



MIND TOOLS

Essential skills for an excellent career



Tools to Improve Your Memory

Module 6

Memory Techniques

Remembering:

- Lists – The [Link and Story Methods](#)
- Numbers - [Number/Rhyme](#) and [Number/Shape Mnemonics](#)
- Letters - [the Alphabet System](#)
- Lists and Groups - [The Roman Room Method](#)
- Ordered Lists - [The Journey Method](#)
- The Structure of Information - [Concept Maps](#)
- Long Sequences of Information - [The Major System](#)
- All Aspects of a Type of Problem - [Aide Memoires](#)
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6. Tools for Improving Your Memory

The tools in this module help you to improve your memory. They will help you both to remember facts accurately and to remember the structure of a topic or subject.

The module is split into three sections. Firstly we will discuss the powerful tools that you can use to remember:

- Numbers - *Number/Rhyme* and *Number/Shape Mnemonics*
- Letters - *the Alphabet System*
- Lists and Groups - *The Roman Room Method*
- Ordered Lists - *The Journey Method*
- The Structure of Information - *Concept Maps*
- Long Sequences of Information - *The Major System*
- All Aspects of a Type of Problem - *Aide Memories*

Next we will look at how you can extend these tools to code more information.

Finally we will look at more advanced uses of the tools for remembering:

- People's names
- Languages
- Information for exams
- Long Numbers
- Lists

As with other mind tools, the more practice you give yourself with these techniques, the more effective your use of them will be. This section contains many of the memory techniques used by stage memory performers. With enough practice and effort, you may be able to have a memory as good. Even if you do not have the time needed to develop this quality of memory, many of the techniques here are useful in every-day life.

Mnemonics

"Mnemonic" is another word for memory tool. Mnemonics are methods for remembering information that is otherwise quite difficult to recall. A very simple example is the "30 days hath September" rhyme. The basic principle of mnemonics is to use as many of the best functions of your brain as possible to store information.

Our brains evolved to code and interpret complex stimuli such as images, colors, structures, sounds, smells, tastes, touch, positions, emotions and language. We use these to make sophisticated models of the world we live in. Our memories store all of these very effectively. Unfortunately, information we have to remember is almost always presented in only one way: as words printed on a page. While language is one of the most important aspects of human evolution, it is only one of the many skills and resources available to our minds.

This module of Mind Tools will show you how to use all these resources.

Using Your Whole Mind To Remember

By coding language and numbers in striking images, you can reliably code both information and the structure of information. You can then easily recall these later.

You can do the following things to make your mnemonics more memorable:

- Use positive, pleasant images. The brain often blocks out unpleasant ones.
- Vivid, colorful, sense-laden images are easier to remember than drab ones.
- Use all your senses to code information or dress up an image. Remember that your mnemonic can contain sounds, smells, tastes, touch, movements and feelings as well as pictures.
- Give your image three dimensions, movement and space to make it more vivid. You can use movement either to maintain the flow of association, or to help you to remember actions.
- Exaggerate the size of important parts of the image.
- Use humor! Funny or peculiar things are easier to remember than normal ones.
- Similarly rude rhymes are very difficult to forget!
- Symbols (red traffic lights, pointing fingers, road signs, etc.) can code quite complex messages quickly and effectively.

Designing Mnemonics: Imagination, Association and Location

The three fundamental principles underlying the use of mnemonics are imagination, association and location. Working together, you can use these principles to generate powerful mnemonic systems.

Imagination: is what you use to create and strengthen the associations needed to create effective mnemonics. Your imagination is what you use to create mnemonics that are potent for you. The more strongly you imagine and visualize a situation, the more effectively it will stick in your mind for later recall. The imagery you use in your mnemonics can be as violent, vivid, or sensual as you like, as long as it helps you to remember.

Association: this is the method by which you link a thing to be remembered to a way of remembering it. You can create associations by:

- Placing things on top of each other
- Crashing things together
- Merging images together
- Wrapping them around each other
- Rotating them around each other or having them dancing together
- Linking them using the same color, smell, shape, or feeling

As an example, you might link the number 1 with a goldfish by visualizing a 1-shaped spear being used to spear it.

Location gives you two things: a coherent context into which you can place information so that it hangs together, and a way of separating one mnemonic from another. By setting one mnemonic in a particular town, I can separate it from a similar mnemonic set in a city. For example, by setting one in the town of Horsham and another similar mnemonic with images of Manhattan, we can separate them with no danger of confusion. You can build the flavors and atmosphere of these places into your mnemonics to strengthen the feeling of location.

The Link Method & Story Method (6.1.1)

Function: **Remembering a simple list**

How to use tool: The Link Method is one of the easiest mnemonic techniques available. It is not quite as reliable as a peg technique (see [6.1.2](#)), as images are not tied to specific, unchanging sequences.

It works quite simply by making associations between items in a list, linking them either with a flowing image containing the items, or with a story featuring them. The flow of the story and the strength of the images give you the cues for retrieval.

Taking the first image, create a connection between it and the next item. Then move on through the list linking each item with the next. It is quite possible to remember lists of words using association only. However, it is often best to fit the associations into a story otherwise, by forgetting just one association, you can lose the whole of the rest of the list.

