

ReMinD

Rehabilitation of Memory in Neurological Disorders

**A workbook for people with
memory problems**

**by
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and Nadina Lincoln, 2019**

WELCOME!

Welcome to the **CRAMMS** workbook for the cognitive rehabilitation programme you are about to start. This book contains all the information you will need as you progress through the programme.

How to use this workbook:



- There are spaces to write notes about discussions and activities during the groups. Please do write notes, as you will be able to look back through this book after the programme has finished to help you again.



- When you see this symbol, this is a group discussion activity. In the group we will discuss the topic and your experiences around it. Please write some notes so you can remember what we talked about later.



- When you see this symbol on a page it is take-home activity. This is to help you practice the techniques you learn in the group, while at home.

We hope that you will find the programme both informative and interesting and that it will help you to build up your own 'personal toolbox' of techniques for dealing with the attention and memory difficulties you experience.

* * *

The Cognitive Rehabilitation Group:

- The Group is weekly on the following dates:

Session	Date
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Ice breaker – let's get to know the group!



- The assistant psychologist running the group is:

- Write down three facts about the person sitting next to you:

1.....
.....

2.....
.....

3.....
.....

- The other members of the group are:

- | | |
|---------|---------|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

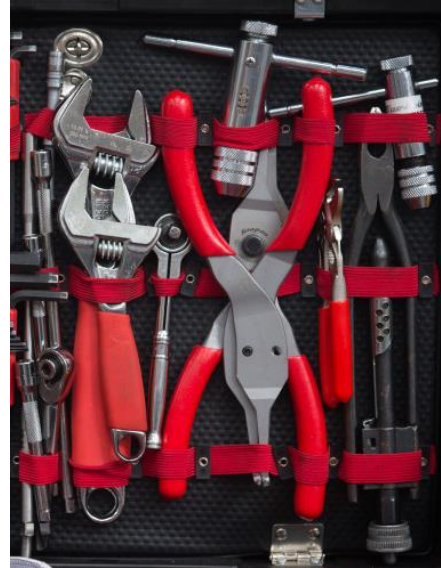
The Rehabilitation Programme

Aims

Unfortunately there are no quick fixes with neurological problems, and the aim of this programme is not to magically fix your problems with attention and memory.

The main aim of this programme is to provide you with a personal “toolbox” of strategies to help you overcome these problems.

Like the tools in a toolbox, you may find some of the strategies very useful in lots of situations. They may become your go-to ways to remember information.



You may use other strategies for different things, and you may learn some strategies that you prefer not to use. The strategies you prefer to use may be different to the ones someone else prefers.

The programme also aims to provide you with:

- An opportunity to reflect on attention and memory difficulties you have been experiencing and how you have coped so far
- An opportunity to share your experience of attention and memory problems with others and learn from each other's experiences
- Greater confidence in effectively dealing with your attention and memory difficulties

Structure

The group sessions will run for ten weeks, with each session lasting an hour and a half.

In each session we will recap the previous session, discuss take-home activities from the previous week, and learn about attention and memory and the strategies you can use to help remember things.

The ten sessions will be:

Session 1: Introduction to the Programme

Meeting others in the group, establishing group rules, exploring attention and memory problems.

Session 2: Memory and Memory Problems

Learning about the processes involved in memory and the memory systems.

Session 3: Attention I

Learning about the importance of attention and different types of memory aids.

Session 4: Attention II

Learning strategies to improve attention.

Session 5: Introducing Internal Memory Aids

Learning internal memory techniques, such as chunking and categorisation.

Session 6: Internal Memory Aids II

Learning more internal strategies, such as deep level processing and visualisation.

Session 7: Internal Memory Aids III

Learning more internal strategies such as “little and often” and the PQRS method.

Session 8: Introduction to External Memory Aids and Diaries

Learning to use diaries effectively.

Session 9: External Memory Aids II

Learning about external strategies, such as mobile phones and notice-boards.

Session 10: Review of the Programme and Fine-tuning

SESSION 1:

Introduction to the Programme by Roshan das Nair



Introductions

Format of this session and the programme

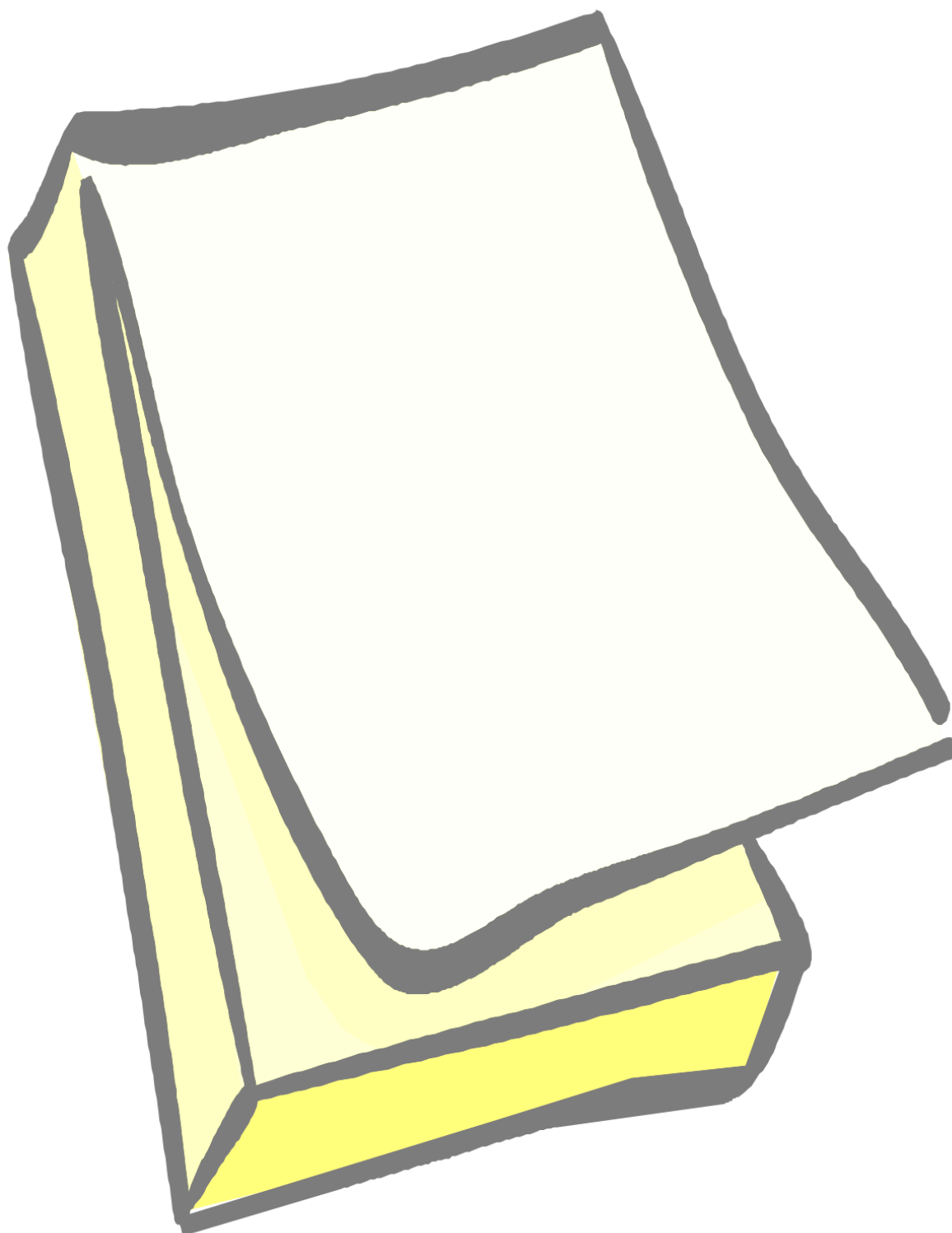
Group rules

As we will all be working together as a group for the next few weeks, it is important to establish a few ground rules for the sessions. These rules are discussed by the group as a whole so everyone feels comfortable with them, but in general, the following should be agreed:

- **Confidentiality:** People can discuss what is said in the group, but not who said them. When meeting group members outside of the group, issues relating to the group should not be discussed.
- **Respect:** Respect other people's views, opinions, beliefs, and lifestyles. It is ok to have a difference in opinion.
- **Comfortable sharing of information:** What is shared, and how much is shared, depends on the person. Questions may be asked, but no one will force the other to respond.
- **Patience:** Be patient with each other.
- **Listening:** Make sure everyone is listened to.
- **Attendance:** Try to let us know if you are going to miss or be late for a group.
- **Mobile phones – please put them on silent or turn them off as they can be very distracting to the group.**



Make a note of any other rules we agree here:



Discussion topics



1. Sometimes I forget certain things, such as...

For example:

- remembering faces / names
- recalling conversations (real life, on the telly, etc.)
- following plots in films, plays, books, etc.
- finding the way around familiar places

- Put a tick next to those on the list that are mentioned, and make a note of any other problems discussed below:



- Now list those that are most relevant to you personally:

-
-
-
-
-

2. How do you feel when you are having difficulty with attention and memory?

.....

.....

.....

.....

.....

.....

3. Sharing our own techniques to solve problems

Have you come up with any techniques to reduce these problems or help you cope better?



For example:

- having specific places for specific things
- having a routine
- use of external aids like calendars, diaries
- avoiding distractions when learning something new

- Again, tick those on the list that are mentioned, and make a note of any others. Put a star next to the techniques you use.



