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Learn How You Can Unlock The Secrets To A Perfect, Computer Like Memory In Just 5 Minutes A Day. Breakthrough combination of Memory Improvement teaching and training techniques will show you how to boost your memory power and see maximized results faster than ever before!  
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## Welcome to Memory Improvement Techniques

Some of the following memory techniques are samples from my memory improvement package. I have taken some chapters from the main book as well as from the bonuses in order to give you a solid understanding of the basics.

As a rule, anything to be remembered can be readily associated with something else that will be a part of the environment at the time when the act of memory should occur.

Suppose for example, that it be necessary to ship a box by express in the morning, without a moment of delay. If we form a mental picture of the box resting upon the breakfast-table, we become assured of remembering this at the proper time. It requires only that we should concentrate on a concrete visualization of the box on the breakfast-table.

The ludicrous is readily remembered by almost all persons, and for that reason an absurd combination is even better, since it tends to make the picture distinct. Let the eggs be smeared over the parcel, if you will. If small enough, thrust it deep into the marmalade jar, or let it float on your coffee. Only, be sure that you have the exact image of the combination photographed on the brain.

Then, if one of the things in the picture is seen on the breakfast-table, you will remember to send the package. This is a simple method of recalling to mind a thing to be done at a certain time.

Form a mental picture in which the thing to be remembered is concretely associated with a place in which you are sure to be at the time when the thing should be remembered.

Most of us have a definite routine in our lives, such that at a certain time we shall be in a certain place, and of that place we have an exact picture of imagination. If you have to be at an appointment in an office building at 10AM, you may have difficulty remembering the time. 10AM and office building do not have an association formed between the two.

The same for a telephone number, a license plate, or a string of numbers. They are meaningless when standing alone.

The key to remembering, then, is to create an association between objects. Picturing an office building as two towers, one looking like a '1' and the other like a '0' when we picture it in our minds, associates '10' with office building - and, in turn, our appointment.

Sometimes associations are obvious. Mr. Katz, who has whiskers, would not involve much effort to create an association between the name and person, but what if such an association isn't as obvious?

If the association between two items is not obvious, we have to use our imagination and use various devices to create these associations. It's not necessary that these associations be creative or even logical. The more outlandish we make them, the stronger the impression they will make and the better we will be able to remember them.

Start by visualizing. Can you take one object and somehow incorporate the other object into the same picture? If I gave you 'snake' and the letter 'S', I'm sure the first thing you would think of would be a snake in the shape of a letter 'S'.

However, what if the object cannot take the form of a letter 'S' - then what? Let's look at the following list:

-dog

-money

-car

-table

Let's say we want to associate the letter 'S' with each of these objects. As with anything, some are going to be easy, others aren't. Those that aren't are going to require a bit of imagination. Those items requiring imagination and some thought are going to make a more vivid impression and stay in our minds.

'Dog' - think of a dog with a very loose spine, so loose he can bend in any direction. Imagine him now asleep on the floor twisted into an 'S' shape. Or,

think of him with part of his fur shaved away in the shape of an 'S' - the mark of 'Sorro'.

-'Money' - this is easy. Just think of the sign for money – an 'S' with a slash through it - '\$'.

-'Car' - picture a car with a big 'S' on its dashboard, or its license plate is just the letter 'S'.

-'Table' - think of a table with one of its legs in the shape of a letter 'S'.

The relations don't have to be realistic nor do they have to be unrealistic. They have to stand out in your mind though. They have to be such that when you look at the first object, your mind is immediately drawn to the second, similar to the train of thought that takes you from 'apple' to 'red' to 'fruit', etc.

We are constantly faced with information overload. We have to sift through thousands of facts daily and decide what to keep and what to throw away, often subconsciously. Scientists have listed over forty different names for different types of memory. Most of these categories are defined by their recall - how quickly and under what conditions do they need to be retrieved and put into use. The very ability to translate sensory input into symbols, symbols into sounds and sounds into syntax to form language is an ability believed to be truly unique to man. Animals may react to sounds but it is the human ability to create meaningful syntax from that sound that is truly unique. You would not understand these sentences otherwise.

Although our piano teacher may have said over and over again, "Practice makes perfect", repetition is not always the most efficient memory device. Our memory for past events cannot retain heavy doses of the same thing. It may be difficult, if not impossible for people to remember exactly what they had for lunch everyday during the previous week (excluding those who always eat the same thing). Episodic memories tend to blend in our minds. Memories that are unique (eating at a different restaurant with a friend) tend to stand out. The 'first-time' experience for an event is usually the strongest. School days may melt into one, but the first or last day of school will stand out. Episodic events that are unique tend to stay fresh; it is their uniqueness that makes them that way. Strong emotional moments also maintain their impact. The semantic memories - remembering poems for example - are the ones that benefit from

repetition. Learning a vocabulary through flash cards allow one to repeat the event and form an indelible memory (until the exam is over). Our short-term memory - where we hold the telephone number until we dial it - is our holding-area. We can retain the information from there or throw it away. It is believed this short-term memory area has a limited holding capacity. The magic number seems to be seven (the famous reason why phone numbers are seven numbers). This seven figure can take the form of individual elements such as numbers or as chunks of information. That is the reason one divides memory information, such as telephone numbers, into more memory palatable groupings - area codes, exchanges, etc.

Most memory experts agree that in order to remember something we have to pay attention in the first place. Most of us ignore what is going on around us. We do this by a process called 'perpetual filtering', this allows us to block out the immense amount of irrelevant input that surrounds us in daily life in order to focus at the task at hand. Moviegoers lose themselves in the picture and ignore the surrounding theater, bookworms are oblivious to the daily everyday noises. However, too much filtering can numb us to the wonders of life as Henry David Thoreau observed. Beginners and children have not yet developed the correct filtering skills. They are observant to everything. Experience allows part of the environment to become more important than the other.

One can learn memory techniques - they're basically easy.

It is believed we have room for between five to nine pieces of information. One of the reasons phone numbers were made seven characters long was just that reason - it's the median memory amount we can store temporarily (until we dial the number).

Now the question is - don't we remember more than just seven digits of a phone number at a time - what about the area code? How does this work? Simple, we have the ability to gather or 'chunk' information into groups and each group that we form becomes one item of information.

Say we want to remember an address:

Mary Smith  
68 Memory Lane  
Wistful, KS 99882

We have thirty-five characters to remember - how do we do it. Our mind starts by organizing the information:

Item 1: Name (Mary Smith)

Item 2: Street Address (68 Memory Lane)

Item 3: Town (Wistful)

Item 4: State (KS - Kansas)

Item 5: Zip Code (99882)

Now the information is in more manageable terms.

If something is meaningful, it is easier to recall. In fact, the more meaning, the more likely you're paying attention in the first place. We also tend to remember things that interest us. How many school age boys remember every pitcher on every baseball team in the country, but can only remember a handful of presidents?

Creating meaning is the secret behind very many memory techniques. However, quickly, we can give meaning to material right away. First, organize it. When items are arranged in a certain organization, their identify and even position take on meaning. We will use this when memorizing lists of numbers.

Which of the following strings of numbers would you think easier to remember:

3145769927      or      (314) 576-9927

and why?

Another very strong way to make something meaningful is to connect it. You're going to see this used quite often for recall. We make something meaningful by connecting it to something we already know. There was an old spelling rule in school - 'the principal is a prince of a pal'. Do you see how you can remember it by something meaningful - the word pal? You know how to spell the word 'pal', now relate that back to the word you're trying to remember with meaning - and it stays.

The shape of Italy is easier to remember than the shape of France. Why? It's in the shape of a boot, while the shape of France requires thought.

## **Focusing Attention and Creating Meaning**

No matter what memory technique one learns, it is going to fall back to two important principles: focusing attention and creating meaning. You'll find, once you've studied memory techniques for a while, that they eventually sound similar - the applications change. So, let's start by discussing various ways to focus attention and apply meaning before we continue any further.

Memory techniques are methods meant to utilize your natural memory skills as described above. Start by being sensitive to how your memory works.

Your basic five senses are sight, hearing, touch, taste and smell. In addition you have a kinesthetic sense which transmits your body movements to the brain. Be sensitive to your sensory input. The more aware you are of what your senses are detecting, the more memory traces you can gather and the experience will be easier to recall.

For example, when you are introduced to a person, observe the following by using your sensory input:

- Visually observe the hair (or lack) - the color, shading, style and texture. The eyes - what color, shape, expression, unusual facial features, body size, shape, carriage, unusual gestures, style of clothing?

- Listen to the voice, is it light or husky, does the person have unusual speech pattern, certain favorite expressions?

- Does the person have a unique smell - perfume, shaving lotion, etc?

- If you shook the person's hand - how was the grip, tense, relaxed? Was the skin soft or rough?

- Also, notice the personality - outgoing, introverted, etc.

Our sensory input is the first step in remembering something. Often, some sensory input will trigger a particular memory. Think of the times that a certain

smell jolted your memory of something long forgotten. What happens when you hear a song that you haven't heard in years?

