

Memorization

You never forget something you have learned, except in cases of injury or disease. You may fail to acquire or retrieve information when you need it, but you do not forget. It cannot be erased. Consider the forensic hypnotist.

Think of your brain as a camera and your memory as a piece of film. If you light your subject well and leave the shutter open, it will create a strong impression on that film. If you don't, the impression will be weak and harder to perceive against the backdrop of the whole image.



Fortunately, if you want to strengthen a weak image (memory), you can: just open that shutter and give it more light! If you don't, overlaying images (memories) will interfere and make it hard, if not impossible, to discern.

So, intention and interest are critical. If you want to remember particular information, give it your focused attention up front and review regularly to reinforce the original impression. This allows you to memorize quickly and accurately.

Memory is also strengthened by association—by building upon what you already know. Immediately associating a new idea with information already firmly lodged in

your mind revives and strengthens the old memories and anchors the new information. It is easier to add new ingredients to a recipe you know well than it is to learn an entirely new one, for example.

Strategies

In class and while studying:

1. Intend to remember. This primes the memory and improves recall by 20 to 60 percent. It's important to get a clear, sharp impression of the face, name, date, or facts you want to remember the first time. If you memorize bad information, it takes a lot more effort to blot it out.
2. Use half of your study time to read and the other half to apply the new material. Think about its relevance to you, explain it to someone else, summarize it in writing, or find a unique or meaningful way of using it. Review before a test.
3. Use chunking. There are limits to how much we can recall at once, but these limits expand when the material is meaningfully organized. Cluster ideas around a heading or category. One item may serve as a cue to another during a test.

Consider the following example. Which shopping list do you think would be easier to remember?

- ☐ Milk
- ☐ Bananas
- ☐ Eggs
- ☐ Cheese
- ☐ Broccoli
- ☐ Yogurt
- ☐ Onions
- ☐ Chicken

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- ☐ Broccoli
- ☐ Chicken
- ☐ Eggs
- ☐ Milk
- ☐ Yogurt
- ☐ Cheese

These items are all plants (and they spell out BOB).

These naturally go together, too (Which came first? Now we know!).

These are all dairy items (that go from liquid to solid).

4. Condense and summarize—this takes less time. Think bulleted lists instead of paragraphs, sentences instead of pages.
5. Mnemonic devices can help you organize new information, either classic acronyms such as Every Good Boy Does Fine to represent the lines on the musical staff EGBDF, or your own original systems. Memorize these completely or a small error is likely to throw everything off.
6. Use rhymes, Venn diagrams, unusual images or sequences—for example, remember grocery items by visualizing a walk through the supermarket.
7. Eliminate distractions:
 - Use a cue. For example, wear a certain baseball hat that tells others you're studying and don't want to be disturbed. Use your desk to read, review, and write, and only use your bed to take a break.
 - Screen out distractions with sound (like white noise) or an unobtrusive visual background.
 - Prepare everything needed before you begin, such as a lamp, pencil, paper, books, a comfortable chair, etc. Always rest before focused study.
 - Record stray thoughts on a separate note pad, but don't act on them. You can also make a to do list before you start or as a study break, to get random thoughts out of your head.
8. Check your concentration as you go, near the end of each page or even more often if the reading is dense in facts, definitions, equations, etc. Practice identifying the main idea by restating it in your own words.
9. Use all of your senses. Draw ideas out, trace them over and over, look for unique visual patterns, explain it to somebody, rehearse for the mirror. By using and combining all of the impressions your senses gather about one thing, you will remember it much more clearly than by relying on sight alone.

For example, read the material aloud. Your eye will take in the appearance of the printed word, your ear will pass the sound of the words to your brain, and even the tension of the muscles of your throat add to the total impression.
10. Erase to remember. Write out what you need to recall for an exam completely in pencil. Progressively erase words as you memorize them.



Examples

The top four memorization techniques used by students to memorize information include:

1. A visual inspection strategy in which students carefully study the visual appearance of objects.
2. A word-based strategy in which students make up sentences about the objects.
3. A mental image strategy in which students form interactive images of the objects, similar to cartoons.
4. A memory retrieval strategy in which students think about the meaning of the objects or associate personal memories with them.

Imagery

Problem: you need to pick up the dog from the groomer, balloons for the party tonight, your sweater from the dry cleaner, and cupcakes from the bakery. How will you remember and get everything done?

Answer: combine all the things you have to remember into one picture: imagine your dog running around in your sweater while he has balloons tied around his midsection and is eating a cupcake.

Association

Problem: You need to remember the phone number is 737-7887. How?

Answer: A 737 is an airplane and your grandma happens to be 78 years old. The last two digits of the number are just her age in reverse. Once you repeat that to yourself a few times, it will be easy to remember the phone number: type of plane + Grandma's age + Grandma's age backwards.

Keyword

Problem: How can you memorize this week's set of Spanish vocabulary?

Answer: First, select a key word in English that sounds like the word you need to learn. Next, find an image which involves the key word with the English meaning of the foreign word. For example, consider the word "cabina" which means "phone booth." For the English keyword, you might think of "cab in a...." You could then invent the image of a cab trying to squeeze into a phone booth. When you see the word "cabina" on the test, you should be able to recall the image and the definition.

Kinesthetic Association

Problem: you're touring the Museum of Modern Arts in New York with a small group of fellow students and need to memorize the names of the artistic works you see there. What do you do?

Answer: stop in front of each exhibit as a group and stage a mini-play about each. Have one person narrate while the rest act out the story and include the name of the work and artist. Touch or manipulate the objects in a meaningful way if possible.

Acrostics

Problem: you have a lot of technical terms to memorize before finals for a number of different classes. How are you ever going to remember it all?

Answer: make acrostic sentences for the tough stuff. For example:

The sentence "A cow eats grass" will remind you of the spaces in the base clef for the left hand on the piano for your Music class, or A C E G.

The sentence "Please excuse my dear Aunt Sally" will help you remember the order of operations in Math: parenthesis, exponents, multiplication and division, addition, and subtraction (all from left to right).

The sentence "King Philip can only find green snakes" will help you memorize the order of classifications in Biology: kingdom, phylum, class, order, family, genus, and species.

Rhythms, Rhymes, and Jingles

Problem: you need to know how many days are in a particular month, but don't have a calendar handy. This happens all the time! What now?

Answer: use a catchy tune or rhyme—there's no need to rack your brain for the answer. For example:

Thirty days hath September,
April, June, and November;
All the rest have thirty-one,
Excepting February alone,
And that has twenty-eight days clear
And twenty-nine in each leap year.