A large dashed rectangular box for writing. In the top left corner of this box is a small icon of a notepad with a pencil.

How effective are these strategies?
Rate them between 0 and 10 on usefulness
(0 = not at all useful; 10 = extremely useful)

If there any techniques discussed by the group that you have not used before but that you think could be helpful to you, jot them down here:

.....

.....

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Have you come across any leaflets/websites with advice that might be helpful to share with the group?

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4. Do you have any questions about the programme? Ask your group leader and note your answer here.

.....

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Take Home Activity



Think about the main memory problems you have and record them in the table below. For each one, state how often it happens (that is: hourly, twice daily, weekly, and so on) and how much you feel it affects you. Score 1 if it does not have a large impact and 5 if it severely affects your life. If you use any techniques to help with the difficulty, put this in the last column.

	Memory problem faced	How often this occurs	How much it affects you: 1=not at all; 5=severely	Techniques used (if any) to deal with it
1	e.g. I forget the names of my colleagues	2-3 times a week	4	Try to avoid using their name
2				
3				
4				
5				

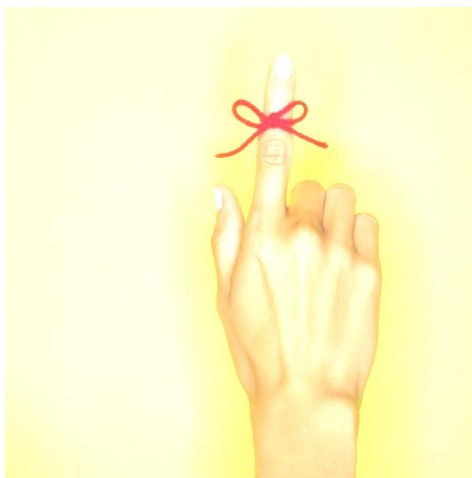
In our final review session we will come back to review how these problems have changed using this table, so please make sure you have enough information in the table to do this.

Use the space below to make a note of ways you could improve any of the strategies you already use, in order to reduce further forgetting. You may also want to record different techniques you want to try, and why you think they may help you.



SESSION 2:

Memory & Memory Problems



Review of session 1



Discussion topics

- What did we learn about our current memory problems from the take home activity?

- What is memory? What do you think it is?

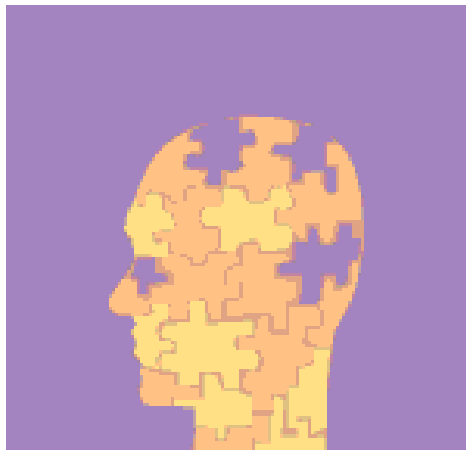
- Why is memory important?



Introduction to memory and memory problems: A psychologist's perspective

Memory

- Memory problems are very common and can be the result of many causes, such as ageing, stroke, traumatic injury or other health conditions
- We all experience memory difficulties at different points in our lives but most of us learn to cope with them
- Memory difficulties can vary depending on the nature and degree of the damage to the brain tissue
- This means that memory is not a single thing but is broken up into smaller units that work together to help us remember information
- This also means that there is no single brain area that is solely responsible for memory. Multiple parts of the brain are involved in a complicated memory system