Given the fluid structure of this mnemonic, it is important that the images stored in your mind are as vivid as possible. Significant, coding images should be much stronger than ones that merely support the flow of the story. See the introduction to this module for further information on making images as strong as possible.

The Story Method is similar, except that the images are linked together as part of a story. This makes it easier to remember the order of events and create a memorable mnemonic.

When a word you want to remember does not trigger strong images, use a similar word that will remind you of that word.

Example: You may want to remember a list of counties in the South of England: Avon, Dorset, Somerset, Cornwall, Wiltshire, Devon, Gloucestershire, Hampshire, and Surrey.

You could do this with two approaches, the link method and the story method:

Remembering with the Link Method

This would rely on a series of images coding information:

- An AVON (Avon) lady knocking on a heavy oak DOoR (Dorset).
- The DOoR opening to show a beautiful SuMmER landscape with a SETting sun (Somerset).
- The setting sun shines down onto a field of CORN (Cornwall).
- The CORN is so dry it is beginning to WILT (Wiltshire).
- The WILTing stalks slowly droop onto the tail of the sleeping DEVil (Devon).
- On the DEVil's horn a woman has impaled a GLOSSy (Gloucestershire) HAM (Hampshire) when she hit him over the head with it.
- Now the Devil feels SoRRY (Surrey) he bothered her.

Note that there need not be any reason or underlying plot to the sequence of images. Instead, only images and the links between images are important.

Alternatively, you could code this information by imaging the following story vividly:

An AVON lady is walking up a path towards a strange house. She is hot and sweating slightly in the heat of high SUMMER (Somerset). Beside the path someone has planted giant CORN in a WALL (Cornwall), but it's beginning to WILT (Wiltshire) in the heat. She knocks on the DOoR (Dorset), which is opened by the DEVil (Devon). In the background she can see a kitchen in which a servant is smearing honey on a HAM (Hampshire), making it GLOSsy (Gloucestershire) and gleam in bright sunlight streaming in through a window. Panicked by seeing the Devil, the Avon lady screams SoRRY (Surrey), and dashes back down the path.

Key points:

The Link Method is probably the most basic memory technique, and is very easy to understand and use. It works by coding information to be remembered into images and then linking these images together.

The story technique is very similar. It links these images together into a story. This helps to keep events in a logical order and can improve your ability to remember information if you forget the sequence of images.

Both techniques are very simple to learn. Unfortunately they are both slightly unreliable as it is easy to confuse the order of images or forget images from a sequence.

The Number/Rhyme Mnemonic (6.1.2)

Function: **Remembering short lists of items accurately and in order**

How to use tool: The Number/Rhyme technique is a very simple way of remembering lists in order.

It is an example of a peg system, a system where information is “pegged” to a known sequence (here the numbers one to ten). By doing this you ensure that you do not forget any facts, as gaps in information are immediately obvious. It also makes remembering images easier as you always know part of the mnemonic images.

At a simple level, you can use it to remember things such as a list of English Kings or American Presidents in their precise order. At a more advanced level it can be used, for example, to code lists of experiments to be recalled in a science exam.

The technique works by helping you to build up pictures in your mind, in which you represent numbers by things that rhyme with the number. You can then link these pictures to images of the things to be remembered.

The usual rhyming scheme is shown below:

- 1 - Bun
- 2 - Shoe
- 3 - Tree
- 4 - Paw
- 5 - Hive
- 6 - Bricks
- 7 - Heaven
- 8 - Gate
- 9 - Line
- 10 - Hen

If you find that these images do not attract you or stick in your mind, then change them for something more meaningful. Link these images to ones representing the things to be remembered. Often, the sillier the compound image, the more effectively you will remember it - see the introduction to this module to see how you can improve the image to help it stay clearly in your mind.

Example: For example, you could remember a chronological list of ten Greek philosophers as:

- Parmenides - A BUN topped with grated yellow PARMESan cheese
- Heraclitus - a SHOE worn by HERACLES (Greek Hercules) glowing with a bright LighT
- Empedocles - A TREE from which the M-shaped McDonalds arches hang hooking up a bicycle PEDal
- Democritus - think of a PAW print on the voting form of a DEMOCRATIC election.

- Protagoras - A bee HIVE being positively punched through (GORed?) by an atomic PROTON
- Socrates - BRICKS falling onto a SOCK (with a foot inside!) from a CRATE.
- Plato - A plate with angel's wings flapping around a white cloud
- Aristotle - A friend called hARRY clutching a bOTTLE of wine vaulting over a gate
- Zeno - A LINE of ZEN Buddhists meditating
- Epicurus - A HEN's egg being mixed into an EPileptics's CURE.

Try either visualizing these images as suggested, or if you do not like them, come up with images of your own. Once you have done this, try writing down the names of the philosophers on a piece of paper. You should be able to do this by thinking of the number, then the part of the image associated with the number, and then the whole image. Finally you can decode the image to give you the name of the philosopher. If the mnemonic has worked, you should not only recall the names of all the philosophers in the correct order, but should also be able to spot where you have left them out of the sequence. Try it, It's easier than it sounds.

You can use a peg system like this as a basis for knowledge in an entire area. The example above could form the basis for knowledge of ancient philosophy. You could now associate images representing the projects, systems and theories of each philosopher with the images coding the philosophers' names.

