**Daily Study and Review**

**1. Manage Your Time**

School is a full-time job. And managing your time is important.

* If you have a "real" job after school that you do just for fun (or for some extra spending money), or if you participate in extra-curricular activities (whether school-related or not), keep your priorities in mind: **Your education should come first!**

**2. Take Notes in Class**

Good studying at home begins with good notes taken in class.The key idea of taking good notes in class is to *write down as much as possible*. There are several reasons to take notes that are as complete as possible:

A. It will force you to pay attention to what's going on in class.

B. It will keep you awake (!)

C. There will be less that you'll have to remember.

Should you concentrate on *taking notes* or should you concentrate on *understanding* what you are learning? Paradoxically, I'd err on the side of taking notes, not understanding! Understanding can come later, when you [review your notes](http://www.cse.buffalo.edu/~rapaport/howtostudy.html#copy). But if you have incomplete notes, it will be hard for you to learn what you didn't take notes on.

**3. Study Hard Subjects First & Study in a Quiet Place**

**Study hard subjects first.** Each night (or day) when studying or doing your homework, do those subjects first for which you need to be alert and energetic. Leave the easier, or more fun, subjects to later.

**Study in a quiet place**, with as few distractions as possible. Do *not* listen to music or TV: It is virtually impossible to do two things at once if one of them is studying. (For the evidence on why it is difficult—if not impossible—to do two things at once (called "multitasking"), see:

[Willingham, Daniel T.](http://www.danielwillingham.com/%22%20%5Ct%20%22_blank) (2010), "Have Technology and Multitasking Rewired How Students Learn?", Ask the Cognitive Scientist, [*American Educator*](http://www.aft.org/newspubs/periodicals/ae/index.cfm) (Summer): 23–28, 42.

**When should you study or do your homework?** It's tempting to put off your homework to the last minute. There are at least two good reasons to do your homework as soon as possible and not put it off till the evening, when it's not daylight (although you should certainly take a break between the end of the school day and before starting your homework):

* It's better to get it done and over with, and to leave yourself enough time to do it all. If you put it off, you may find that you have an assignment or two that are going to take you a lot longer than you thought they would. If you start early and get your work done before you relax, you'll have enough time for even those hard assignments (even if it means not having enough time to Facebook or play videogames or read for fun). The general principle is: Don't eat your dessert first!
* You're more awake during the daytime or after relaxing for, say, an hour or so after classes end, than you will be at the end of the day just before going to sleep.

**Where should you study/review?** NOT IN YOUR BEDROOM! Your bedroom is your place and rest and your body automatically starts to relax when you enter it. You should study in a well-lit place at a table with all of your needed materials within arm’s reach.

**4. Read Texts Actively & Slowly, before & after Class**

By 'text', I mean whatever you have to read: It might be a text book, a work of fiction, a poem, an essay, an article from a journal or magazine, or even a class handout. With [one major exception](http://www.cse.buffalo.edu/~rapaport/howtostudy.html%22%20%5Cl%20%22exception), you should not read passively. That is, don't just read the text straight through without thinking about what you're reading. If you read without thinking, I guarantee that your mind will eventually wander off, your eyes will eventually glaze over, and you will fall asleep—it's a form of self-hypnosis. So you must read actively. To use computer jargon, you must turn the inert medium of text on paper to an *interactive* medium, in which you have a "conversation" with the text, as you might if you could be talking to the author.

**5. How *Not* to Study**

Believe it or not, **re-reading your textbook has "little or no benefit" when you are studying for a test.** (Callender & McDaniel 2009). Most students don't realize this, because they have an "illusion of competence" (that is, you think you know the material better than you really do) when they re-read notes and textbooks (Karpicke et al. 2009; Belluck 2011), especially when re-reading *passively* instead of *[actively](http://www.cse.buffalo.edu/~rapaport/howtostudy.html%22%20%5Cl%20%22active)*. One method of studying that is better than passive re-reading is the **"read-recite-review"** ("3R") method: "Read the text, set the text aside and recite out loud all that [you can] remember, and then read the text a second time" (McDaniel et al. 2009).

**6. Study Actively**

Active studying does *not* mean just reading your notes and textbook chapters. Active studying means interacting with the material while you study. Active studying involves creating new study material that will help you to keep the information organized in your mind. Active studying also helps you to see how different parts relate to each other. When you have figured out a new piece of information and believe you understand it well enough, then *write it down* *in an organized fashion*. It is up to you to figure out the best way to organize the material to make it easy to learn. Different students will use different methods depending on their learning style and the type of course. The method you use is also dependent on the type of test you will have (essay, multiple-choice, etc). It is up to you to be creative and figure out the most efficient way that will help you to remember the material later. Whatever you create should be neat and organized. Computer word processing programs will force you to be neat and organized, although they are not necessary. A blank piece of notebook paper can work just as well. **Some methods of displaying information to be learned:**

* **Outlining** – Very effective and works well for social science courses (economics, history, psychology, human development, etc.)
* **Listing** – Effective for learning a lot of new terms. The lists should have some type of organizational structure (by chapter?)
* **Diagramming** – Can be useful for showing how concepts are related. If you are a visually oriented learner, this may be a very effective method.
* **Flowcharting** – Can be useful for showing how one thing leads to another. Particularly effective in science classes.
* **Flashcards** – Can be useful for learning a lot of terms or definitions. *Do not* just memorize the definition. Examples are more effective than definitions. Can you think up an example on your own? Can you explain it in your own words? Give the flashcards to a friend and have them ask you questions. You will find out very quickly whether you know it or not.

This new material that you create should become your primary source of information as the time for the test draws closer. The *process* you go through in creating it will help you to organize the material in your mind. Your goal is to thoroughly understand the major concepts that will be tested. Within the major concepts, your goal should be to understand how all the minor points (terms, definitions, theories, names, etc.) fit together. Pay particular attention to the subtle differences between closely related terms. This process of active studying must begin at least four or five days before the test. It cannot be done the night before. Your mind requires several days to process and store this new information. It is like a puzzle, you may see a lot of individual seemingly unrelated pieces, but it takes time to see how they all fit together.

This process also requires ***effort****.* Thinking and writing requires more effort than just reading over notes. However, the more time and effort you spend thinking about and organizing the material ahead of time, the better prepared you will be, and the less anxious you will feel when the test finally arrives.

Your education is the key to your success….it isn’t just a cliché…..it’s the truth. Examples are all around you. Wake up and pay attention to them.