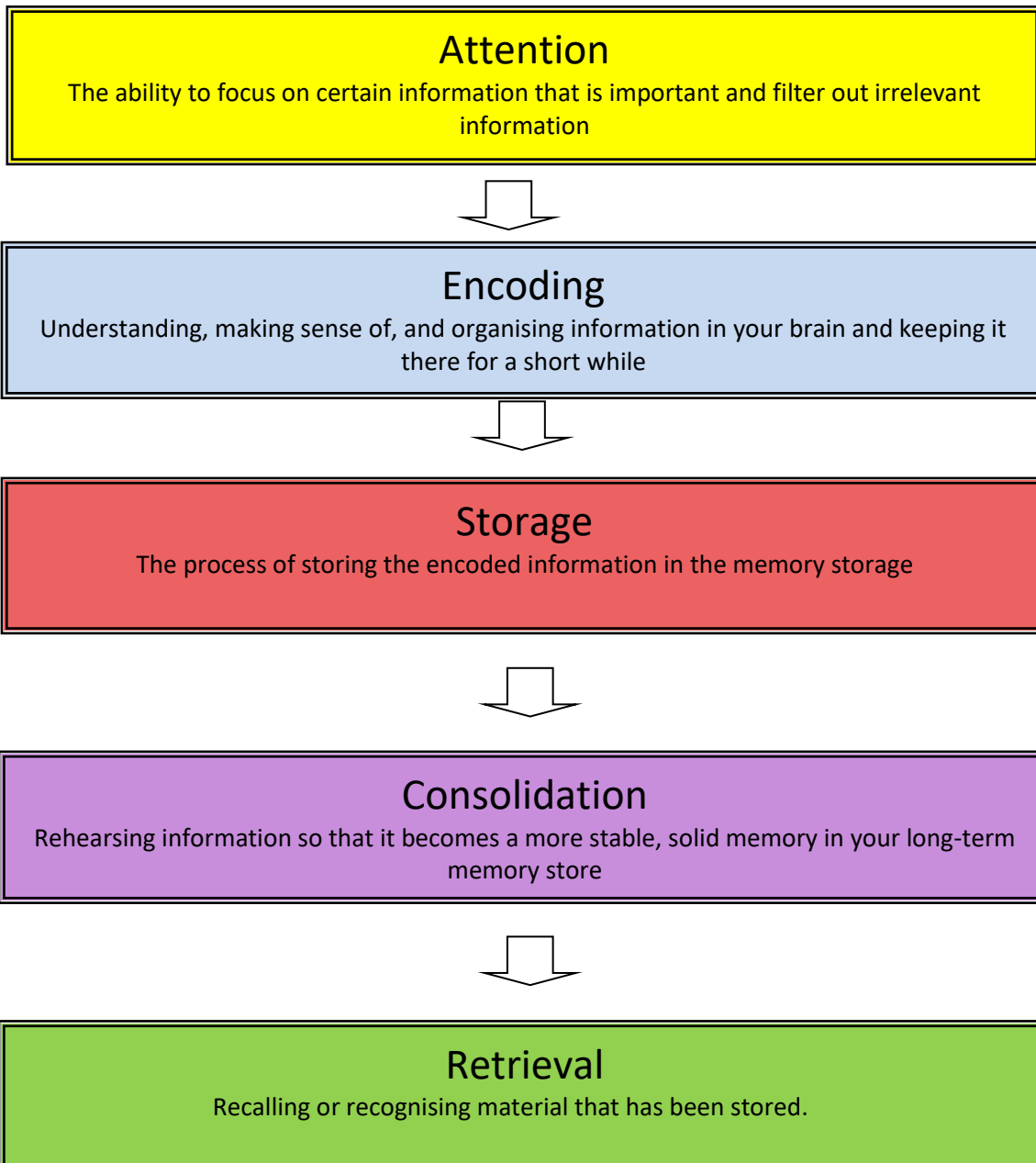


- Therefore, a problem in one or more of these areas can cause us to have memory problems
- People may experience memory problems in different ways, have difficulties remembering different types of information and the severity can vary greatly

Processes involved in attention and memory

Memory is a complex system that depends on many brain functions.

There are five processes involved in memory. These are:



These processes are linked to each other. I.e. each stage depends on the one before it being done successfully.