Key points:

The Number/Rhyme technique is a very effective method of remembering lists. It works by “pegging” the things to be remembered to images rhyming with the numbers 0-9. By driving the associations with numbers you have a good starting point in reconstructing the images, you are aware if information is missing, and you can pick up and continue the sequence from anywhere within the list.

The Number/Shape Mnemonic (6.1.3)

Function: Remembering ordered lists with visual images

How to use tool: The Number/Shape system is very similar to the Number/Rhyme system. It is a very simple and effective way of remembering a list in a specific order. It is another example of a peg system.

The technique works by helping you to build up pictures in your mind, in which the numbers are represented by images shaped like the number. You can then associate these with the things you want to remember using striking images.

One image scheme is shown below:

- 1 - Candle, spear, stick
- 2 - Swan (beak, curved neck, body)
- 3 - (rotate shape though 90 degrees!)
- 4 - Sail of a yacht
- 5 - A meat hook, a sea-horse facing right
- 6 - A golf club
- 7 - A cliff edge
- 8 - An egg timer
- 9 - A balloon with a string attached, flying freely
- 0 - A hole

If you find that these images do not attract you or stick in your mind, then change them for something more meaningful to you. As with the Number/Rhyme scheme, link these images to ones representing the things to be remembered.

In some cases, these images may be more vivid than those in the number/rhyme scheme, and in other cases you may find the number/rhyme scheme more memorable. There is no reason why you cannot mix the most vivid images of each scheme together into your own compound scheme.

Once you have mastered this technique, you can multiply it using the images described in the article on Expanding Memory Systems (see 6.2).

Example: We will use a list of more modern thinkers to illustrate the number/shape system:

- 1 - Spinoza - A large CANDLE wrapped around with someone's SPINe.
 - 2 - Locke - A SWAN trying to pick a LOCK with its wing.
 - 3 - Hume - A HUMAN child BREAST feeding.
 - 4 - Berkeley - A SAIL on top of a large hooked and spiked BURR in the LEE of a cliff.
 - 5 - Kant - A CAN of spam hanging from a meat HOOK.
 - 6 - Rousseau - A kangaROO SEWing with a GOLF CLUB.
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- 7 - Hegel - A crooked trader about to be pushed over a CLIFF, HaGgLING to try to avoid being hurt.
- 8 - Kierkegaard - A large EGG TIMER containing captain KIRK and a GuARD from the starship enterprise, as time runs out.
- 9 - Darwin - A BALLOON floating upwards, being blown fAR by the WIND.
- 10 - Marx - A HOLE with white chalk MARKs around it's edge.

Key points: The Number/Shape technique is a very effective method of remembering lists. It works by linking things to be remembered with the images representing the numbers 0-9. By using it in conjunction with the Number/Rhyme system, you can build potent images that can make very effective mnemonics.

The Alphabet Technique (6.1.4)

Function: Remembering longer ordered lists accurately

How to use tool: The Alphabet system is a peg memory technique similar to, but more sophisticated than the Number/Rhyme system. It is a good method for remembering longer lists of items in a specific order, in such a way that you can tell if items are missing.

It works by associating images representing letters of the alphabet with images you create for the things to be remembered.

When you are creating images for the letters of the alphabet, create images phonetically, so that the sound of the first syllable of the word is the name of the letter. For example, you might represent the letter "k" with the word "cake".

Tony Buzan in his book "Using Your Memory" suggests using a system for creating vivid images that you can reconstruct if you forget them. He suggests taking the phonetic letter sound as the first consonant, and then, for the rest of the consonants in the word, using the first letters in alphabetical order that make a memorable word. For example for the letter "S" (root 'Es') we would first see if any strong images presented themselves when we tried to create a word starting with "EsA", "EsB", "EsC", "EsD", "EsE", etc.). This approach has the advantage of producing an image that you can reconstruct if you forget it. You might, however, judge that this is an unnecessary complication of a relatively simple system. In any case it is best to select the strongest image that comes to mind and stick with it.

One image scheme is shown below:

A - Ace of spades
B - Bee
C - Sea
D - Diesel engine
E - Eel
F - Effluent
G - Jeans
H - H-Bomb, itch
I - Eye
J - Jade
K - Cake
L - Elephant
M - Empty
N - Entrance
O - Oboe
P - Pea
Q - Queue
R - Ark
S - Eskimo
T - Teapot

U - Unicycle
V - Vehicle
W - WC
X - X-Ray
Y - Wire
Z - Zulu

If you find that these images do not attract you or stick in your mind, then change them for something more meaningful to you.

Once you have firmly visualized these images and have linked them to their root letters, you can associate them with information to be remembered.

See the introduction to this module to see how you can improve these pictures to help them stay clearly in your mind.

Example: Continuing our mnemonic example of the names of philosophers, we will use the example of remembering a list of modern thinkers:

A - Ace - Freud - A crisp ACE being pulled out of a FRYing pan (FRiED)
B - Bee - Chomsky - A BEE stinging a CHiMp and flying off into the SKY
C - Sea - Genette - A GENerator being lifted in a NET out of the SEA
D - Diesel - Derrida - A DaRing RIDer surfing on top of a DIESEL train
E - Eagle - Foucault - Bruce Lee fighting off an attacking EAGLE with kung
FU
F - Effluent- Joyce - environmentalists JOYfully finding a plant by an
EFFLUENT pipe
G - Jeans - Nietzsche - A holey pair of JEANS with a kNEe showing through
H - H-Bomb - Kafka - A grey civil service CAFe being blown up by an H-
Bomb
Etc.