People tend to vary in the reactions to sensory input, some may be more aware of what they see rather than what they hear, others are the opposite. For many people, the sense of smell is more powerful than they realize.

Need to remember something quickly - think of a rhyme - 'Susie Klein can stop on a dime.'

Remember the rhyme 'Thirty days hath September, April, June and November - all the rest have thirty-one except February'? It's a good way to remember how many days there are in a month. If you have to remember similar information, see if the individual data elements can be strung together in a rhyme. Repeating the rhyme at various intervals will aid in its later recall.

Sometimes it's not that easy to find a connection, in that case, try creating one. Do you want to remember what time during the day you should be doing a certain thing? Start by associating each hour of the day with a particular activity:

7AM - Getting out of bed

8AM - Feeding the bird

12Noon - Eating lunch

5PM - Coming home

6PM - Watching the news

11PM - Going to bed

Now when you have to do a certain task at 12 noon, think of yourself eating lunch, having to put down your fork and running off to do whatever it is. Have to do the same thing at 8 in the morning? You're feeding the bird, all of a sudden you drop the bird seed because you have to run off and do your task. That way you'll be able to form an association between a certain hour of the day and whatever it is that you have to be doing at that particular time.

These, of course, don't have to be actual events you perform, but just a mnemonic device for forming associations. What is important - you have a way of forming an association. Association is very important in recall. It is a way of forming a trace to a memory element.

If you have a large amount of information to remember - try sorting them into groups. Memorists like to refer to this as 'chunking'. Grouping things strengthens the memory. For shopping lists - organize by dairy products, canned goods, vegetables, etc. If the groupings go over the magic number seven then try breaking them down into subgroups under different headings similar to what one does with phone numbers and addresses. It is easier to remember something that is organized than something that is scattered.

Again, spending the time to group up front will shorten the time necessary later to recall the information.

If you have an important event such as a speech or a presentation - try reviewing the event in your mind. At the start of the day - look at your schedule and review the tasks in your head - how can you link the chain of events together - what associations can you make?

The real test of memory is that which we can remember stand alone. A memory artist was able to recall the name of everyone in his audience (after being introduced only once when they entered the theater).

Most of us will never have to memorize several hundred people on a first name basis (it would make an impression though). However, we do, in the course of our lives, have to remember names, facts and other information off the top of our head. The ability to do this can come in handy - how many times do we see a phone number for something and just don't have a pen and paper to write it down? Wouldn't it be great if we had some means for doing it without any outside aids?

Techniques for remembering information are known as 'mnemonics'. The name comes from the Greek goddess of memory - Mnemosyne. It refers to any means, stand-alone or not, for remembering something.

Mnemonics are often referred to as 'tricks' as in magic tricks, but they really are not. They are based on all the information we have about memory and how our mind works to remember things that have been described above. They are ways of using our natural ability to recall information and adjusting it to the task at hand. Most mnemonics prefer to call these methods 'techniques' rather than 'tricks'. A 'trick' implies some unknown ability.

Internal memory techniques have been around for centuries.

The earliest mention in a work on Oratory attributed to Cicero. In those days, one didn't have notes - one had to remember off the top of one's head. Up until

the last century, illiteracy was not uncommon and one could not depend on notes. The ironic thing is that the techniques described by the Romans and Greeks are similar to the ones we use today. Times may change, but how we remember things seems to remain constant throughout human history.

How do memory techniques work? They cause us to both focus and find meaning and at the same time they are created to use our memory in the way it works best, by associations and links mentioned above. You have probably been using simple forms of memory techniques throughout your life.

Remember the phrase 'Columbus sailed the ocean blue in 1492'? We've created a rhyme which we remember. Rhymes are common memory aids.

How do you remember which spelling of stationary/stationery to use?

'Stationery is for a letter' - the 'e' in letter corresponds to the 'e' in stationery and we know that the spelling 'stationery' refers to note paper and the like.

Finally, how many had to remember for their science course 'ROY G. BIV' - the colors of the rainbow - Red, Orange, Yellow, Green, Blue, Indigo, Violet?

As you can see from the above examples, memory techniques have been a part of your life for a very long time.

## Link Method

One of the most popular memory techniques is the Link Method. It is easy to use, has a wide range of applications and can be very effective if used properly. It requires a bit of imagination and thought, but both of these are strong memory boosters when used correctly.

The Link Method is a group of associations made between items in a list - one item leading to a cue for the next. In addition to being able to recall all the items on a list, one is also able to memorize the order of the items in the list.

One starts by taking the first item on a list and making an association between that item and the next one on the list and, in turn, the next. The problem, of course, would be forgetting one association on the list and, so possibly forgetting the rest of the list. Creating a running story is helpful in strengthening the association and makes it easier to remember. The more imaginative the story, the better.

Let's take the following items:

-cat

-rice

-hat

-pigeon

-fence

I purposely chose items that seemingly have nothing to do with one another.

Let's start with the pure Link Method. Imagine a cat - a Siamese Being from Siam he only eats rice. We have the first two words connected. Now imagine the rice being served to him in a hat. A pigeon comes along and starts to eat the rice. The cat doesn't like it and chases him away. He lands on the fence.

Everything in the story flows into the next. It is important that the images in one's mind be as vivid as possible. Try to note details about the cat. It's important that he be a Siamese for the sake of our story line. Imagine clearly the color points of a Siamese cat. Imagine his eyes as being Oriental.

Picture the rice - is it white or colored? What makes a stronger impression?

We said the rice was in a hat - what type of hat - a large fedora that is easily filled with rice and keeps its shape will make a stronger impression than a cap that falls loosely even when filled.

A pigeon comes to land. Make it a street pigeon with gray, white and black markings. If you make it white, you'll mistake it for a dove. The cat is interrupted from eating. Watch him stop and look up at the pigeon knowing what the pigeon has in mind. Also, will the pigeon be tastier than the rice?

Imagine the cat making a move towards the pigeon - it doesn't have to be a big leap, just enough to scare the pigeon away.

Imagine the pigeon in flight. Notice how quickly he can fly away. Notice how he lands on the fence. What type of fence is it - a picket fence or a chain link?

Notice the amount of detail I've used when I describe each object. The more detail you have, the more involved you get with the description and the stronger the image and the ability to recall.

The list method used three important elements in memory recall:

Association - This is making an association or linkage between what you are trying to recall and a certain method or object. In the above example, I associated rice with cat, hat with rice, etc. When creating these associations, it's better to form your own instead of using any standard, since these associations will have particular meaning to you. Anything that has meaning to you will, of course, be easier for you as an individual to remember.

Associations between objects, even those that are seemingly unrelated, are formed by several ways:

- Placing an object on top, beneath, behind, in front of another.
- Causing one object to be thrown or knocked into another (in other words some type of strong physical impact).
- Merging the two together so to form one object or to change the object into something else.
- Entwining the two objects around each other.

- Rotating, dancing or moving around each.
- Sharing a similar physical characteristic.

Location - this is the setting in which you set your associations. Changing location with each different list will help you to keep them separated in your mind. In the sample above, we could have used the backyard of a house, a room in the house or a restaurant and still keep the logic of my story intact.

This type of memory technique may come naturally to someone with a good imagination but surprisingly it may be an excellent tool for someone who's imagination is not that obvious, or rather, one who doesn't use his imagination that much since everyone has an imagination.

Take the following list:

- tree
- pencil
- computer
- felt
- can

At first glance they may all seem unrelated, but with a little effort and applying the association methods I listed above, you can see how surprisingly easy it is.

Start by picturing a tree. Think location now - where is the tree? Look at the rest of the list. A tree is often considered an outdoor object, but we have two indoor objects - pencil and computer - how are we going to combine the two?

Imagine a room with a window and there's a tree outside - we know it's a tree because we're on the second floor and only a tree would grow so high we'd see it outside our window. The tree has leafy branches - a good tool to start forming a link. The branch grows into the window and grabs a pencil from a desk - notice the use of action and outlandish incidents. It's like watching a cartoon.

At this point we change the action from the tree to the pencil, we want the pencil to be doing something that will cause it to link with a computer. Imagine

that the pencil was startled when it was grabbed by the tree. It starts to scream. Who could forget the image of a pencil screaming?

There is a computer sitting on the same desk as the pencil. Again we use our imagination. The computer was asleep, but the screams of the pencil wake it up.

Not only do we have a link at this point between three objects, but we are also creating a story with vivid images. Furthermore, the story has imagination. It unusual - and the unusual will stay in our minds.

Imagine now the computer grabbing the pencil to prevent it from being pulled by the tree. It slides along the desk because it's resting on felt. Here we have logic and movement and something that can be created vividly in our minds.

Finally, the computer holding onto the pencil slides along the felt and falls into - you guessed it - a can.

Simple, unusual, connected and easy to remember.

