Memory Power for Facts and Concepts

Use this Four-Step System to master and retain facts and concepts in Anatomy, Biology, History, Geography, Foreign Language Study, Law, Real Estate, or for any other information that you want to learn.

The Four-Step Memory System

**Step One**  Selecting Information

**Step Two**  Making Up Your Memory Slips

**Step Three**  Studying with Memory Slips

**Step Four**  Reviewing with Memory Slips

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**Introduction**

A memory system is nothing more than an efficient and effective way to learn the thousands of facts and concepts that must be mastered to succeed in today's information society. Learning and remembering facts, formulas, definitions, and concepts is especially important if you are enrolled in courses where success is measured by how much you can remember on quizzes and tests that are based on textbook material and class lecture notes. The Four-Step Memory System that is described here is based on recent research in the psychology of learning and makes use of those characteristics of memory that have been identified as critical to efficiency and effectiveness. If you use this four-step system exactly as it is described here, you will not only master the facts and concepts that you need to understand your course material, you will also get better grades in your course examinations.

Here are seven reasons why you should consider using the **Four-Step Memory System:**

1. It is easily learned and can be used almost anytime and anywhere.

2. It is an interactive way of learning. You cannot daydream when you use this method. Every minute of the time you use to study with this system is learning time.

3. You will get more out of your studying/reading and make better lecture notes when you know the definitions of key words found in your textbooks and used by your instructors in their class lectures.

4. You will be better prepared to take in-class examinations which are given more and more as objective tests on machine-scored forms.

5. You will increase the number of times you spend studying the important facts and concepts in your courses without increasing the amount of total time that you spend studying.

6. You will have tested yourself on the course content before your instructor does and you will not only know the material, you will know that you know it.

7. This system works. Thousands of high school and college students have used the Four-Step Memory system successfully to get higher grades in their courses.
Step One: Selecting Information

Identifying what you must study is obviously the most important step in learning. Your main sources for study material are your lecture notes and course handouts, textbooks, and any course quizzes or tests that you have taken during the semester.

1. Look through our lecture notes and course handouts for main ideas, important facts, definitions, and any information that you have identified as possible test material.

2. Go through your textbook and consider the following for study:
   - Chapter titles and section headings to give you the organization of the material
   - Any text material that is underlined, italicized, or printed in boldface type
   - Chapter key words listed at the beginning or end of the chapter
   - Chapter outline at the beginning of the chapter
   - Chapter summary at the end of the chapter
   - Questions and problems at the end of the chapter
   - Any charts, illustrations, graphs, or diagrams
   - Formulas and equations in math and science texts

3. Find a fellow student that you can study with. Go through your lecture notes and textbook material together to select material for your memory slips. Try to predict the information that your instructors consider important and also what questions they will probably ask on tests. Consider sharing your study method with your instructors at their regular office hours.

Step Two: Making Up Your Memory Slips

After you have identified the material in your textbooks and lecture notes that you want to learn, you will need to make up a batch of blank slips and put this information on the slips. Use regular lined notebook paper cut up or index cards for your slips (sizes of about 3” x 5” or 4” x 6” work well).

- Write or print the information on each slip. Put part of the information on one side (Side A), the rest on the back of the slip (Side B). As you do this, tell yourself that you intend to remember this information and recite aloud the information that you are putting on the slip.
  - This intent to remember is a necessary and powerful factor of remembering. Reciting the information as you write or print it also aids in remembering.
- Use one slip for each fact, definition, concept, or formula.

Study the sample memory slips on this page and the next page. They illustrate many different types of Memory Slips and should give you some ideas for your own slips.
### Side A

#### Art History (Identification)

The Thinker

#### Chemistry (Formula)

specific gravity (formula)

#### Sociology (definition)

Having to do with the origin and preservation of the group

#### Spanish (vocabulary)

<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>lunes</td>
</tr>
<tr>
<td>Friday</td>
<td>viernes</td>
</tr>
<tr>
<td>Tuesday</td>
<td>martes</td>
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<tr>
<td>Saturday</td>
<td>sábado</td>
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<tr>
<td>Wednesday</td>
<td>miercoles</td>
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<tr>
<td>Sunday</td>
<td>domingo</td>
</tr>
<tr>
<td>Thursday</td>
<td>jueves</td>
</tr>
</tbody>
</table>
Step Three: Studying with Memory Slips

After you have made up your memory slips, begin studying with them by following the procedure below:

1. First shuffle the slips. Get them out of order. Since your instructor seldom writes tests in which the information is neatly arranged as it is in your textbook or lecture notes, you should learn the material so that you can recall it independently of its place in the chapter or notes.