Key points: The Alphabet Technique links the items to be remembered with images of the letters A-Z. This allows you to remember a medium length list in the correct order. By pegging the items to be remembered to letters of the alphabet you know if you have forgotten items, and know the cues to use to trigger their recall.

The alphabet system takes a certain amount of learning.

The Journey System (6.1.5)

Function: Remembering long lists of information

How to use tool: The journey method is a powerful, flexible and effective mnemonic based around the idea of remembering landmarks on a well-known journey. It combines the narrative flow of the Link Method and the structure and order of the Peg Systems into one very powerful system.

You use the Journey Method by associating information with landmarks on a journey that you know well. This could, for example, be your journey to work in the morning; the route you use to get to the front door when you get up; the route to visit your parents; or a tour around a holiday destination. Once you are familiar with the technique you may be able to create imaginary journeys that fix in your mind, and apply these.

To use this technique most effectively, it is often best to prepare the journey beforehand. In this way the landmarks are clear in your mind before you try to commit information to them. One of the ways of doing this is to write down all the landmarks you can recall in order on a piece of paper. This allows you to fix these landmarks as the significant ones to be used in your mnemonic, separating them from others that you may notice as you get to know the route even better.

To remember a list of items, whether these are people, experiments, events or objects, all you need do is associate these things with the landmarks or stops on your journey.

This is an extremely effective method of remembering long lists of information. With a sufficiently long journey you could, for example, remember elements on the periodic table, lists of Kings and Presidents, geographical information, or the order of cards in a shuffled pack. The system is extremely flexible: all you need do to remember many items is to remember a longer journey with more landmarks. To remember a short list, only use part of the route!

One advantage of this technique is that you can use it to work both backwards and forwards, and start anywhere within the route to retrieve information.

You can use the technique well with other mnemonics. This can be done either by building complex coding images at the stops on a journey, or by linking to other mnemonics at each stop. You could start other journeys at each landmark. Alternatively, you may use a peg system to organize lists of journeys, etc.

See the introduction to this module for information on how to enhance the images used for this technique.

Example: You may, as a simple example, want to remember something mundane like a shopping list:

Coffee, salad, vegetables, bread, kitchen paper, fish, chicken breasts,

Pork chops, soup, fruit, bath tub cleaner.

You could associate this list with a journey to a supermarket. My mnemonic images therefore appear as:

1. Front door: spilt coffee grains on the doormat.
2. Rose bush in front garden: growing lettuce leaves and tomatoes around the roses.
3. Car: with potatoes, onions and cauliflower on the driver's seat.
4. End of the road: an arch of French bread over the road.
5. Past garage: with its sign wrapped in kitchen roll.
6. Under railway bridge: from which haddock and cod are dangling by their tails.
6. Traffic lights: chickens squawking and flapping on top of lights.
8. Past church: in front of which a pig is doing karate, breaking boards.
9. Under office block: with a soup slick underneath: my car tires send up jets of tomato soup as I drive through it.
10. Past car park: with apples and oranges tumbling from the top level.
11. Supermarket car park: a filthy bath tub is parked in the space next to my car!

Key points: The journey method is a powerful, effective method of remembering lists of information, by imagining images and events at stops on a journey.

As the journeys used are distinct in location and form, one list remembered using this technique is easy to distinguish from other lists. To use this technique you need to invest some time in preparing journeys clearly in your mind. This investment pays off many times over by the application of the technique.

The Roman Room Mnemonic (6.1.6)

Function: Remembering groups of non-ordered information

How to use tool: The Roman Room technique is an ancient and effective way of remembering information where its structure is not important. As an example, it serves as the basis of one of the powerful mnemonic systems used to learn languages (see 6.3.1).

To use the technique, imagine a room that you know, such as your sitting room, bedroom, office or classroom. Within the room are objects. Associate images representing the information you want to remember with the objects in the room. To recall information, simply take a tour around the room in your mind, visualizing the known objects and their associated images.

The technique can be expanded by going into more detail, and by using information to be remembered to key into smaller objects. Alternatively, you can open doors from your room into other rooms and use the objects in them as well. When you have more experience you may find that you can build extensions to your rooms in your imagination, and fill them with objects that would logically be there.

You can use other rooms to store other categories of information. And, there is no need to restrict this information to rooms. In fact, you could use a landscape or a town you know well, and populate it with memory images.

See the introduction to this module for information on how to enhance the images used for this technique.

Example: For example, I can use my sitting room as a basis for the technique. In this room I have the following objects: *table, lamp, sofa, large bookcase, small bookcase, CD rack, tape racks, stereo system, telephone, television, video, chair, mirror, black & white photographs, etc.*

I may want to remember a list of World War I war poets: *Rupert Brooke, G.K. Chesterton, Walter de la Mare, Robert Graves, Rudyard Kipling, Wilfred Owen, Siegfried Sassoon, W.B. Yates*

I could visualize walking through my front door. Within this image, someone has painted a picture on it showing a scene from the Battle of the Somme. In the center of the picture is a man sitting in a trench writing in a dirty exercise book.