We are taking a list of otherwise isolated items and joining them together in an imaginative way. Our memories don't live in isolation. They are connected. How many times does a certain perfume bring to mind the person you knew who always wore it? Why did that happen? The reason is - perhaps unconsciously - you formed an association in your mind.

You may think at this point that forming associations as we've done above is difficult. You just don't have the imagination for it. This is not true. The scenario you create is for you alone - no one else has to know about it. Furthermore, it becomes easier with practice. Your first few efforts at anything - playing the piano or learning to paint - were probably awkward at first. Then you had a magic moment when everything seemed to fall into place and the task became easier for you.

The same will be happen when devising link associations.

What if you're faced with two words that can't be visualized or that really seem difficult to link together? Break the words down into syllables and sounds.

For example, say you have to remember that Mr. Barnstead lives on Gromond Street. Barnstead can be broken into Barn and stead. Barn is easy - you can picture that - but what about 'stead'. 'Stead' rhymes with 'head'. Okay, now picture Mr. Barnstead hitting his head against a Barn and he muffles his reaction and it becomes 'ssss'. We see the person in our mind - we see the barn, we see him hitting his head and letting out a 'sss' - put them together and we have Mr. Barnstead.

You may guess the rest - he hit his head, so now he has a bump, which is growing into a mound. Now you see how you can take something obviously not related and find a relation.

One other good thing about the link method when it is used to create stories is that you also remember the order of the list. Also, the very first item can be associated with the reason you are remembering the list in the first place.

The Link Method relies heavily on the ability to associate. The ability to associate is a strong part of memory. It is a skill that can be exercised and improved. The better your ability to form associations, the stronger your ability to remember.

Again, interacting two objects, whether they are related or not is critical. They must not stand quietly side by side but rather interact in some way so to make them stand out. Look for aspects they have in common. What is the context and how can that environment help the items to function?

Try to make the events outlandish. How does one do that?

- Make it bizarre. An inanimate object performing as a living being
- Emotion - make the objects get excited
- Large numbers - a huge amount of something is always remarkable
- Involve the senses - sensory experience makes a strong impression
- Try to find unique characteristics in the object
- Make it repulsive - have it do something disgusting (you don't have to tell anybody)
- If all else fails... try a little humor.

Use those concepts that make things easier for yourself. What is easier to remember, a list or a story? A list has little meaning in itself, but a story is connected. We remember by connecting. Form the connections and you will form the memory.

## Peg Method

The Link Method may seem a good way to remember small lists, but what if you have to remember something a bit longer? What if you forget something in the middle? That would mean you'd forget everything that follows. Also, if you want to remember the 15<sup>th</sup> item in a list of 50, you may have to go through the first 14 to reach it.

There is another variation on the Link Method for just this type of situation. It's called the Peg Word method.

The Peg Word method works by having a group of words associated with numbers. This will allow you to associate an item with a peg word and in turn with a number - that associated with the peg word. If you need to remember the 15<sup>th</sup> item in a list - just think of the peg word for '15' and you have your associated item.

Now the question comes - how do you memorize a peg word list?

There are several ways - one is extremely easy - you memorize a rhyme for the numbers 0 - 10:

- 0 - hello
- 1 - sun
- 2 - zoo
- 3 - tree
- 4 - door
- 5 - hive
- 6 - sticks
- 7 - heaven
- 8 - gate
- 9 - pine
- 10 - hen

Or you can make up your own rhyme list - perhaps choosing particular objects that you use often when creating your associations. Also, when we cover how to memorize numbers, you can create your own list based on those techniques.

Using the rhyme method - how do you continue past 10? There are several ways. One would be to have a certain setting where something occurs. Say, everything 0-10 is inside, 1-19 is outside in a city, 20 - 9 is outside in the country, 30 - 9 is on the beach, etc.

You may also want to change the characteristics. Make 0-9 extremely small, 10-19 extremely large, etc. It doesn't matter what the characteristic is, just as long as you're able to associate it with a group of 10.

When we learn number memorization, you'll see how to associate a word with a number and you can use that ability to create as many peg words as you like by duplicating them with variations as above. The important point with all this is that you have some word associated with some number.

Once you have your list memorized, then using the Peg Word System is easy. You already know how to form associations. Now you just form associations with your peg words and you have the list in order and you can reference a particular item on the list by just thinking of the peg word for that number.

Let me give an example. Say, we want to memorize a list of five countries and they have to be kept in order and we have to be able to pull a country's name by its order in the list:

1. (sun) - France
2. (zoo) - Germany
3. (tree) - Italy
4. (door) - Portugal
5. (hive) - Denmark

Now let your imagination run wild.

Imagine the sun with a beret - think of France.

Think of someone disinfecting the zoo - because of the germs - you have Germany.

Think of a tree with a boot (the shape of Italy) on one of its roots, or even a tree filled with boots.

Imagine yourself sailing a boat into a port, but you have to open a door to get to it.

Imagine going into a bear's den. The bear likes his honey so he has his own hive hanging from the ceiling of the cave.

Now since you've formed associations between the peg words and the country, you can remember the list of countries in order, individually by their order or, if asked a country, you can in turn give its number in the list. As you can see, peg words can be very powerful.

However, there may be a problem especially with longer lists. Since you have a standard set of peg words and you use them to associate lists, how to prevent from confusing lists?

Some people may not have a problem because of the nature of the list they are memorizing. All the items may have enough in common that they're not likely to confuse it with items in another list.

If the list is short-term, such as a shopping list, then you won't have to have it memorized for more than a few days.

If the list is medium-term or if you have to remember a group of small lists, then divide the items into groups of ten. Use the peg words for 1-10 with one list, 11-19 with another, etc. You may also want to come up with more than one group of peg words. When we get to memorizing numbers you'll see how easy this will be.

If a list is for long-term recall, you may actually find that you've used it so often that you have the list memorized and only have to refer back to the peg words occasionally.

Finally, the Peg Word Method should only be used when necessary. If you have a short list, the Link Method alone may be enough to memorize it. If you don't have to worry about order, then save the Peg Method for something that does.

## Loci System

The next system we're going to cover is the Loci System - sometimes called the Journey System. It's perhaps the oldest recorded memory technique and is actually referred to by Cicero in a book on oratory - remember they didn't have pens and pencils to take notes.

Because of its origin, the Loci System is also known as the Roman Room Technique. The Romans would imagine a room in their home that was populated with various objects. These objects could be easily visualized and were arranged in a certain order within their homes.

Of course, one has flexibility with this method. The area memorized does not have to be a room, it can be a certain route you walk each day or something similar. Just as long as you notice certain identifiable objects.

Now as you mentally scan the room or whatever place you have chosen, you form associations between the items to be remembered and the items in the room. This is similar to the peg system only more outer directed.

Start by imagining a room you know very well, hopefully one with objects that are large and stationary. Imagine a kitchen - what are the items you see as you look around a kitchen:

- sink
- stove
- refrigerator
- toaster
- table

Now let's say I have a list of five items to remember. We can create a one-on-one correspondence between my list and the items I've chosen. You can see how this is a variation of the Peg System.

Say I want to remember the names of five animals:

- cat

-dog  
-elephant  
-giraffe  
-camel

Imagine walking into the kitchen. The first thing I see is the sink. I remember it's stuffed up and I go to see what's wrong - I notice the cat's tail coming out the drain. Oh, I say, the cat must have been trying to go down the sink again and got stuck (make it ridiculous - it will stay in your mind).

Next I go to the stove. I open the door and the dog is inside sleeping. He's angry that I woke him so he takes his paw and angrily slams the door shut on me.

I go to the refrigerator to open it and I jump back. Instead of a handle to open the door, there's a gigantic elephant's trunk. Nervous, I step back.

I instead decide to go to the toaster, because I left something in it to toast. It's ready, but instead of bread popping out of the toaster, comes the head and neck of a giraffe. Have to fix that... All this has left me very upset, so I go to sit down at the table. I notice a lump under the table cloth and when I lift the cloth I realize that it's not a table, but a camel, sitting down.

These are five common elements found in a kitchen. You can obviously expand on the number of elements you use and use different rooms you're familiar with to associate different types of elements. You can use the same room several times - just choose different times of the day and associate the different light patterns you see with each list you want to remember.

Change the style of items you find in a room. Choose different time periods with different aged stoves and refrigerators (or ice boxes).

I used the kitchen as an example because it is easy to itemize the items one would find in a normal kitchen. It doesn't have to be a kitchen and it doesn't have to be a room. It could be a store, a restaurant, a street corner - anything that is easy to visualize. As you get practice making associations with various objects, you won't have to worry if you will be able to make associations - they'll come naturally with practice.

Again, the room or area you use doesn't even have to be real - you can imagine the setting. Some memory experts make a point of filing various settings that they can later use.

Another advantage of the Loci System over the Link System is that you have created an order. If you forget one item, you still have the others. Also, you know the sequence to use to locate them again.

