

# 10 Tips for Smarter Studying

## Research-based practices for studying

**1. REVIEW WITHIN 24 HOURS OF LEARNING.** The first time you hear a lecture or study something new, you can make sure to retain at least 80% of what you learned by reviewing your notes/the material **within 24 hours** of first learning it. Scientists have found that it is more effective to study the materials closer to the day you learned it than closer to the day of the test. So, if you learn something on Monday and the quiz is the following Monday, study no later than Wednesday.

**2. USE ACTIVE RECALL.** In 2009, a professor of psychology advised students not to simply reread their textbooks – simply rereading causes students to think they know the materials better than they do because everything is right in front of them. The professor advised that students should instead use **active recall**: closing the book and saying or writing everything you can remember. This will test your knowledge and cement it in long-term memory.

**3. MAKE CONNECTIONS.** The difference between slow learners and quick learners is, in large part, the way they study: instead of memorizing, quick learners make connections between ideas. Known as “contextual learning,” the process entails an individual student putting information into a form that makes sense to him or her. Try putting all the information you are trying to learn onto one sheet of paper to get a full picture and then try and make connections. Also recall any stories that your teachers told in class while teaching the subject.

**4. LISTEN TO MUSIC.** According to researchers at Stanford’s School of Medicine, if you listen to classical music while you study you will engage the parts of your brain that help you pay attention and make predictions. Listening to music can also put you in a better mood about studying and make it more enjoyable.

**5. STOP MULTITASKING!** You may think you are killing two birds with one stone by texting while studying, but really you’re just killing your studying efficiency. An Indiana University study recently showed multitasking inhibits studying by interrupting the absorption and processing of information.

**6. RELAX.** Here is another reason not to wait until the last minute to study: stress hinders learning. UC Irvine researchers found that even stress that lasts as briefly as a couple of hours can engage corticotropin-releasing hormones that disrupt the process of creating and storing memories. So, taking regular breaks (every 30 min.) to exercise or take a few deep breaths will help your studying if they lower your stress.

**7. GET SOME REST.** All-nighters are no-nos. The best way to recall information is to sleep after learning it. At the University of Notre Dame, students were split into two groups: those who studied at 9:00am and then went about their day, and those who studied at 9:00pm then went to sleep. Both at 12 hours and 24 hours later, when both groups had had a full night's sleep, the ones who slept shortly after studying scored higher when tested.

**8. TAKE THE PRACTICE TESTS.** Some teachers provide their students practice tests. While the benefit of a preview of your instructor's testing style is obvious, a recent study showed students who tested themselves after learning something retained an amazing 50% more of the materials a week later than their peers who did not take a test. When taking a practice test, try and simulate your testing environment as much as possible – don't look at your notes, textbooks, etc. Even if your teacher doesn't provide you with practice tests, you can still make your own and quiz yourself.

**9. USE FLASHCARDS EFFECTIVELY.** Flashcards are an example of active recall, and the Leitner System is the best way to use flashcards. Named for scientist Sebastian Leitner, the system involves moving the cards with correctly answered questions to the bottom of your pile (or a separate pile altogether) and incorrectly answered cards toward the top of your pile. The cards nearest to the top are then studied most frequently and the cards further down in the pile (or separated) are studied less frequently. This forces you to review the material you know the least well -- over and over-- until you learn it.

**10. EXERCISE FIRST.** Your brain benefits from exercise. You can also give your studying a boost by breaking a sweat shortly before you study. Exercise gets blood flowing to your brain more evenly and makes you more alert and able to learn.

*Good luck!!*