I walk into the sitting room, and look at the table. On the top is RUPERT the Bear sitting in a small BROOK (we do not need to worry about where the water goes in our imagination!) This codes for Rupert Brooke.

Someone seems to have done some moving: a CHEST has been left on the sofa. Some jeans (Alphabet System: G=Jeans) are hanging out of one drawer, and some cake has been left on the top (K=Cake). This codes for G K Chesterton.

The lamp has a small statuette of a brick WALL over which a female horse (MARE) is about to jumping. This codes for Walter de la Mare.

Etc.

Key points: The Roman Room technique is similar to the Journey method. It works by pegging images coding for information to known things, in this case to objects in a room.

The Roman Room technique is most effective for storing lists of unlinked information, while the journey method is better for storing lists of ordered items.

The Major System (6.1.7)

Function: **Remembering Large Volumes of Related Information**

How to use tool: The Major Memory System is one of the most powerful memory systems available. It takes a lot of time to master, but once learned is very powerful. The technique often forms the basis of some of the extraordinary, almost magical memory feats performed by magicians and stage memory performers.

The system works by converting number sequences into nouns, nouns into images, and linking images into sequences. These sequences can be very complex and detailed.

The building blocks of the system are the association of the numbers below with the following consonant sounds:

- 0 - s, z, soft-c - remember as 'z is first letter of zero'
- 1 - d, t, th - remember as letters with 1 downstroke
- 2 - n - remember as having 2 downstrokes
- 3 - m - has three downstrokes
- 4 - r - imagine a 4 and an R glued together back-to-back
- 5 - L - imagine the 5 propped up against a book end (L)h
- 6 - j, sh, soft-ch, dg, soft-g - g is 6 rotated 180 degrees.
- 7 - k, hard-ch, hard-c, hard-g, ng - imagine K as two 7s rotated and glued together
- 8 - f, v - imagine the bottom loop of the 8 as an eFfluent pipe discharging waste (letter image of F in alphabet system)
- 9 - p, b - b as 9 rotated 180 degrees.

These associations should be learned thoroughly before going further with the technique.

Starting to use the Major System

The system operates on a number of levels, depending on the amount of time you are prepared to devote to learning the system.

The first level, which involves coding single digit numbers into small words, functions almost as a poor relation of the number/rhyme system. It is at higher levels that you can unleash the real power of the system. You should, however, learn to use this first level before moving on.

The trick with converting numbers into words is to use only the consonants that code information within the word, while using vowels to pad the consonants out with meaning. If you do have to use other consonants to make up a word, use only those that do not code for numbers - i.e. h, q, w, x, and y.

At the first level, we code each number into a short noun. This is made up of the consonant coding for the number, and vowels that turn the consonant into a word. On a

sheet of paper, write the numbers 0 to 9, and apply these rules to create your own memory words. Some examples are shown below:

- 0 - saw
- 1 - toe
- 2 - neigh
- 3 - ma
- 4 - ray
- 5 - law
- 6 - jaw
- 7 - key
- 8 - fee
- 9 - pie

You can use these words in association much like the other peg technique memory words.

Moving to the second level

Similar rules apply to creating a standard word from two numbers. It is best not to try to use a single number word as a root, as this can confuse the image.

Write down the numbers 01 to 99, and apply the rules to create memory words for yourself. A few examples are shown below:

- 09 - z, p - zap
- 17 - t, ch - tech
- 23 - n, m - name
- 36 - m, sh - mesh
- 41 - r, s - rose
- 52 - l, n - line
- 64 - ch, r - chair
- 75 - k, l - keel
- 89 - f, p - fop
- 98 - b, f - beef

Taking the Major System Further

Just using double number words may be enough to make this a sufficiently powerful mnemonic for you. Alternatively you may decide to use triple number words, using the same construction rules as double number words.

Examples are:

- 182 - d, v, n - Devon
- 304 - m, s, r - miser
- 400 - r, c, s - races
- 651 - j, l, d - jellied
- 801 - f, z, d - fazed

Even though you can construct words from first principles each time, at this level of complexity it may be worth writing them down to make them easier to remember. You

can then run through them many times to strengthen the link in your mind between the numbers and the associated words. This will help you to remember the appropriate word faster.

Using Words to Remember Long Numbers

Once you have come up with words and images to link to your numbers, you can start to apply the technique to remember, for example, long numbers. A good way of doing this is to associate Major System words with stops on a journey (see [6.1.5](#)).

Example: The number Pi is 3.14159265359 (to 11 decimal places). Using the major system and the journey system together, I can remember this as:

- Passing my *Ma* (3) by the front door of my house
- Seeing Michelangelo's *David* (1,4,1) sleeping under the rose bush in the garden
- Someone has tied a *loop* (5,9) of yellow ribbon onto the steering wheel of my car.
- I see a poster with a photo of a steaming pile of sausages and mashed potato, with the title 'glorious *nosh*' (2,7) at the end of the road.
- A *lama* (5,3) is grazing on grass outside the garage forecourt
- Another *loop* (5,9) of yellow ribbon has been tied around the railway bridge. This is getting strange!

Note that this is another use of the journey used in the example of 6.1.5.