When practicing this technique, try memorizing things both in order, out of order and backwards. Play with the elements and associations. This not only strengthens the associations, but also gives you confidence in your ability to use them.

Also, have several rooms or loci available for use and use them alternatively instead of having one that you use over and over again. It's less likely you'll get confused and allows variety.

## Journey System

Another techniques called the Journey System. Instead of a room, you pick strategic points in a journey or a trip that you make and form associations between the items to be remembered and the points of interest on the journey or trip.

The trip or journey you chose doesn't have to be extravagant, again it could be within your house - just as long as it involves motion and change. Allowing motion and change lets you bring in a bit of story-telling into the process. Having a story makes it stronger.

Let's start by taking a journey through your house:

We open the front door, walk in and put our coat on the coat rack and our hat on the table. We walk into the living room - we know it's the living room because the first thing we see is a big comfortable couch and a TV set in front.

We want to see if anybody else is home, so we go to the kitchen and look inside. We know it's the kitchen because we see the refrigerator, the stove, the sink and the kitchen table.

The kitchen is empty so we go to check upstairs. We go up the stairs and into the bedroom, which is also empty - we know it's the bedroom because there's a big bed, a night table and a night lamp.

You turn and go to the bathroom - there's a big shower stall with a curtain, a sink and a mirror. You finally go to the mirror, look at yourself and think you're alone.

We have an easily remembered journey, yet look at all the 'pegs' or 'loci' we have with which to form associations:

- front door
- coat rack
- hall table
- sofa
- TV set
- refrigerator
- stove
- sink
- kitchen table

- stairs
- bed
- night table
- night lamp
- shower stall with curtain
- sink
- mirror

In one simple trip we have sixteen items which are easy to remember and to form associations. We can even expand. What are the rooms we entered:

- Hallway
- Living Room
- Kitchen
- Stairs
- Bedroom
- Bathroom

Let's talk a little at this point about what makes a memory stay. The two big factors are association and imagination. Everyone has the ability to use both. Some may find it easy - others will have to work a bit at it. If you don't think you have a good imagination or ability to associate, not only will it come with practice, but the results you have will stand out in particular because they were so forced. Remember - our goal is to have the item stay in our memory and be able to recall it. The image can be as ridiculous as you want - no one has to know.

When you try to form images and associations, try to bring as many senses as possible into play. By senses, I mean:

- Vision
- Sound
- Smell
- Taste

-Touch

-Kinesthesia (awareness of body position)

Bring movement into the picture. Don't just see a cat's tail coming out of the drain in the sink - see it move. Remember - the cat's angry that he got stuck. Movement catches our attention. Why do we wave when trying to get someone to see us? Something moving within a crowd stands out.

Don't be so serious about everything - bring in some humor. Laugh a bit. A lot of humor comes from surprise - it makes an impression and we remember that which makes an impression.

Make it imaginative - let your imagination run wild. Einstein said 'imagination is more important than knowledge'. You know - he was right. Nobody has to know what you're thinking.

Personalize the information. Objects have different meaning to different people. Smells and tastes bring back different memories to different people. What triggers your imagination may not be the same that triggers mine, what works for you is important for you alone, not anyone else. Don't blindly follow the examples I give but develop your own.

When all else fails - exaggerate. We remember that which is exaggerated. Clowns use this skill all the time - big nose, big shoes - little head.

Before using the Journey or the Loci System - take some time and prepare the place. Be sure you have a definite location in mind. Something you can bring to mind at will and in the correct order.

The Journey and Loci Systems are popular for speakers. In fact, their first recorded use was in a book on Oratory by an unknown writer from Roman times. He explained to his young pupil how to make associations between key points in the speech and the room in which he spoke.

That way he didn't have to concern himself with the next topic. He could look around him and the various strategic points in the room reminded him what came next. He just had to find the words for describing his point. The room took care of the rest.

The Link and Loci/Journey Systems are fairly easy to learn. Once you understand association and have some practice with it, it can be almost second nature and you don't have to put much thought into it.

## Alphabet Technique

Another Peg Method that is a little more complex than the number/rhyme or number/shape methods we just described is the Alphabet Technique. It is good for memorizing long lists in order and can be used for detecting missing objects within the grouping.

The Alphabet Method is where one associates the items to be remembered with images that are associated with various letters of the alphabet.

The images that are used to represent the letters of the alphabet don't necessarily start with the indicated letter, rather they are attributed phonetically - so that the sound of the image word corresponds to the letter, such as 'k' is 'cat'. The word 'cat' starts with the 'k' sound.

Using this rule, a popular and effective letter/sound combination alphabet is:

A - Ace of Spades

B - Bee

C - Sea

D - Diesel engine

E - Eagle

F - Effluent

G - Jeans

H - Bomb

I - Eye

J - Jad

K - Cake

L - Elbow

M - Empty

N - Entrance

O - Oboe

P - Pea

Q - Queue

R - Ark

S - Eskimo  
T - Tea Pot  
U - Unicycle  
V - Vehicle  
W - WC  
X - X-ray  
Y - Wire  
Z - Zulu

Take a moment to examine the list a little closer. Notice 'F' for 'Effluent' - how the word corresponds by sound to its associated letter rather than by the actual letter. Should you forget the word associated with a letter, you have a rule for coming up with a replacement. In fact, you could probably do this off the top of your head instead of memorizing a list like the one above. The rules for the formation will bring you back to the original letter.

What is the advantage of this system over the previous peg systems with their corresponding enhancers? First, it allows you to remember up to 26 elements without having to introduce enhancers. Also, the corresponding words and their sound association allows for the use of rhyme, plus, if necessary, off the cuff associations once you understand the rule for the letters.

## Forming a Story

If you have a longer list of seemingly unrelated items, that automatically becomes a good candidate for a story.

For example:

Glass

Horn

Cat

Onion

Melon

These words may be unrelated, but that is the point – you can combine them easily with a story that will be outrageous enough it will stay in you head - change the order if necessary - A cat is playing with a melon and all of a sudden it's repelled by the smell of an onion that was used to season the melon. The cat got all excited and ran away - racing through a glass window and landing inside a big French horn.

It's silly and childish - but that's the point, it's silly enough to be remembered. Think the story through and the key words - cat - melon - onion - glass - horn - come to mind.

Of course, it's unlikely that you'll ever have to remember a list of words such as this, but the point is not to be afraid to create the absurd. It works.

### Relate the Facts

If a piece of information doesn't relate to you, then try finding something about it that does. For example, the human body has 60,000 miles of blood vessels. Kind of hard to believe? Think that that means ten round-trip drives between Los Angeles and New York and it will take on meaning.

Do you have to remember the physical dimensions for a room or a field? Compare it to something you know already. If you're a sports fan, chances are you can picture the size of the playing field. How does that compare to the

space you are trying to remember - bigger smaller, would it fit into a football field - how many times?

In earlier civilizations, when most people were illiterate, a good memory was essential - you could not write down reminders. Orators were required to speak for long periods of time without the help of notes or other devices. How did they do it? By applying the above four concepts. Even today, speakers who are able to talk without the use of notes make a stronger impression than those who do not.

Before going into specific ways of memorizing certain items, we'll start by explaining memory techniques that one can use in most every situation.

The first is the most obvious, probably the most common way people use to remember - repetition. Repeating an item of information forces you to focus attention on it. The more you focus attention on something, the stronger the item will remain in your memory. Think of it as a photographic plate - the longer an impression is made, the stronger the picture as a result.

Another technique, similar to that of linking is the Storytelling Technique. You simply make up a story as a way to connect the information together. It is a way of making seemingly unconnected information come together.

If we want to remember the ingredients in a recipe:

chicken

chicken broth

wild rice

cranberries

salt

Imagine a chicken walking through a field of wild rice. You know the rice is wild because you imagine them as savages wielding spears. It frightens the poor chicken and she melts into broth. The broth spills all over the place and into the neighboring field where you have cranberries. You know they're cranberries because they are so annoyed they've turned red. But when they realize that the liquid is chicken broth, they are delighted and sprinkle salt on it so it will be tastier.

## Visualization

Another powerful memorization tool is visualization. For most people, it is easier to remember what one sees rather than what one hears. See the name - make a piece of abstract information concrete. Obviously names of colors (Green, Brown), jobs (Taylor, Gardner) or animals (Fox, Robin) allow one a rich field for fantasy. Use what you are given. Don't complicate something that can be easy.

Have a standard word to associate with the common name prefixes:

a round moon for "O" as in O'Brian

a Scottish kilt for 'Mac'

a shamrock for 'Mc'

If something is unusual, it is easier to remember. We tend to remember the odd rather than the mundane. Use this ability to remember names - create a story using the sounds (or meaning). If it has exaggeration or motion in it, the image becomes more vivid - and easier to remember. When introduced to Mr. Myers, notice that he has some extra weight around the middle - a spare tire, imagine the tire being mired in mud. Of course, don't let the person know what you are thinking - if you do, he'd probably remember you very well but not for the reason you'd like.

