

In education, there are three main types of goals: skills, attitudes, and knowledge. The latter, knowledge, takes on greater and greater importance as students progress through the grades. In order to retain the knowledge they need, it is necessary for students to spend time committing information to memory. The key to effective studying is exposing your brain to the information as frequently and in as many different ways, as possible. Simply reading over class notes or a math textbook is one of the worst ways to study - it only provides your brain with one superficial exposure. Copying notes while saying them aloud increases that exposure fourfold (seeing, writing, saying, hearing). Using, or re-organizing, the information also improves your retention as it increases the *depth* of your exposure (your brain not only receives the message, it does something with it). The strategies listed below are only the start - you may come up with ideas of your own, or your teacher may share ideas in class.

1. Re-copying Notes

Re-copying notes is a great way to study material that has was covered within the last week. It not only exposes you to the material again, but it also helps to keep your notebook much neater. If there are any words or concepts that you do not understand, you should look them up in a textbook or reputable online source as you re-copy.

2. <u>Organizing Information</u>

Making charts and tables to present information will often make recall much easier. Make sure the table is neat because often times you will be able to *see* it in your mind and you will want to be able to read what you see.

3. Taking Notes From Text

Believe it or not, this can actually save you time! By reading the material you are responsible for knowing, thinking about it, and writing it out in your own words, you are creating a succinct study guide, and exposing your mind to the material three times (once reading, once thinking, and once writing). This form of study is particularly helpful if you put the notes into your own words. When you take notes, use headings for each section of text, and take notes on one paragraph at a time.

4. Study Cards

Study cards can be used in a variety of ways. They can be used as "flash cards" for quick drills, game cards for "Trivial Pursuit" or "Jeopardy" type games, or they can be placed around the house so you will see them and use them throughout the day. Study cards usually have a word or question on one side, and the definition or answer on the other. ***These are great for vocabulary! You can often find these online, pre-made by other people who have studied the same material, but it is better to make up your own.

5. Self-Test

Don't waste your time! Test yourself, then spend most of your study time on the material you <u>don't</u> know. Of course, you should also review that which you do know so you won't forget it. There are many ways to test yourself but be sure the test is similar to the type of test you will have in class. If you need to be able to write answers, as is often the case, you should make up a written test one day, then take it the next day. Parents can also be a great help by making up and marking a test for you. ***Start studying right away - be sure to do the corrections for your self-test.

6. <u>Idea "Map"</u>

As you study, you should try to figure out how the various bits of information are related to each other. It is easier to remember a large number of things that are related than the same number of unrelated facts. Remembering how evaporation, transpiration, and condensation fit into the hydrological cycle is usually easier than memorizing each of these processes in isolation. (This ties in well with "Organize Your Information.")

7. Record Your Notes

Some people remember things they say or hear better than those they see or write. If you are one of those people, try making notes on paper, then recording them on an mp3 player or phone, and listening to them. You can even make up songs if that helps.

8. <u>Sketch Map</u>

One of the most effective ways of memorizing the locations of things on a map is to draw the map from memory, then label it. Don't get too hung up on details, just make sure it looks approximately right. Doing this will force you to visualize the information clearly which is one of the keys to memorization.