Key points: The major memory system works by linking numbers to consonants, and then by linking these into words. By using the images these words create, and linking them together with the journey system, large amounts of information can be accurately memorized.

Using Concept Maps as Memory Aids (6.1.8)

Function: Remembering the structure of information

How to use tool: Concept Maps (see section [5.1](#) for full information) are not formally mnemonics. They do, however, help you to plan the structure of a topic as a clear “shape” that you can remember easily. By seeing this shape in your mind, you can prompt yourself to remember the information coded within it.

This becomes even easier if you have coded this information using striking images. See the introduction to this module to see how to make information as memorable as possible.

Aide Memoires (6.1.9)

Function: **Ensuring that you remember to consider all aspects of a situation**

How to use tool: An Aide Memoire (Memory aid) is a structured list of points or headings that should be considered when solving a particular problem. It tends to be specific to the type of problem being faced.

A good aide memoire can be a very powerful planning tool, as it contains a great deal of the experience of the people who developed it. If you use a good aide memoire effectively, you can be reasonably confident that you will have considered all relevant factors. Often this makes the difference between carrying out a task effectively and making a mess of it, particularly when you are under pressure.

Aide Memoires are routinely used in areas as diverse as computer systems analysis, construction of financial proposals and military planning.

Developing an Aide Memoire

If you are solving a common problem, then a good aide memoire may already exist for it. If you cannot find a good pre-prepared one, then you may have to develop it for yourself. This is worthwhile where you need to plan a number of similar jobs.

Developing an aide memoire is an iterative process. First you start by producing what you think is a definitive list of points or headings that should be considered. Use this to plan the job. After the job is complete, review the list, and see if there are any additional points that should be included. Every time an unforeseen problem arises on a project, ask yourself whether you need to prompt yourself on it on your list.

As your aide memoire improves, so will the quality of your planning.

Example: Systems Analysts use a number of different aide memoires for designing computer software. The one used depends on the size and type of job being executed. An example of a simple one is shown below. This is used during preparation of a specification to ensure that relevant factors are considered.

Customer Requirement

- Stated Requirement and Purpose of Enhancement
- Special Requirements
- Volumes of Data and Processing Time
- Technical Risks and Feasibility
- Implications:
 - Hardware
 - Supporting software
 - System specific considerations
- Project Stages

Project Implementation

- Programmer Instructions
- Quality Assurance
- Documentation
- Training
- Installation
- Follow Up Work

The analyst will run through this list of headings while preparing a specification to ensure that he or she has considered all aspects of a problem. Where headings are not relevant they are ignored. By using and developing the aide memoire, the analyst can be reasonably confident that all appropriate project stages have been taken into consideration. This ensures that a fair price is charged for work done.

Key points: An aide memoire is a standard list of points or headings that show what you should consider while you are planning to solve a problem. By using an aide memoire you ensure that you do not forget important factors.

Aide memoires should be improved continuously. If you find that have not included an important point, then update the list appropriately. This ensures that the next time you use the aide memoire you will remember to think about the point. This will improve the quality and depth of future planning that you carry out.

Learning a Foreign Language (6.3.1)

Systems Needed: [Link Method \(6.1.1\)](#)
[Roman Room Mnemonic \(6.1.6\)](#)

Foreign languages are the ideal subject area for the use of memory techniques. Learning vocabulary is often a matter of associating a meaningless collection of syllables with a word in your own language. Traditionally, people have associated these words by repetition, by saying the word in their own language and the foreign language time and time and time and time again. You can improve on this tedious way of learning by using three good techniques:

1. Using Mnemonics to link words

This is a simple extension of the link method described in 6.1.1. Here you are using images to link a word in your own language with a word in a foreign language. For example, in learning English/French vocabulary:

- English: rug/carpet - French: tapis - imagine an ornate oriental carpet with a tap as the central design woven in chrome thread
- English: grumpy - French: grognon - a grumpy man groaning with irritation
- English: to tease - French: taquiner - a woman teasing her husband as she takes in the washing.

This technique was formalized by Dr. Michael Gruneberg, and is known as the 'LinkWord' technique. He has produced language books in many language pairs to help students acquire the basic vocabulary needed to get by in the language (usually about 1000 words). It is claimed that using this technique this basic vocabulary can be learned in just 10 hours.

2. The Town Language Mnemonic

This is a very elegant, effective mnemonic that fuses a sophisticated variant of the Roman Room system with the system described above.

This depends on the fact that the basic vocabulary of a language relates to everyday things: things that you can usually find in a city, town or village. To use the technique, choose a town that you are very familiar with. Use objects within that place as the cues to recall the images that link to foreign words.

Nouns in the town

Nouns should be associated to the most relevant locations: For example, the image coding the foreign word for book could be associated with a book on a shelf in the library. You could associate the word for bread with an image of a loaf in a baker's shop. Words for vegetables could be associated with parts of a display outside a greengrocer's. Perhaps there is a farm just outside the town that allows all the animal name associations to be made.

Adjectives in the park

Adjectives can be associated with a garden or park within the town: words such as green, smelly, bright, small, cold, etc. can be easily related to objects in a park. Perhaps there is a pond there, or a small wood, or perhaps people with different characteristics are walking around.