Finally, there is the Visual Link Technique - we try to 'hook' the person's name to their face. Select a particular feature - does the person have large eyes, high cheekbones, dimples, long ears? Now exaggerate that feature. Make the earlobes hang down to the shoulder or the nose so big you can't see the rest of the face. Combine the name with that feature - create a story around it. The more ridiculous, the better. The writer Louis Untermeyer had a large nose - so large that anything 'unter' it got 'mired'.

A lot of names are easier to remember than we think - flowers (Rose, Daisy), etc. These are not only obvious, but easier to form a connection. At worse, you can fantasize about a particular flower coming out that person's ear. Names like Greene (turning green with envy, from eating bad food), etc. can create vivid impressions.

Always try to make an association to a person's face. Notice things about the

face -

shape - round, oval, square

eyes - color, size, far apart, close together

nose - big, small, Roman, ski-slope

chin - receding, prominent

lips - thick, thin

wrinkles - where, do they form a pattern?

hair - full, receding, color

Focus in on three separate parts of a person's face, normally three is all that's required to make it unique. Now you have something tangible to work with. If MacGuire has a Roman nose - imagine a Roman orator wearing a kilt. You know the keyword Roman refers to his nose, kilt means his name starts with 'Mac'.

Make a point to remember the name of the cab driver, the waitress, the usher. Do it so it becomes a habit. Once it is a habit, memorization becomes almost effortless.

Memory lapses run a range, from small insignificant items one forgot to pick up on the way home to actors suddenly faced with forgetting their lines on opening night. Some forgetfulness is simply due to absent-mindedness - one's mind is elsewhere. The economist Adam Smith often got so involved in his work that he forgot to get dressed and would arrive at a presentation in a night dress. Sir Isaac Newton often forgot to eat. Einstein often showed up for his classes dressed in mismatched socks. Oh well, happens to the best of people.

Then again, there are those people at the other end of the spectrum - those whose memory feats seem unimaginable.

Theodore Roosevelt and Winston Churchill could quote books they had read years before. There are the generals that know the name of every soldier under them, the actors who retain the dialogue for several dozen plays in a repertoire. Gou Yan-Ling, listed in the 'Guinness Book of World Records' managed to memorize 15,000 phone numbers. How will that make you feel next time you forget someone's phone number?

Our memory is a fascinating thing and multi-faceted. We are able to recreate visual images as well as sound, emotions, the layout of towns and in some cases

even smells. We can recognize musical passages and famous paintings as well as plot outlines from the classics. We remember how to operate numerous pieces of machinery and remember that we 'heard that joke before'.

## **Understanding Memory**

Though brain anatomy may play a role in one's ability to remember, in human beings, its size is not critical to one's memory. Size difference within the human species does not mean much. Squirrels can locate nuts hidden months before, yet where are those house keys now that you're going out? We humans, though, have different requirements for our day-to-day functioning. We are constantly faced with information overload. We have to sift through thousands of facts daily and decide what to keep and what to throw away, often subconsciously. Scientists have listed over forty different names for different types of memory. Most of these categories are defined by their recall - how quickly and under what conditions do they need to be retrieved and put into use. The very ability to translate sensory input into symbols, symbols into sounds and sounds into syntax to form language is an ability believed to be truly unique to man. Animals may react to sounds but it is the human ability to create meaningful syntax from that sound that is truly unique. You would not understand these sentences otherwise.

Cause and effect is the skill described by Pavlov in his famous experiment with a dog. Every time a bell would ring, the dog would be fed. After performing this several times, a bell was rung but the dog wasn't fed. However, the dog still salivated in anticipation of his meal. This ability has become known as conditioning. It involves pairing one event with another. This training can also be associated with unpleasant as well as pleasant memories.

John Watson, an American professor, founded the school of behavioral psychology on this idea. He believed that all human behavior was a result of learned response to perceived rewards or punishments. Although this theory has been disproved as being too simple, the reward/punishment or the ability to associate two sensory events or phenomena is seen throughout the animal kingdom. This phenomena may also be the building blocks for more complex memory functioning.

There is a famous experiment where two sets of rats were raised in markedly different environments, one with toys and amusements, another with only a food dish. On reaching adulthood, the mice were killed and their brains analyzed. Those with the most toys won - their brains were noticeably thicker than those of the deprived group. This effect was not only confined to the

young, but also to the older rats undergoing similar conditions. In addition, the memory capacity of the enriched group was far greater than the deprived one. Upshot - toys are good at any age. The brain responds to learning. Experience, the uniqueness of our lives, is what shapes our brains and helps make us unique.

“It is poor sort of memory that only works backwards”, said the Queen Lewis Carroll, “Through the Looking-Glass”

Just as puzzling as the process of remembering may be, so too is that of forgetting. Some claim that we never forget, the memories still reside in our brain but they cannot be accessed. This so-called inaccessibility is the root of Freud’s Theory of Repression. Painful memories are swept under the rug - out of site, seemingly unreachable, until they emerge in disguised forms.

Most memory experts agree that in order to remember something we have to pay attention in the first place. Most of us ignore what is going on around us. We do this by a process called ‘perpetual filtering’, this allows us to block out the immense amount of irrelevant input that surrounds us in daily life in order to focus at the task at hand. Moviegoers lose themselves in the picture and ignore the surrounding theater, bookworms are oblivious to the daily everyday noises. However, too much filtering can numb us to the wonders of life as Henry David Thoreau observed.

There is a classic demonstration by researchers Raymond Nickerson and Marilyn Jager Adams in 1979. They asked their subjects to describe a penny. Although all American citizens, only one person got it exactly right - an avid penny collector.

Front:

Head (whose?)

IN GOD WE TRUST

LIBERTY

Date

Back:

Building (which?)

UNITED STATES OF AMERICA

E PLURIBUS UNUM

ONE CENT

The median number correct was three. Almost everyone forgot the word 'Liberty'. When subjects were then given a list of features and asked to name those that appeared on a penny, the results were not much better. Again, practically everyone omitted the word 'Liberty'.

Finally, they were shown fifteen pictures of pennies (one right, fourteen wrong) and asked to name the correct one. Less than half were able to identify the genuine coin.

Nickerson and Adams concluded that the ability to recognize an object did not guarantee a memory for the detail. We seem to remember the minimum necessary to allow us to recognize common objects. We filter the rest.

The fact that the only one who got it correct was an avid penny collector also showed another side of the perpetual filtering process - what one may ignore, the other may find obsessive. Memory is idiosyncratic - what captures one person's attention, may be ignored by the next. No two observers note the same.

Beginners and children have not yet developed the correct filtering skills. They are observant to everything. Experience allows part of the environment to become more important than the other.

Failure to pay attention may be the single most common reason for forgetting. It's the main reason we forget people's names even after we were just introduced - we failed to pay attention in the first place.

There is a classic law school scenario where a professor would be lecturing the class, a person would suddenly enter the classroom and do something unexpected and then leave. The professor would then ask the class to describe what just happened. The range of answers given would be used to prove the unreliability of eyewitness accounts.

A type of memory phenomena has been termed 'flashbulb memories' -those deeply engrained in memory due to the shocking nature of the event - Pearl Harbor, President Kennedy's assassination, the space shuttle Challenger explosion, the World Trade Center attack. People have almost vivid memories of where they were and how they heard the news.

According to the 'Cambridge Encyclopedia of the English Language', "there seems to be a universal and deep-rooted drive to give individual names to things." History is full of names given to inanimate objects from "The Spirit of St. Louis" for Lindberg's plane to Daniel Boone naming his rifle. It is interesting then that most people, when asked what they had the most trouble remembering, invariably said proper names. Even Emily Post, in her famous book on etiquette went into detail on the proper way to handle one's forgetting someone's name. In Roman times, the aristocrats were often accompanied by a nomenclator - someone whose task it was to supply the names of people.

Chronic name forgetting is given its own medical term - onomastic aphasia. The forgetfulness tends not to differentiate between place names and human names.

Forgetting names, for most of us, may be dependent on the way the brain processes information. According to British psychologist Andrew Young, there is a hierarchical pattern for name recognition. The first involves deciding whether a face is familiar or not. The next step is to gather the information that accompanies that face. It is often this last step that causes the most confusion, which may explain why we have difficulty naming somebody when we meet them out of context.

Another theory is that the problem may lie in the uniqueness of names. The categories under which a person can be identified - gender, profession, etc. are not always unique, the traits can be shared among several individuals.

Also, their meaninglessness. They are not identified with tangibles, but rather take on the form of meaningless sounds.

In general, we forget the meaningless. Nonsense syllables are harder to remember than actual words. We remember by building on the familiar, in a way adding to a vast network of connections. This is one of the strongest theories behind modern memory techniques - creating meaning where there would otherwise be none and connecting the result into already existing associations. Learning new items is a form of branching out of old.