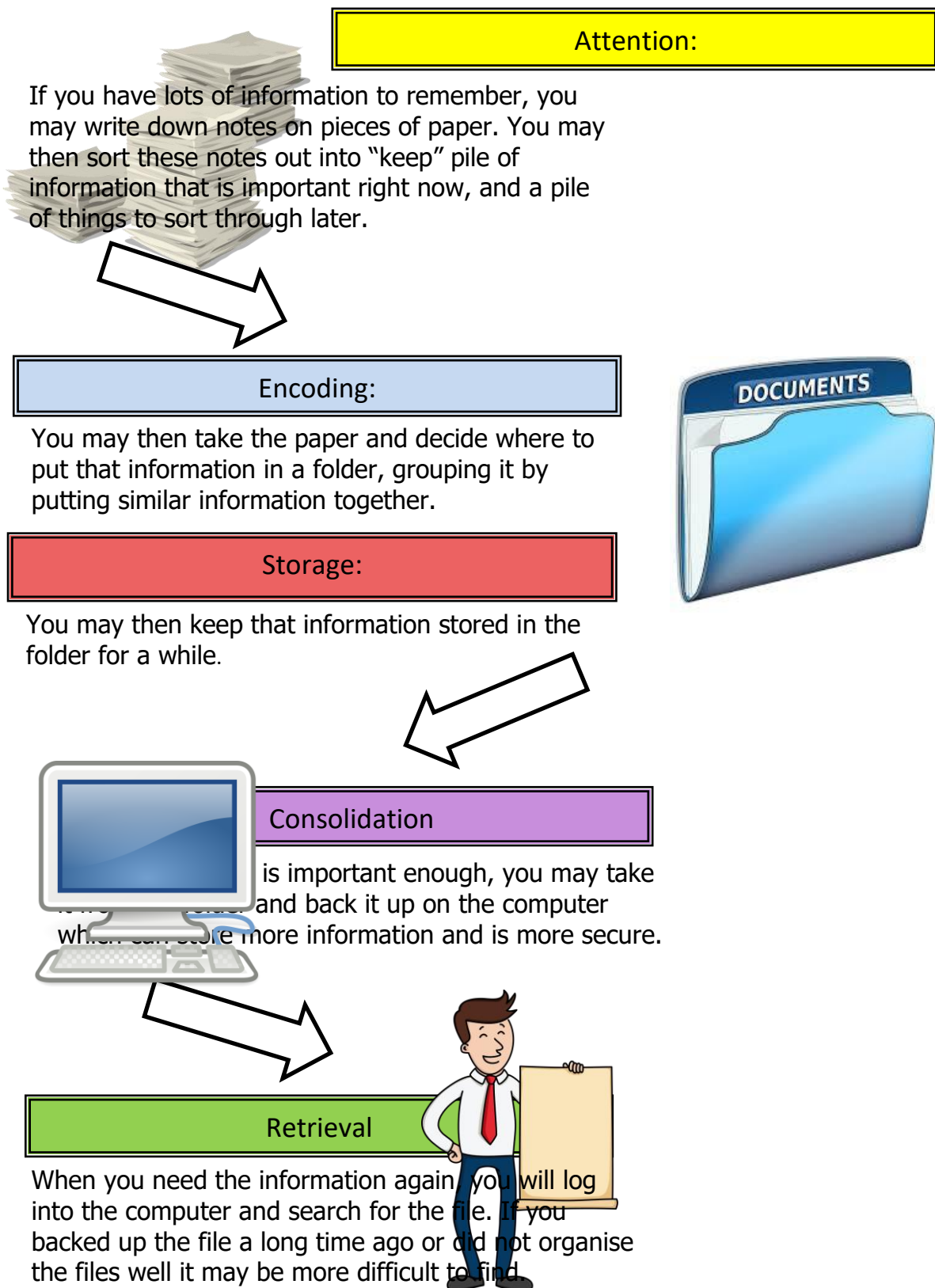
Therefore, without adequate attention, the information cannot be encoded properly, which in turn will result in poor storage, which means retrieving the information will be very difficult or impossible.



Memory difficulties can arise if there is a problem in one or more of these processes.

Memory processes as a filing cabinet

We can help understand these memory processes by imagining the memory system as a filing cabinet system.



Memory Storage

Memory can be subdivided into separate storage systems depending on where/how it is stored, and the amount of time memories are “alive” in them.

There are three types of storage systems we know of:

1. Sensory Memory:

Brief, fleeting impressions of sensory information.

2. Working Memory:

An in-between storage system that provides a space for information to be worked on and processed.

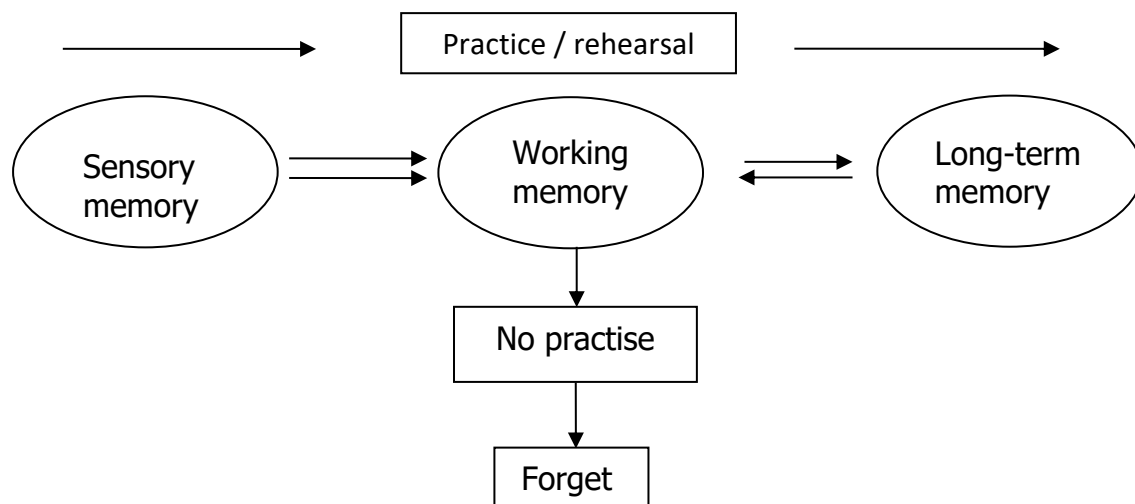
If information in the Working Memory is not rehearsed it may be lost (forgotten), but if it is rehearsed enough it may enter the long-term store.

