

How To Get A's

Introduction: Beginning science students rarely study enough to master the subject. You can no longer obtain good grades by simply going to class. From now on you must memorize more by using frequent, but shorter study sessions.

Definition: High grades are the result of effort and good study techniques.

Meaning of definition:

- (↑ effort) 1. The competition gets tougher in the higher level science classes.
- (Study daily) 2. Consistent effort is half of the secret to doing well.
Never allow yourself to fall behind.
- (Learn techniques) 3. Reliable study techniques comprise the second half.
- (Homework = at home) 4. Studying, generally means outside of class time.
- (Hand-in work ~25%) 5. Homework that you hand-in should be about 25% of your study time, NOT 100% of it.

Study techniques:

- (Study nightly) 1. Always do some studying. When you have no assigned homework, work on sample problems and read the essays, study guides and supplemental workbooks. Try studying every night. You might find that some of the chapters are a lot more interesting than TV.
- (20 on, 20 off) 2. Never study one subject for very long. Twenty minutes on and twenty minutes off works well. Take a break.
Cramming does not work for long term memory.
Do you want to learn for the test or for your career?
Careers are for a lifetime!
- (Skim) 3. Reading - If possible, it's best to buy the book and **mark in it**.
Build a home library.
Skim the material first to get an overview, then read it.
(What's this section about?) Copy the headings that are in **bold**.
(KNOW THE MAIN IDEA)
(Highlight text) **Highlight** the text and make notes in the margin.
(Add to class notes) As you read, **add** to your class notes.
Read with your notebook open and polish your notes by improving on them.
(Learn vocabulary) **Memorize** the underlined/**bold**/*italicized* words.
Learn the new vocabulary.
(Flash cards work) Flash cards help.
(Review) **Read** the summaries and **understand** all of them.
Review the chapter quickly - ask yourself if you understand each section completely. If not, **write down a question** and ask it in class.
(Write down queries) You learn by writing out a question, and finding a legitimate answer. (Not by asking it.)
(Summarize in writing) Summarize each page or section in your own words.
Add this summary to your notes.
(Read questions) Try to answer the questions at the end of the chapters.
They are excellent questions for 2 people to ask each other.
(Friends teach) Talk to your friends - you learn and remember by

- (Pictures help) interacting with them. Form a review group.
Study the diagrams and pictures. Read the **captions**.
What was the meaning of each picture, graph or table?
- (Notes are **GOLD**)
(Obtain all notes)
(Passive is poor)
(Think in class)
(Don't goof off)
(Don't doodle)
(Stay alert)
(Guess ahead)
(Outline)
(Shorthand, symbols)
(Write lots)
(Notes last forever)
(Write fast)
(Add to class notes)
(Recopy)
(Memorize notes)
(Understand notes)
(Predict for exams)
(Analyze notes)
(Use practice tests)
(Lab notes)
(What's the point of the lab?)
(Learn by doing)
(Acronyms)
4. Take notes for **every** day of class.
If you miss a day of class, get the notes from your lab partner or friend.
Be mentally active, get silently involved; passive people miss facts **and** the total picture.
Think as you write - don't be concerned with the social scene. A class that horseshoes around will take the same type of tests as a serious class.
Which one will get the better grades?
Focus! What is the point; where is this lecture going?
Anticipate! What comes next? What is the teacher going to say next?
Take notes in **outline** form.
Abbreviate long words or repetitive phrases.
Always make a key for the abbreviations.
Write down everything on the **board/overhead + more!**
Write down some notes to help explain what you copied from the board. You need to understand your notes two years from now!
Write fast.
Leave room to add to them when you read the book
Paper is cheap!
Recopy your notes for the day, if they are not clear.
Memorize your notes before tests. This is the number one technique for raising your grades!
Try to **understand** your notes.
5. Predict exam questions. What questions would you ask if you were tutoring your best friend?
Examine your notes; look for similarities & differences.
• Look for reasons that explain why.
• Look for a complete picture.
• Look for an explanation in **your own words**
Take **practice** exams at home. Time them to assure that you are working at the proper speed.
6. Labs - take notes on the tips given at the beginning of the lab.
There will often be hints that mean little before the lab, but after you have finished, they will make sense. Write them down and write fast. Ask yourself what concepts the lab attempts to convey?
7. Mimic simple problems to solve complex ones.
• Look for examples in the text.
• Look for examples in the study guide.
• Look for examples in the work sheets.
• Look for examples in your class notes.
8. For some memory work it helps to make-up an **acronym** or a sentence using part of the memory work.
ex.) SIGN = Studying Improves Grades Now

(Study alone)

9. Study by yourself. Learning is an individual activity, but you will learn faster by interacting with others. Therefore discuss the material with others in your review group, but memorize on your own.

(Proper atmosphere)

10. Where you study will influence how you study and how effectively that time will be spent. Study in a place with no distractions. Do not study in front of the TV. If you like music, it should low and without lyrics. Always have a comfortable seat and adequate light.

This is Chapter 1 from Getting Started in Chemistry: An Expanded Synopsis with Worksheets by Darwin DeShazer and Charles Buff. Copyright ©1993. The privilege to copy for face-to-face teaching situations is granted to educators.

Copies of the booklet are \$8.00 including free shipping.

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