Smells are recently coming under study for having a more powerful influence on recall than once thought. A familiar odor, good or bad, has the ability to rekindle memories once thought lost. Edwin Morris, a fragrance expert, once wrote "There is almost no short-term memory with smell." Even Ebenezer Scrooge was transported into the far reaches of his past by smell. "He was conscious of a thousand odors floating in the air, each one connected with a thousand thoughts, and hopes, and joys, and cares, long, long forgotten."

"Nothing revives the past so completely as a smell that was once associated with it."

Vladimir Nabokov

Alzheimer patients, in addition to their loss of memory, also lose their sense of smell. The two tend to be closely linked. Smell may be the first memory that we form as infants, recognizing the smell of one's mother, before sight or even sound. Smell may even enhance the ability to learn. Studies done with memorizing word-lists with an accompanied smell, were easily recalled in the presence of the same smell.

Patterns of memory have also been studied. We tend to remember the first and last items of a list, but have trouble with both the elements and order of those items in between. This may be related to the impact that critical events have - the first and last items are outstanding, the middle items run routine, similar to multiple airplane flights, but we tend to remember our first time and the last.

We use the memory tools I am about to describe for three types of information:

Things we really need to remember such as PIN numbers, e-mail address and the like.

Things we really don't need to remember, such as temporarily memorizing a phone number to call for a reservation. It's not necessary to remember it by heart.

Finally, those things we have to 'remember' but not 'memorize'.

This type of information is necessary for use to function over a brief period of time - such as the day of the week, errands, etc. This is not the items that need to be stored in long-term memory.

Of these images that we remember, those that are exaggerated or emotionally charged tend to stand out. Memory depends a great deal on all four senses and the more senses that are brought into play, the stronger the overall image and hence the stronger the memory. Poetry is more memorable than prose and song more memorable than poetry. This is because an auditory element is brought into play - both with the natural sound of the words and the rhyming factor. It's no wonder songs and rhymes are used so frequently in advertising - they want you to remember their product. History was often passed down in epic poetry form and today's schools use rhyme to help students remember important facts. Until the fourteenth century, practically everything (with the exception of legal documents) was written in rhyme. It was the strongest memory aid of its day.

Remember, memory techniques basically do two things - they force you to focus your attention and then add meaning. Without these two basic steps you

wouldn't be able to remember anything. In addition, they also allow you to 'play' with the information and thereby allow you to review and repeat it.

Create an unusual event at a certain time to remind you to do something. It can be something as obvious as setting an alarm clock, to timed e-mails or an alarm on your wristwatch. When it goes off - you remember.

## **Mental Pictures**

'A picture is worth a thousand words', so the same goes for mental imagery.

Try whenever possible to form a visual image in your mind. A visual image is an extremely strong tool and you only realize it once you get past the initial stages and grow comfortable doing it.

If you meet someone named Woods - think lumberjack, imagine Mr. Woods swinging an axe, trying to topple a tree. Try to make the image active - it's easier to remember. Make the picture as vivid and life-like as possible. The more ridiculous the image, the stronger it becomes and the longer it will stay in your memory.

Try doing the reverse in a situation. Instead of Mr. Woods chopping down a tree, imagine a tree trying to chop down Mr. Woods. Imagine a man biting a dog, etc. Making something the reverse of the norm may be the simplest way to make something unusual.

Here are words of wisdom from an old book on memory.

## **THE BEST FOUNDATION FOR A GOOD MEMORY**

Robust health is the best foundation upon which a good memory may be built. I do not mean that all healthy persons have good memories, but that persons with good health, other things being equal, will remember more than those who are in a low physical condition.

A good memory cannot be preserved with an impaired nervous system. Not only may a long-continued wakefulness change the temper of a mild and gentle person, but also cause great deviation in the powers of intellect and imagination, and ruin the ability to recall facts and ideas.

The gift of remembering is dependent upon the power of strict attention. And this is dependent not only upon discipline, but upon the comfortable condition of the body, which only comes from a good circulation and abundant blood.

## **MEMORY AND NUTRITION**

Every act of memory produces a permanent modification of the brain; but the nature of this modification cannot be known. Whatever this change may be, it must be accomplished through nutrition. This organ, and especially the gray substance, the seat of memory and cerebration, receives a very large supply of blood--no other part of the body receives so much--and nutrition goes on here at a very rapid rate.

In proportion as nutrition is perfect memory is good. This helps us to understand why the power of recollection in the young is so much better than in that of the aged. Their brains are better nourished, and the blood circulates in them more perfectly. The color of the surface of the brain of a child is rosy; that of an old person is yellowish; and these facts indicate that one is being well fed with an abundance of rich blood, and that the other is not.

This fact has an important bearing on all our efforts to strengthen this faculty; not only must the brain be properly exercised, but it must be well nourished.

Fatigue of every form is weakening to the memory. Impressions received when we are tired are not permanently fixed in the mind, and their reproduction is often impossible. Fatigue is the result of an excessive activity of any faculty, continued until its stored-up nutriment is exhausted. After a period of rest, and a return to normal conditions, the memory also returns.

## **PERFECT CIRCULATION OF BLOOD**

Memory is also, to a large extent, dependent upon a perfect circulation of the blood in the brain.

The quality of the blood must also be considered. Th. Ribot, in a work upon diseases of the memory, says: "Fever in its various stages is accompanied by extreme activity of the brain. In this activity the memory takes part. We know that in a fever the rapidity of the circulation of the blood is excessive; that the fluid is altered from its normal state and charged with the waste product arising from rapid combustion.

In this state persons often remember impressions of trivial things, in which no interest was taken, while, perhaps, more important impressions are forgotten. It will generally be found that such impressions were received when the energies were high; when exercise or pleasure, or both, had raised the action of the heart.

Herbert Spencer writes: "Highly nervous persons, in whom the action of the heart is greatly lowered, habitually complain of loss of memory and inability to think -- symptoms which diminish as fast as the natural rate of the heart beats is regained."

## **Why Numbers Are Difficult**

Numbers, of themselves, do not convey clearly defined pictured impressions to the average brain. There is nothing about them to stimulate the imagination.

To be sure, they are duly recorded both through the eye and the ear, but ordinarily they register themselves merely as numbers, which are difficult to retain.

It becomes necessary, therefore, to devise some means by which they may become photographed on our mental films in such a way that they will mean something as definitely as does a word representing an object.

## **Pictures Will Recall Numbers**

We must find something that will represent numbers, and then proceed to fix these substitutes in our minds by practice. Then, when a number appears before us, we shall be enabled to recall at once the picture which that particular number represents.

For centuries attempts have been made to find means to fix numbers in mind. The code method is the perfected result of many minds that have worked on this problem. It is a practical method for you—for every one—who wishes to develop a sure memory for figures.

## The Number Code

The number code substitutes letters for numbers.

These letters are then combined into words, which readily suggest mental pictures. Most numbers look alike, but there is little danger of mistaking your pictures.

So the basis of an improved memory for figures is to carry them in mind as pictures.

By reading once or twice, in your usual manner, a series of numbers like the following, you will find it difficult to keep them in mind for any length of time:

**1971—9958—3537—6838**

Using the number code you will have no trouble recalling these numbers at will, for you will carry them in mind by means of the following pictures:

1971



9958



3537



6838



Compare the above pictures and words with the one hundred code words on page 52.

See that Tub is word **19**, Kite is word **71**—hence the picture of a Tub and a Kite represents the combination **19-71**.

Simplicity itself—when you know the one hundred words and their corresponding numbers.

### **The Basis of the Code**

The code is based on the **phonetic** or **sound** spelling instead of the actual spelling of words.

Every word is composed of vowels and consonants. The vowels are *a, e, i, o, u*, and have *no figure values*.

In addition to the vowels—which have no figure values— there are three consonants that do not represent figures, namely *h, w, and y*. Note that they form the word *why*— which is easily remembered.

These letters—*a, e, i, o, u, w, h, and y*—*are* not used to represent figures

They are used merely to help in forming words. We can combine them at any time and in any manner desired with other letters without altering the figure value of the word, with one exception.

*H*, by itself, has no figure value. It, however, helps to form the following combinations: *Ch, gh, ph, and sh*. The figure value of these combinations will be explained later.

## Consonants Representing Figures

T	represents	1
N	“	2
M	“	3
R	“	4
L	“	5
J	“	6
K	“	7
F	“	8
P	“	9
S	“	0

These letters can be combined with vowels to represent any number. They have been selected because they are similar to the figure they represent or can be readily associated with it.

1—The figure 1 is represented by the letter *T*. Suggestion—*t* has 1 down stroke.

2—The figure 2 is represented by the letter *N*. Suggestion—*n* has 2 down strokes.

3—The figure 3 is represented by the letter *M*. Suggestion—*m* has 3 down strokes.

4—The figure 4 is represented by the letter *R*. Suggestion—*r* is the fourth letter in four.

5—The figure 5 is represented by the letter *L*.

Suggestion—*L* represents 50 in Roman numerals.

6J 7K 8F 9P S0

6—The figure 6 is represented by the letter *J*.