Verbs in the sports center

Verbs can most easily be associated with a sports centre or playing field. This allows us all the associations of lifting, running, walking, hitting, eating, swimming, driving, etc.

Remembering Genders

In a language where gender is important, a very good method of remembering this is to divide your town into two main zones. In one zone you code information on masculine gender nouns, while in the other zone you code information on feminine nouns. Where the language has a neutral gender, then use three zones. You can separate these areas with busy roads, rivers, etc. To fix the gender of a noun, simply associate its image with a place in the correct part of town. This makes remembering genders easy!

Many Languages, many towns

Another elegant spin-off of the technique comes when learning several languages, as this can be very confusing. With the town mnemonic, all you need do is choose a different city, town or village for each language to be learned. Ideally this might be in the relevant country. Practically, however, you might just decide to use a local town with the appropriate foreign flavor.

3. The hundred most common words

Tony Buzan, in his book "Using your Memory", points out that just 100 words comprise 50% of all words used in conversation in a language. Learning this core group of 100 words gets you a long way towards being able to speak in that language, albeit at a basic level. The 100 basic words used in conversation are shown below:

- | | | | | |
|---------------|---------------|---------------|--------------|---------------|
| 1. A,an | 2. After | 3. Again | 4. All | 5. Almost |
| 6. Also | 7. Always | 8. And | 9. Because | 10. Before |
| 11. Big | 12. But | 13. (I) can | 14. (I) come | 15. Either/or |
| 16. (I) find | 17. First | 18. For | 19. Friend | 20. From |
| 21. (I) go | 22. Good | 23. Goodbye | 24. Happy | 25. (I) have |
| 26. He | 27. Hello | 28. Here | 29. How | 30. I |
| 31. (I) am | 32. If | 33. In | 34. (I) know | 35. Last |
| 36. (I) like | 37. Little | 38. (I) love | 39. (I) make | 40. Many |
| 41. One | 42. More | 43. Most | 44. Much | 45. My |
| 46. New | 47. No | 48. Not | 49. Now | 50. Of |
| 51. Often | 52. On | 53. One | 54. Only | 55. Or |
| 56. Other | 57. Our | 58. Out | 59. Over | 60. People |
| 61. Place | 62. Please | 63. Same | 64. (I) see | 65. She |
| 66. So | 67. Some | 68. Sometimes | 69. Still | 70. Such |
| 71. (I) tell | 72. Thank you | 73. That | 74. The | 75. Their |
| 76. Them | 77. Then | 78. There is | 79. They | 80. Thing |
| 81. (I) think | 82. This | 83. Time | 84. To | 85. Under |
| 86. Up | 87. Us | 88. (I) use | 89. Very | 90. We |
| 91. What | 92. When | 93. Where | 94. Which | 95. Who |
| 96. Why | 97. With | 98. Yes | 99. You | 100. Your |

(Extract reproduced from Use Your Memory by Tony Buzan with the permission of BBC Worldwide Limited, © Tony Buzan)

Summary

The three approaches to learning foreign languages shown here can be very effective. They help to point out:

- The most important words to learn;
- Show how to link words in your own language to words in a foreign language; and
- Show how to structure recall of the language through use of the town mnemonic.

Using Mnemonics In Exams (6.3.2)

Systems Needed: The Number/Rhyme Technique ([6.1.2](#))
The Number/Shape Technique ([6.1.3](#))
The Alphabet Technique ([6.1.4](#))
The Journey Technique ([6.1.5](#))
Concept Maps ([5.1](#))

A very effective way of structuring information for revision is to draw up a full, color-coded Concept Map of a subject. This will help you to see the overall structure of the topic and show you the associations between pieces of information. A good Concept Map can be an effective mnemonic in its own right.

The problem with this is that you can forget the label on a line on a Concept Map. A more reliable method is to take your Concept Map, and break it down into a numbered list of important points. You can then use one of the peg techniques (6.1.2 - 6.1.4) to remember the items on the list. Alternatively you can use the journey technique (6.1.5) for longer lists.

By associating items on a list with a peg system or journey, you can check that you have retrieved all items held by the mnemonic. Supporting facts can be associated into images or sub-mnemonics. These facts can be triggered by the pegs (for the peg system), or at landmarks, if you use the journey system. Alternatively, you can loosely associate this information with the facts coded.

Retrieving all the facts necessary to answer an exam essay question becomes as simple as running through the mnemonic in your mind. As you go, jot down the retrieved facts that are relevant to the question. Once you have written these down, you can apply any other mnemonics you have coded, or note any associated facts and connections that occur to you. This should ensure that you have all possible information available to you, and should help you to produce a good essay plan.

How to Remember Names (6.3.3.)

Systems Needed: [Link Method \(6.1.1\)](#)
[Roman Room Mnemonic \(6.1.6\)](#)

Remembering names needs a slightly different approach from all the others explained so far in this section. The techniques used, though, are quite simple:

1. Face association

Examine a person's face discretely when you are introduced. Try to find an unusual feature, whether ears, hairline, forehead, eyebrows, eyes, nose, mouth, chin, complexion, etc.

Create an association between that characteristic, the face, and the name in your mind. The association may be to link the person with someone else you know with the same name. Alternatively, it may be to associate a rhyme or image of the name with the person's face or defining feature.

