. Most students struggle with Chemistry because they don't approach it the right way. Nevertheless, with deligence you can attempt this subject successfully and perhaps even pleasurably. Here are some suggestions to help you form good study habits and master the subject:

1. Review and study material before going to the class. In Chemistry, it is better you have already read and studied the material that is going to be presented that day. It is known as FLIPPED CLASSROOM.

2. Always attend classes regularly and take some careful notes. In taking the notes, you don't just have to focus on what your teacher writes on the board alone. You have to listen and copy down all salient verbal points and concepts discussed during the class. **NOTE: Entropy in the class must be zero.**

3. Gain understanding of the fundamental of Chemistry. Think critically, understand the meaning of every term or question you come in contact with. Don't cram, instead use a mnemonic or a periodic review system (maybe every 20 minutes, every 45 minutes, every 1 hour or every 3 days etc.). **NOTE;** Memorization should not take the place of understanding. Explain a concept to your classmate or some other person.

4. Consistent practices; Practicing daily is a master key to success in learning and studying Chemistry. Check yourself by reviewing and solving the exercises found in your textbooks and related exams style questions. If you get a problem or an exercise solved wrongly, work it again until you are able to get it right. NOTE; Don't allow Chemistry notebook or textbook to be a closed one.

5. Make use of the laboratory time: Conducting Chemistry practical (qualitative and quantitative analysis) will strengthen your understanding of Chemistry.

6. Form an active studying group: Study group will allow you to share ideas with one another, study for exam. Members in the group should not exceed 6 active, committed and dedicated members. The environment for group study should be free from distractions and Study time should be between 2-3 hours. Ask yourselves questions at the end of the group session and try answering the questions.

7. Don't hesitate to ask your teacher for help where you don't understand.

**B: PREPARING FOR EXAMINATION**

Examination is an educational course or a learning tool designed to increase students' performance on standardized tests. The following steps are required when preparing for exam:

1.During the course: Have a positive attitude. You are a product of what you think. You can say to yourself "I WILL MAKE AN EXCELLENT RESULT". It is very important that you prepare thoroughly for internal school examination, as you approach the exam(WAEC, NECO, JAMB etc) and you start your revision program, the topics covered from SS1-3 will be familiar and the learning process will be less stressful and more effective. Make sure your notes are up to date. Get good textbooks recommended by the exam body. Make sure you understand the ideas and concepts. If you find any aspect of the subject difficult, seek for assistance from your teachers.

2. Revising for the examination: In advance of the examination, make a personal revision timetable for all your subjects, but include time for relaxation. Then, create a more detailed one for Chemistry, to cover all the topics. It is useful to have a copy of the examination syllabus (WAEC, NECO, JAMB etc). You will need a quiet room at a comfortable temperature, plenty of paper and pen or pencil. Occasionally, revising with a friend ,makes a welcome and useful change. Know how long you can probably study. This depends on individual characteristics and can vary from person to person, maybe as little as 45 minutes, 1 hour ,more. Do not exceed your revision time. Your revision must be active. You could study the topic for several minutes and then close the book and write out what you can remember. Repeat this until you have most of the information correct, then move on to another section of the work. This is called the LOOK, READ, COVER, WRITE AND CHECK TECHNIQUE. It is very effective for the majority of students. Once you have acquired a good knowledge and understanding of the subject, it is time to take your revision to Practicing on past question papers. This is a most valuable way of preparation, as it will provide an insight of what to expect in the real examination. It is good to familiarise yourself with the exam style questions as early as you can (from SS 1). You must be familiar with some terms listed in the examination syllabus. The commonly terms include:

**Define -** You need to give a precise statement.

**Describe** - You simply have to say what happened or what will happen. E.g potassium for,s an ionic compound with sulphur. Describe what happens when two atoms of potassium react with one atom of sulphur. In this question, you have to give your answer in terms of electron transfer, give the formula for the ions formed. Electrons are transferred from potassium to sulphur. The two atoms of potassium each lose one electron to sulphur. They form K+. Sulphur atoms gain two electrons forming S2-.

**What do you understand by? -** Give the definition and some additional explanation.

**State** - Give a concise answer, no explanation is needed.

**Explain** - You must give reasons and/or underlying theory.

**Predict -** You are not suppose to know the answer from memory but to deduce it, usually from information in the question. E.g Given that atom A has electronic configuration of 1s22s22p4. Predict its group in the periodic table. The answer would be group 6 since it's Valence shell contains 2s22p4.

**Suggest** - This implies that there is more than one acceptable answer or that you are expected to arrive at the answer using your general knowledge of Chemistry.

3. Approaching the examination period: Get your examination timetable and highlight exam days and dates. This is to avoid you saying 'I thought that the examination was this afternoon when the examination may have been taken in the morning'. Make sure you have correct equipment the night before the exam (e.g pencil, eraser, ruler, calculator and two pens). Leave home early, because if you are late you will not be given extra time and under certain circumstances you may not be allowed to enter the examination hall. If the examination is by 9.0 am, you should arrive the exam venue 30 minutes prior to the exam (8.30 am). This will allow you to relax for the exam and you will not be put under pressure.

For multiple choice paper (objective test), attempt all of the questions since there are no penalties for incorrect responses. Read through the question carefully, try to eliminate some of the incorrect answers and increase the odds in your favour. If you cannot answer a question, put a star by it, leave it and return to it when you have completed the other questions. Check your answers at the end of the examination of you have any spare time.

For theory papers, once the examination has started, flick through the paper and choose a question you feel confident about. Take reasonable care that your writing is legible because what cannot be read cannot be marked (use good handwriting). Do not provide more alternative answers than required, in the vain hope that the examiner will pick out the correct ones. Do not rush, the time allocated to the exam is adequate for candidates to complete the paper. Leave the hardest questions until last. If you finish early, take the opportunity to check through your answers.

Adequate preparation for exam brings high grades.

***Success and failure have the same numbers of letters (7). Both are in your hands, so choose one***