Suggestion—*j* reversed is a roughly formed 6.

7—The figure 7 is represented by the letter *K*.

Suggestion—note the two 7's forming *K* in the illustration above. One of the 7's is upside down. *K* also

follows *J* in the alphabet.

8—The figure 8 is represented by the letter *F*.

Suggestion—*f* and 8 both have two loops.

9—The figure 9 is represented by the letter *P*.

Suggestion—reverse the loop on *p* and we have 9.

0—The figure 0 is represented by the letter *S*.

Suggestion—cipher means 0—think of it as sipher.

In this way we associate 0 with the *S*—of sipher.

Also note that the two parts of *S* reunited form 0.

The illustration shown above will, impress upon your mind's eye a similarity between certain letters and the numbers represented by them.

Draw all the letters, beginning with *t*, following, my suggestions.

Use these, or any other means, to fix the letters and the numerals to which they correspond firmly in mind.

Remember clearly—the following letters have no numerical value:

*A E I O U—W H Y*

Now review the code, and see if you have well in mind the numerical value of the letters.

1 2 3 4 5 6 7 8 9 0    T N M R L J K F P S

Having gone this far, I wish to assure you that the code is not complicated. The code words Hat to Daisies carry the key. They are formed in accordance with the principles you are now learning. Follow me carefully, step by step.

### **Additional Letters**

You will now learn the figure value of other consonants having a similar sound to those previously considered. Note well:

All consonants having a similar sound have the same numerical value,

1—T and D have nearly the same sound, therefore both  
T and D represent 1.

6—*G* as in George (known as *soft g*) has the *J* sound, therefore *soft G* also represents 6. *Sh* as in shot and *ch* as in chain are similar to *j* in sound, so *sh* and *ch* also represent 6. Note that *h* by itself has no value, but the combination *sh* or *ch* represents 6. *J*, *soft g*, *sh*, and *ch* all stand for 6.

7—*C* as in can (*hard c*) is a *K* in sound, therefore *hard c* also represents 7. *Hard G* as in gay is similar in sound to *K*, so *hard G* also stands for 7. *K*, *hard c* and *hard g* all represent 7.

8— *F* and *V*, when used in any word, sound alike, so  
both *f* and *v* stand for 8.

9—*P* and *B* having nearly the same sound, both are used for 9.

0—*C* as in ice (*soft c*) and *Z* are sounded as *S*. *s*, *Z*, and *soft C* represent 0.

### **Complete Number Code**

1—*T* and *D*

2—*N*

3—*M*

4—*R*

5—*L*

6—7, *Soft G*, *Sh*, *Ch*

7—*K*, *Hard G*, *Hard C*

8—*F* and *V*

9—*P* and *B*

0—*S*, *Z*, *Soft C*

It is necessary to be familiar with the sounds of the letters, for as you have already seen, the sound determines the figure value.

*C* is either *k* or *s*, viz: Cat (*kat*), city (*sity*).

*C* in cat (*kat*) is *hard c*. Its figure value is 7.

*C* in city (*sity*) is *soft c*. Its figure value is 0.

*G* has two sounds—as in age (*aje*), figure value 6, and as in *gay*, figure value 7.

*G* in age (*aje*) is called *soft g*. Its sound is similar to *ch* in the word *much*, or *sh* in *mash*.

*J*, *soft g*, *ch*, and *sh* all have the figure value 6.

## Words Containing Soft G

Age (aje) 6, hinge (hinj) 26, rage (raje) 46, rouge (ruj) 46, lodge (loj) 56, judge (juj) 66, cage (kaj) 76, page (paj) 96, George (jorj) 646.

Observe *silent D* in lodge (loj) 56, and judge (juj) 66.

It will be good practice to turn to a dictionary and write five or ten other words containing *soft g*.

Note that the *soft g* sound is simply *j*. *J* represents 6, therefore *soft g* (j) is always 6.

## Hard G

*Hard g* is similar in sound to *k*, viz: card (*kard*), guard (*gard*).

Pronounce *card*, *guard*, and you will note that the sounds of *k* and *hard g* are almost identical. Since *k* and *hard c* are 7, *hard g*, which is sounded almost the same, also has the figure value 7.

## Words Containing Hard G

*Gay* (7). *Egg* (7) *dog* (17) *nag* (27), *fig* (87), *bag* (97), *guard* (741).

Write five or ten other words containing *hard g*.

## Words Containing Soft Ch

*Ch* also has two sounds. *Soft*, in *chew* (6), *hard*, in *ache* (*ake*) 7.

*Much* (36), *match* (36), *roach* (46), *chain* (62), *chair* (64), *check* (67) *chief* (68), all contain *soft Ch*. Write five or ten other words containing *soft ch*.

There are few words containing *ch* sounded as *K*. *Ch* nearly always has the figure value of 6.

### Summary

C (s) Soft C —0. C (k) Hard C—7. Ch Soft —6. Ch (k) Hard—7. G(j) Soft —6. G (gay) Hard —7.

### Letters and Sounds Used Occasionally

The following letters and sounds are mentioned merely for completeness. Make no special effort to learn them now:

*Q* is a combination of *k* and *w*, viz: Quire (*kwire*), *Q* is 7.

*X* (pronounced *eks*) is a combination of *K* and *s*, and therefore stands for **70**. *Ing*, as in king, can be conveniently used for 7.

By using *ing* to represent 7 you can form more easily words for numbers like 457—railing, 987—paving, 687—shaving, 697—shipping.

*Hard ch*, as in ache (*ake*) and chasm (*kasm*), has the *k* sound and represents 7, but is seldom used.

*Gh* and *ph*, as in rough (*ruf*) 48, and phone (*fone*) 82 have the sound of *f* and represent 8.

## Silent Letters Have No Figure Value

In addition to a, e, i, o, u, w, h, y, which have no numerical value, silent letters—letters that are not sounded in a word—lose their figure value in that word.

Therefore, *light* (lite) is 51—*g* is silent.

*Knife* (nife) is 28, *knob* (nob) is 29—*k* is silent.

*Match* (mach) is 36—*t* is not sounded.

Pronounce *match* and *much*. You will observe that the *ch* sound is identical, showing that the *t* in *match* is silent.

*Judge* (juj) is 66—*d* is not sounded.

*Check* (chek) is 67—*ck* always represents 7.

## Double Letters Count as One

Bear in mind: The number code is based on sound, not on spelling. It is phonetic in all cases.

We use double letters to represent a single numeral, as if the word were spelled with a single letter, for there is only the single sound.

Note these illustrations carefully:

Hammer (hamer) figure value 34 Butter (buter) figure value 914 Hill (hil)  
figure value 5 Mamma (mama) figure value 33 Boss (bos) figure value 90  
Arrow (aro) figure value 4.

## How to Use the Code

Having attentively followed the lesson to this point, it will not require much additional effort on your part to learn the words representing every number from 1 to 100.

Let us begin with number 1. This is represented by the letters t and d, from which we select t.

To form a word easily visualized, we can select any of the vowels, a, e, i, o, u, and the letters w, h, and y, and add them to t.

### Forming the Code Words

For our purpose we have taken the letter h and the vowel a and combined these with the letter t (1). Combining h and a with t into the word hat does not change the figure value of t (1), for h and a have no figure value.

In this manner we form the word hat, which represents the figure value 1.

To change hat back to the number it represents we recall that h and a have no figure value, which leaves t representing 1.

Numerous other words could be used for 1 as tie, hood, hut, head, dough, toe, wet.

2. Hen—n is our code letter for 2. We have simply added h and e to make hen, whose figure value is 2.

3- Ham—m is our code letter for 3. We have added h and a, which have no figure value, forming the word ham, which has a figure value of 3.

4- Hare—r is our code letter for 4. We have added h, a, and e, forming the word hare, which has a figure value of 4.

5 -Hill—l is our code letter for 5. We have added h and i, and the additional l, which is not sounded, forming the word hill, whose figure value is 5.

6 - Shoe—sh in our code is 6. We have added o and e, forming the word shoe, whose figure value is 6.

7- Cow—c, sounded k, in our code is 7. We have added o and w, forming the word cow, whose figure value is 7.

8 - Hive—v is one of our code letters for 8. We have added h, i, and e, forming the word hive, whose figure value is 8.

9 - Ape—p is one of our code letters for 9. We have added a and e, forming the word ape, whose figure value is 9.

10- Woods—d is 1, s is 0. To these we have added the letters w, o, o, forming the word woods, whose figure value is 10.

### Cross Out the Letters

Now list these first ten words, and cross out the letters that have no figure value. Then write the number that the remaining consonants represent.

The following practice Chart will be helpful at this point. It has a complete list of code words that can be used for practice. Cross out the silent letters and vowels. Convert the remaining letters into their corresponding numbers.

Note that the word snare is really 024, but it is used to represent 24.