2. Count off 7-10 slips for your study session. That is the maximum number of slips that you should try to study the first time. According to a study of short-term memory that a Harvard professor did in 956 and was repeated 15 years later, most of us are limited in our capacity to remember more than seven items the first time that we hear or read them.

3. Look at the first slip. Test yourself on the information it asks for. Give your answer aloud or if that is not convenient, write it out on scratch paper. Immediately turn the slip over and verify your answer or see the correct answer that you could not recall.

4. If it is correct and complete, put a check mark at the top right-hand corner of the slip on the question side (Side A).

5. If it is not correct or complete, put an X mark there instead.
   - If you want a more detailed record, add the date and time to the check or X mark. Don’t spend much time trying to get the answer. When you do not know the answer, study the slip before going on to the next one. Repeat aloud the question and answer. Think of ways to associate the answer with the question.

6. Continue through the rest of this group of slips repeating the procedure described above.

7. Stop at the end of this group of 7-10 slips and turn to something else for an hour or two. Read your text assignment or do some problems in math, physics, or chemistry.

8. Go back over your slips a second time. Don’t forget to shuffle them before you begin. Record your score with a check or X mark at the top of each slip. If you did pretty well, count off an additional 7-10 slips and repeat this study procedure. Remember to recite aloud or write out your answers for maximum learning effectiveness.

9. Limit yourself to 14-20 new memory slips in any one subject per day.
Step Four: Reviewing with Memory Slips

The secret of effective learning, whether it is in sports or academics is practice and feedback. Practice means doing it over and over until you get it right. Feedback means knowing that our performance is skillful or that it needs correction and more work to get it right. In this final step, you work on your memory slips until you know the material and know that you know it. The check and X marks on your memory slips are evidence of your mastery of the concepts, definitions, formulas, facts, or complex ideas that you need in order to master the course content and to pass course quizzes and tests. The procedure for this step is outlined below.

Carry your slips (and a pencil) with you at all times.

- Almost every day you find yourself with a gift of TIME, five to ten minutes; not enough time to read your text or do problems or other assignments—but time enough to review your memory slips if you have them handy. Use them while waiting at the supermarket checkout counter... outside your instructor's office... stuck in traffic... while cooking or washing dishes... during TV commercials... in the bathroom... while feeding the baby... walking from classroom to classroom... at the doctor or dentist's office ... while exercising on a stationary bike...

Shuffle the slips first. Then go through them one at a time.

- Remember to recite the answer out loud or write it down on scratch paper. Don't spend too much time trying to recall the answer. You know it or you don't. Always verify immediately the correctness and completeness of your answer by looking at the other side of the slip. When you are right, put your check mark on the slip. When you are wrong, put an X on the slip and spend time studying the question and answer and figuring out how you can remember it.

Continue through as many slips as your time allows.

- In this step, you are not limited to 10 slips. You can review as many as you want and for as long as you are able. Repetition is the key to mastery.

Review slips from back to front.

- When you have three consecutive check marks on a slip, turn the slip over and review it by looking at the answer and guessing the question or stimulus. Follow the same procedure until you have three consecutive check marks on both sides of each memory slip.

Give problem slips special attention.

- When you see that you have two or more consecutive X marks on a slip, put it in a separate pile for extra study and some special attention. This separate pile will require added concentration and understanding so you can master each slip.

Continue to review on a regular basis.

- Even after you get three consecutive check marks on your slips, continue to review them until you have taken your test or have completed the course.
Review of the Four-Step Memory Slip System

- Go for the big picture first. Start with slips that show the organization of a textbook chapter or a class lecture.
- As you make up each slip, tell yourself that you will remember the information you are putting on the slip.
- Study only 7-10 slips at a time the first time through.
- Always shuffle the slips each time that you use a group of them for study or review.
- If you don’t know the answer almost immediately, flip the slip over, look at the correct answer, and spend some time studying what you did not know.
- Use a check mark to verify that you knew it or an X mark indicting that you didn’t know it.
- Go to three or four consecutive checks on both sides of each slip to insure mastery of the material.
- Carry your slips everywhere with you. They fit easily in shirt pockets and purses.
- Review all your slips regularly up to the final exam.

Take your course with confidence. Keep in mind that you have tested yourself many times and that you know and will remember the material that you have studied.