5 to 9 bits of information can usually be held in the Working Memory.

Information can be held for 15-30 seconds in the Working Memory, but rehearsal or other internal memory aids can extend this time.

3. Long-term Memory:

Information that is stored here remains “inactive” for a long period of time. This information can be accessed and updated at a later time.



For example:



If someone gives you a phone number to call, the number will enter your sensory memory as you hear it.

In order to hold the phone number in your head long enough to write it down or call it, you could repeat it in your head whilst holding it in your working memory.

If you want to remember the phone number for later, you could repeat it regularly and it may pass into your long-term memory.

Memory Retrieval

We can retrieve memories in two different ways:

- 1. *Immediate recall:*** Recalling information as soon as it is presented (usually within a one minute time span).
- 2. *Delayed recall:*** Recalling information after some time has lapsed. During this period you may be distracted.

Distracters

Distracters are anything that takes our attention away from something we are trying to focus on or remember. Distracters can be:

- External: from the outside – e.g., noise, other people, etc.
- Internal: from inside ourselves – e.g., tiredness, worry, not paying attention, etc.

Discussion topic:

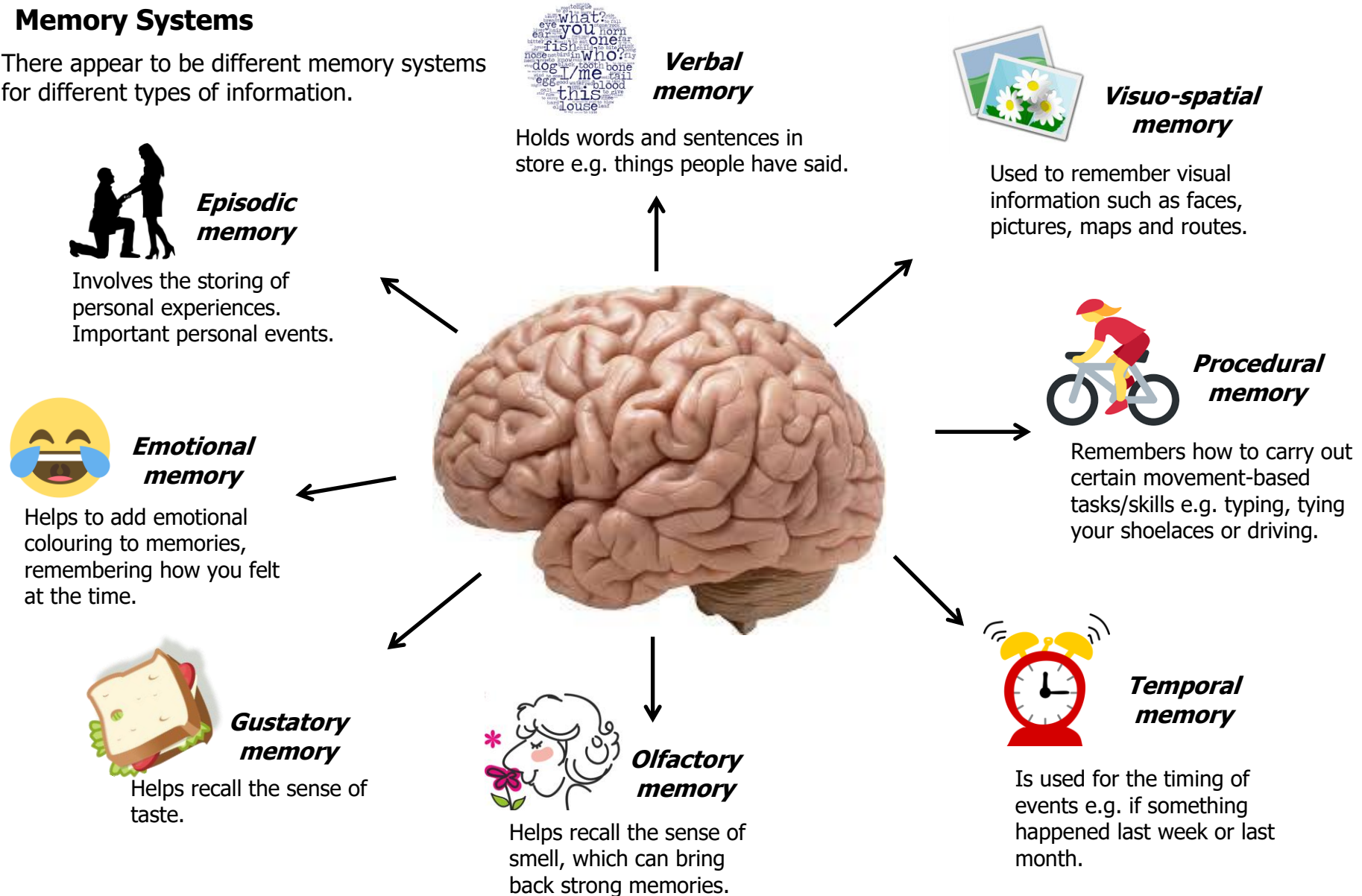
Which distracters have you experienced?