### Code Words and the Numbers They Represent

1— Hat	26 —Hinge	51— Light	76—Cage
2— Hen	27 —Ink	52— Lion	77—Cake
3— Ham	28— Knife	53— Lime	78— Cuff
4— Hare	29 —Knob	54 —Lawyer	79—Cab
5- Hill	30 —Moose	55— Lily	80— Vase
6— Shoe	31 —Mud	56— Lodge	81— Foot
7—Cow	32 —Moon	57 —Lake	82— Fan
8— Hive	33 —Mummy	58— Loaf	83 —Foam
9— Ape	34 — Hammer	59— Lap	84—Fire
10— Woods	35 —Mule	60 —Cheese	85- File
11— Tide	36 — Match	61— Sheet	86— Fish
12— Tin	37 —Hammock	62 —Chain	87— Fig
13 —Team	38— Muff	63— Jam	88— Fife
14— Tire	39— Mop	64 —Chair	89— Fob
15— Hotel	40 —Rose	65— Jail	90— Bus
16— Dish	41— Rat	66 —Judge	91—Boat
17— Dog	42 —Rain	67— Check	92—Piano
18— Dove	43 —Ram	68— Chief	93—Bomb
19— Tub	44 — Warrior	69— Ship	94— Bear
20— Nose	45 — Rail	70— Goose	95—Bell
21 — Window	46 — Roach	71— Kite	96— Bush
22 — Nun	47 — Rake	72 —Can	97— Bag
23 — Gnome	48— Roof	73 —Comb	98— Beef
24 — Snare	49 — Rope	74 — Car	99— Pipe
25 — Nail	50 — Lace	75— Coal	100—Daisies

## Code Words and Their Numbers

These words have been selected carefully to represent the numbers between 1 and 100.

### Useless Without Practice

You must be able to transpose your code words into numbers without hesitation, and to recall quickly the code word representing any number from 1 to 100. If this is not done any attempt to become familiar with the number code is futile.

### Learn the Code Words

You will learn some of the code words more easily than others. Practice on those that trouble you, and you will soon know the figure value, of the one hundred words.

If you wish the code word for 82, you know it must contain either *f* or *v* for 8, and *n* for 2. Inserting vowels, try the combinations *vane*, *vine*, *fin*, *fine*, *fun*, *fan*, etc. Probably *fan* will be the first word to suggest itself.

To recall the code word for 25, you know it must contain *n* and *l*. The code word for 25 is *nail*.

Any word representing 41 must contain *r* for 4, and either *t* or *d* for 1. The code word for 41 is *rat*.

### Review in Groups of Ten

The best way to practice with the code words is in groups of ten. Become thoroughly familiar with the figure value of ten consecutive words at a time. For example, practice with the words *hat* to *woods*, converting them into their respective numbers.

Then transpose the numbers 1 to 10 into the code words. When you know the first ten, practice on every one of the following groups of ten in the same manner.

Then practice with words having the same final number in the following manner:

**1—Hat      51—Light**

**11—Tide    61—Sheet**

**21—Window 71—Kite**

**31—Mud    81—Foot**

**41—Rat    91—Boat**

Proceed in the same way with the remaining code words, thus:

**2—12—22—32, etc.**

**3—13—23—33, etc.**

**4—14—24—34, etc.**

**5—15—25—35, etc.**

### **You Can Transpose Larger Numbers**

You can remember larger numbers by combining the code words. To illustrate:

3964 is 39 and 64, represented by mop and chair.

3251 " 32 " 51, " " moon " light.

9067 " 90 " 67, " " bus " check.

1239 " 12 " 39, " " tin " mop.

795 " 7 " 95, " " cow " bell.

994 " 9 " 94, " " ape " bear.

It is necessary only to form a clear picture of mop and chair to represent 3964.

The danger of transposing figures, by recalling the picture as chair and mop 64-39, instead of 3964, can be avoided by having the first object larger than the second. In the case of 3964, picture the mop larger than the chair.

Another way to avoid transposition of figures is to see the object representing the first figures above the object representing the second figures. For instance, see the mop on the chair. If the number were 6439 the chair would be pictured on the mop.

### Interesting Practice

Auto and car numbers, store, office and phone numbers are excellent material for practice. At first, form words for only the first two figures of automobile numbers. Then take three figures and later form a single word or combination of words for the entire number. Practice at first, on forming words, without trying to remember any, except those that are of especial interest or value.

### A Few Additional Words Will Help You

The use of the following words in combination with your code words will make it easier to convert many of the numbers between 100 and 1100 into words. Use one of these words for the first digit and the code word for the last two figures.

1—Hot	Wet	White
2—New	Win	Own
3—My	Aim	Hem
4—Hairy	Wire	Hire
5—Yellow	Oily	Wheel
6—Ashy	Huge	Wash
7—Gay	Weak	Hack
8—Heavy	Few	Wave
9—Happy	Buy	Wipe
10—Dizzy	Hideous	Dose

Become thoroughly familiar with at least one of these words, for every number from 1 to 10, and use it regularly when the combination will permit. You can combine these with your code words to represent numbers between 100 and 1100.

Familiarity with this list and with the code words gives you a firm grip on most figures.

### **Some Illustrations**

<b>138—White muff</b>	<b>618—Wash dove</b>
<b>165—Hot jail</b>	<b>666—Huge judge</b>
<b>263—New jam</b>	<b>738—Gay muff</b>
<b>292—Win piano</b>	<b>799—Weak pipe</b>
<b>343—Aim ram</b>	<b>829—Heavy knob</b>
<b>374—My car</b>	<b>839—Wave mop</b>
<b>441—Hairy rat</b>	<b>935—Wipe mule</b>
<b>476—Wire cage</b>	<b>973—Buy comb</b>
<b>544—Yellow warrior</b>	<b>1018—Dizzy dove</b>
<b>562—Oily chain</b>	<b>1079—Hideous cab</b>

Now see how interesting the subject of figures can be made by picturing every one of the above combinations.

## Word Combinations

It is easy to picture the following:

A moon beam.      A shiny bell.  
A red chair.      A gray check.  
A lean mule.      A bad dog.

It would be rather difficult and uncertain to remember the numbers that these phrases represent, but combinations such as these are readily retained and recalled by mental pictures.

Here are the numbers they represent:

Moon-beam	32-93	Shiny-bell	62-95
Red-chair	41-64	Gray-check	74-67
Lean-mule	52-35	Bad-dog	91-17

When you form such appropriate combinations you have a firm hold on the numbers, through these easily remembered word-pictures.

## A Helpful List

The following words will combine readily with most of the code words. There are other words that may suit you better for some of these numbers.

11—Dead	16—Dutch	21—Neat
12—Thin	17—Thick	22—Union
13—Dim	18—Tough	23—Enemy
14—Dear	19—Deep	24—Narrow
15—Tall	20—Nice	25—Only

26—Enjoy	51—Old	76—Hoggish
27—Inkv	52—Lean	77—Cook
28—Enough	53—Lame	78—Give
29—Nobby	54—Lower	79—Gabby
30—Messy	55—Loyal	80—Fuzzy
31—Muddy	56—Lash	81—Fat
32—Mean	57—Leaky	82—Funny
33—Maim	58—Leafy	83—Foamy
34—More	59—Leap	84—Fiery
35—Mail	60—Choice	85—Full
36—Mash	61—Jet	86—Fishy
37—Meek	62—Shiny	87—Foggy
38—Move	63—Chummy	88—Heave
39—Mob	64—Cheery	89—Foppy
40—Rosy	65—Chilly	90—Busy
41—Red	66—Jewish	91—Beady
42—Rainv	67—Shakv	92—Bonv
43—Warm	68—Shave	93—Bum
44—Rare	69—Cheap	94—Bare
45—Royal	70—Cozy	95—Blue
46—Rich	71—Gaudy	96—Bushy
47—Rocky	72—Keen	97—Big
48—Rough	73—Calm	98—Beefy
49—Ruby	74—Gray	99—Baby
50—Lacy	75—Cool	

This list will prove helpful for reference. It is not necessary to learn it, but you will gradually acquire many of these words, and add others of your own.

Here is a quick example of how easy it is to turn pictures into words using the phonetic system. You can take a number like 45286 and turn it into words and even a story if you like.

I used the free software from my course and plugged in the above number. The software will give you a list of words to choose from that represent the numbers you entered. A list of choices appeared.

Here are the words I chose:

hairy alien fish

You can combine this in any way you wanted using the memory

techniques to come up with a story or a picture. Picture a hairy alien eating a huge fish. That picture in your mind will enable you to recall the sequence and all the numbers.

Below is another example. Here are the words I chose for the number 76342:

Cow - Chew - Homerun

Combine this in any way you wanted using the memory techniques to come up with a story or a picture. Picture a Cow playing baseball while chewing gum. He swings the bat and hits a homerun. That picture in your mind will enable you to recall the sequence and all the numbers. That's how simple it is.

Click on the link below to get the most complete package of Memory Improvement Books and Memory Training Software available.

[Memory Improvement Techniques](#)