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## HOW DOES MEMORY WORK?

Human memory works on two different levels: short term memory and long term memory.

## Short term memory

This includes what you focus on in the moment, what holds your attention. Most people can only hold about 7 items of information in short term memory at any given moment, although some can hold up to nine.

Look at example A below. Then look away from your computer screen and try to hold it in your short term memory.
$A=6593028$
Most likely, you can hold it as long as you choose. Now follow the same procedure with example B.
$B=573927450621$
It's much more difficult, if not impossible, for most people.
Short term memory is exactly what the name says: short term. To learn information so you can retain and recall it, you must transfer it from short term to long term memory.

## Long term memory

This includes all the information that you know and can recall. In many ways, it becomes a part of you. Once information becomes a part of your long term memory, you'll have access to it for a long time.

## FROM SHORT TERM TO LONG TERM

How do you move information into long term memory? Two of the ways are: rote learning and learning through understanding.

Rote learning means learning through repetition, mechanically, with little understanding. For example, as a child you probably memorized the alphabet and the multiplication tables by rote.

Learning through understanding involves learning and remembering by understanding the relationships among ideas and information. Rather than using rote memory, you use logical memory when you learn through understanding. For example, you use logical memory when you remember main ideas and supporting details from a lecture not because you repeat the ideas in your mind, but rather, because you understand them.

Both types of learning and memory are useful and often are used together. For example, in history, you need to relate facts (like dates) which you memorized by rote to your understanding of historical concepts (like the Civil War).

## THE KEYS TO REMEMBERING

You can learn to remember more effectively if you learn and use the four keys described below. Each one helps you to enter information into your long term memory.

Choose to remember. Be interested. Pay attention. Want to learn and know. What you want is an important part of learning. People learn more effectively and remember more when they are interested and want to learn.

How can you choose to remember? One way is to take a few moments to choose to learn before you read or listen to a lecture. Sit calmly, take a few deep breaths, and tell yourself with your inner voice: "I choose to remember what I learn today." Repeat this a few times, and then begin.

Visualize or picture in your mind what you wish to remember. For many people, a mental picture or visualization is clearer and easier to remember than words. For each major concept that you want to remember, create a mental picture and then look at it carefully for a few seconds. Once you've seen it clearly, you'll probably be able to recall it.

If you are not a visual learner, you may find that you need to improve the quality of your mental pictures or images by practicing. Look at a picture, object, or photograph, then close your eyes and try to see it in your mind's eye. Practice this for a few moments each day.

Relate the ideas and information you wish to remember to each other and to ideas and information you already know. When you relate information to other information, you create a chain of memories which lead to one

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another. When you label an information chain or group of ideas, you create a kind of "file" that makes it easy to locate and remember the information.

You can help yourself to relate information by using mental pictures, visual organizers, or by outlining. Repeat what you wish to learn until you overlearn it. Say it in your own words. Even though you've already learned something, go over it one more time. Research shows that the time you spend on overlearning and putting ideas into your own words will pay off by making recall easier and more complete.