Discuss them with the group and make a list of your most common distracters below.



Memory Systems

There appear to be different memory systems for different types of information.



Take Home Activities



Task 1

Looking back at the information about memory on the last few pages, write down which areas of memory you feel you have difficulties with. Try to also think of an example of when this happens. You may have some sections where you write several things and others where you write none.

For example, under memory processes, someone who regularly experiences a 'tip of the tongue' feeling would write that they have problems with retrieval.



ATTENTION

ENCODING



STORAGE

CONSOLIDATION



RETRIEVAL

Task 2



Have a go at remembering the following string of letters. How long does it take you to remember them?

W Q N X V T

Time taken:.....

Now try learning the following string of letters in their order ***whilst listening to the radio or TV***. How long does it take you to remember them?

E H J S R Z

Time taken:.....

What time is it now?.....

Now turn the page

In 30 minutes try to remember the two strings of letters. **Without looking at the previous page, write the letters (or as many of them as you can remember) here:**

String 1: _ _ _ _ _

String 2: _ _ _ _ _

What time did you remember to complete this part of the task?

.....

Think about the 5 main processes involved in transferring information to memory: **attention – **encoding** – **storage** – **consolidation** - **retrieval****

- Were you able to remember both strings of letters?
- Were you able to remember to do the task in 30 minutes or did it take you longer?
- Is there anything you can do to more effectively commit the word to long-term memory?



SESSION 3:

Attention



Review of session 2



Discussion topics

- What did we learn about our memory from our take home activity?



- What is attention?
- Why is attention important?
- What makes us pay attention?



- Different types of attention:

What is sustained attention (concentration)?

What is divided attention (multi-tasking)? Give some examples of each.



Sustained attention

Divided attention

- What are the different types of distracters you can think of?
E.g. physical, bodily, etc. List as many as you can below.



Internal

External

Newspaper Attention Exercise

Now you are going to have a go at an attention exercise. To help you to improve your attention skills, you should try to practice tasks like these several times a week.

1. Read the following newspaper article and put a line through every letter 'a' that you see. Try to be as accurate as possible whilst also working as quickly as you can. Time how long it takes.

'How I fell for the Cotswolds' quiet charm' by Frances Mayes.

Lower Swell - we are at home in a stone schoolhouse that has undergone conversion into a comfortable Cotswold home and enclosed garden. The tiny cluster of surrounding houses looks equally mellow and natural in green, green radiant fields where sheep look as if they are posing for 'Mary Had a Little Lamb,' and the word chlorophyll comes to mind.

Our schoolhouse seems especially welcoming-three sofas to sink into, long windows where pink mallow branches sway, a table to seat twelve, if we knew so many to invite, and a fireplace. I could settle in for months. I imagine slanting rain on winter evenings, imagine reading the local writers, from Laurie Lee to Shakespeare.

We open all the windows, page through garden books, and spread our area maps on the coffee table for the pleasure of saying names aloud: Stow-on-the-Wold, Bourton-on-the-Water, Upper Slaughter, Chipping Campden. These could be settings for novels in which an intended note under the door slides under the rug instead and lies undetected until too late, far too late. The cheerful kitchen makes me want to whip up a batch of buttermilk biscuits. Maybe it's the sunlight pouring through the door, maybe it's the blue-checked curtains at the window and under the sink, maybe it's the yellow bowl of plums on the counter, or that the four burners on the stove are called hobs here. I like hobs.

(The Guardian, Sunday 1st April 2003)

- Time taken for task 1:
- Letters crossed out in task 1:

2. Repeat the above task, this time accompanied by a distraction (e.g. music or someone talking), and crossing out each 'e' you find in the article below:

Alice in Wonderland by Lewis Carroll

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down what seemed to be a very deep well.

Either the well was very deep, or she fell very slowly, for she had plenty of time as she went down to look about her, and to wonder what was going to happen next. First, she tried to look down and make out what she was coming to, but it was too dark to see anything: then she looked at the sides of the well, and noticed that they were filled with cupboards and bookshelves: here and there she saw maps and pictures hung upon pegs. She took down a jar from one of the shelves as she passed: it was labelled 'ORANGE MARMALADE' but to her great disappointment it was empty: she did not like to drop the jar, for fear of killing somebody underneath, so managed to put it into one of the cupboards as she fell past it.