2. Repetition

When you are introduced, ask for the person to repeat their name. Use the name yourself as often as possible (without overdoing it!). If it is unusual, ask how it is spelled or where it comes from, and if appropriate, exchange cards. Keep in mind, the more often you hear and see the name, the more likely it is to sink in. Also, after you have left that person's company, review the name in your mind several times. If you are particularly keen you might decide to write it down and make notes.

Summary

The methods suggested for remembering names are fairly simple and obvious, but are useful. Association either with images of a name or with other people can really help. Repetition and review help to confirm your memory.

An important thing to stress is practice, patience, and progressive improvement.

Remembering Lists of Information (6.3.4)

Systems Needed: [Link Method \(6.1.1\)](#)
[The Number/Rhyme Technique \(6.1.2\)](#)
[The Number/Shape Technique \(6.1.3\)](#)
[The Alphabet Technique \(6.1.4\)](#)
[The Journey Technique \(6.1.5\)](#)

Remembering lists are what many mnemonics are for. You can code almost any information into these mnemonic lists. All that you need is the imagination to come up with the relevant associations.

To memorize short lists, use:

- The Link or Story Methods (6.1.1)
- The Number/Rhyme System (6.1.2), or
- The Number/Shape Method (6.1.3)

To remember intermediate and long lists, use:

- The simple Journey Method (6.1.5)
- The extended Number/Rhyme Method (6.1.2, and 6.2)
- The extended Number/Shape Method (6.1.3, and 6.2), or
- The Alphabet System, and, if necessary, the extended Alphabet system (6.1.4 and 6.2)

Remembering Numbers (6.3.5)

Systems Needed: [Link Method \(6.1.1\)](#)
[The Number/Rhyme Technique \(6.1.2\)](#)
[The Number/Shape Technique \(6.1.3\)](#)
[The Alphabet Technique \(6.1.4\)](#)
[The Journey Technique \(6.1.5\)](#)
[The Major System \(6.1.7\)](#)

Using mnemonic systems, remembering numbers becomes extremely simple. There are a number of approaches, depending on the types of numbers being remembered:

1. Short numbers

The easiest, but least reliable, way of remembering numbers is to use simple Number/Rhyme images (see 6.1.2) associated in a story (6.1.1).

A better way is to use a simple peg system, where, for example, you can associate digits from the Number/Rhyme System (6.1.2) into positions organized with the Alphabet system (6.1.4).

2. Long numbers (e.g. Pi)

You can store long numbers most effectively with the Journey System (6.1.5). At a simple level, single numbers can be stored at each stop on the journey using Number/Rhyme or Number/Shape images. At a more advanced level you can increase the number of digits stored at each stop by either extending the number systems (see 6.2) or by using the Major System. You can even increase the number of digits stored using the Major System by extending it as described in section 6.2.

By using all the simple techniques together you should be able to store a 10-digit number with relatively little effort. Using the more powerful systems, holding it to 1000 digits might not be too much of a challenge.

3. Telephone Numbers

These can be remembered simply by associating numbers from the Number/Rhyme system with positions in either the alphabet system or the Journey System. You can then associate these with the face or name of the person whose number you are remembering.

For example, to remember that someone's phone number is 735-3458, I can imagine myself traveling to her flat: with my destination firmly in mind, I envisage the following stops on my journey:

1. Front door: the door has sprouted angel's wings, and is flying up to heaven! (7)
 2. Rose bush: a small sapling (tree, 3) is growing its way through the middle of the bush.
 3. Car: some bees have started to build a hive (5) under the wheel of my car. I have to move it very carefully to avoid damaging it.
 4. End of road: a tree (3) has fallen into the road. I have to drive around it.
 5. Past gas station: Someone has nailed a door (4) to the sign. Strange!
 6. Under railroad bridge: the bees are building another hive (5) between the girders!
 7. Beside the river: A rusty farm gate (8) is blocking the road.
-

Remembering Playing Cards (6.3.6)

Systems Needed: The Number/Rhyme or Number/Shape systems ([6.1.2](#), [6.1.3](#))
The Journey Method ([6.1.5](#))

Once you are familiar with the Journey system, it becomes relatively simple to remember the order of a pack of playing cards.

Before you try to do this, you should prepare a journey in your mind that has 54 stops. Ensure that the stops are fresh and firm in your mind.

The next step is fairly simple. What you need to do is have an image in your mind representing each of the cards. Counting an ace as 1, and the 10 as zero, you can create a Number/Rhyme or Number/Shape image in your mind for the numbers Ace to 10. For the jack, queen and king, the images on the playing card are ready-made mnemonic images. The suits similarly can be represented by the suit symbols. For example, you could represent the two of hearts by a white swan with a red heart painted on its side. The ten of spades could be a hole with the handle of a spade sticking out.

It is a good idea to prepare all the images to be used beforehand, as remembering cards during a card game will have to be done quite rapidly. As cards come up, associate the card images with the stops on your journey.

Moving On...

We have put a great deal of effort into developing and testing this e-book to make it as useful as possible. If you have any suggestions on how we can improve it for the future, then please let us know at mindtools@hotmail.com or through the Mind Tools web site at www.mindtools.com. Alternatively, if you have enjoyed this e-book and found it useful, please [let us know!](#)

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Best wishes, and enjoy using Mind Tools!



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