'Well!' thought Alice to herself. 'After such a fall as this, I shall think nothing of tumbling down-stairs! How brave they'll all think of me at home! Why, I wouldn't say anything about it, even if I fell off the top of the house!' (which was very likely true).

- Time taken for task 2:
- Letters crossed out in task 2:



How can we improve our attention skills?

- Paying attention to where you have parked your car



- Remembering a face

- What techniques can be used to improve general attention?



ATTENTION



Take Home Activities



Task 1

1. Find a puzzle in a newspaper, a Sudoku puzzle, word search or crossword, or find another activity that requires sustained attention. Try to find something that you do not often do.
2. Complete the puzzle with no distraction.
3. Spend some time completing the puzzle with distraction (e.g., TV, radio, other people around).
4. Do this activity twice in the week and bring the puzzles with you to the next session.
5. Make a note of the things you found most difficult about these tasks

e.g. Which distracters affected your attention the most?
 - Were there certain times of day when you found concentrating harder?
 - What did you do to try to prevent yourself from losing your concentration?



Task 2



- Route finding

We now want you to practice remembering a basic route. Ask someone at home (partner/friend/carer) to create a route for you made of 6 steps, similar to the one below.

Focus on the points we have discussed during the session and try to use some of the techniques we have mentioned to remember the route.

Have four attempts to try and recreate the route, and ask to be shown the route again in between each one. Write down how many steps you got correct each time.

Example:

- Point 1: Start somewhere in the room
- Point 2: Pick up an object in the room
- Point 3: Walk to another part of the room and leave an item at this point
- Point 4: Walk to another object and touch it
- Point 5: Walk to another object and touch it
- Perform a specific action at this point (e.g., clap your hands)
- Point 6: End somewhere in the room

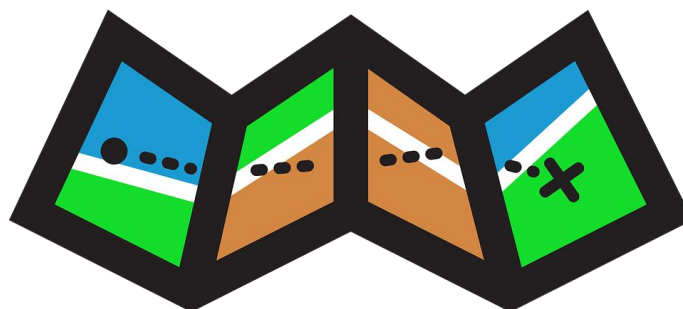
How many stages did you remember on each attempt?

Attempt 1:.....

Attempt 2:.....

Attempt 3:.....

Attempt 4:.....



SESSION 4:

Attention II



Review of session 3



Discussion topics

- What did we learn about attention last week?
- What more did we learn from our take home activity?



Passage Attention Exercise

Read the following passage and try to remember it as best you can:

Edward White, from Stoke-on Trent, and his wife, Angie, last week became the latest victims of a teenage gang who are terrifying the neighbourhood. The White family were visiting a local park on Saturday evening when they noticed a 14-year-old girl being attacked by a mob of 20 to 30 teens.

"They were coming in droves. Ten at a time, five at a time, White told reporters, "They saw the girl they were looking for and they all attacked her".

The couple stepped in to pull the girl away from the mob, when the youths turned on them. They both suffered serious injuries from the beating which only stopped when local police arrived to break up the gang. Several key members of the gang were arrested, but police are appealing for witnesses in order to trace others involved in the attacks.

TURN TO THE NEXT PAGE

- Without returning to the story, try to recall as much of the information as you can.



- How did you go about recalling the information? What about others in the group?

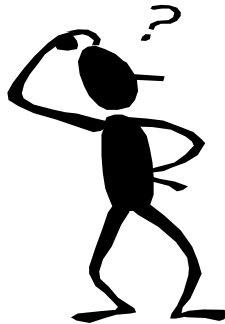


The 5 Ws and the H

When you are paying attention to some sort of information, whether it's a conversation, appointment or newspaper story, it can be useful to think about the 5 Ws and the H... who, what, where, why, when and how?



WHO?



WHAT?



WHERE?



WHEN?



WHY?



HOW?

To use this strategy, when reading the information think about these questions and pick out the information to answer them, focus on these facts and use it as a structure to organise the information.

Now read the following story and remember to focus on the 5W and 1H questions:

On Boxing Day last year, Jack Stevens from Chorley was eating dinner when the doorbell rang. He went to answer the door and found his next door neighbour frantically yelling about a fire that was engulfing her house and which had left her husband trapped inside. Mr Stevens' wife immediately called 999, but there was little time for waiting.

Stevens, 44 at the time, proceeded to the front door of the building and encountered heavy smoke. Upon entering the house into the living room, he saw what he thought was a foot about 12 feet in front of him. Mr Stevens moved through the heavy and accumulating smoke, grabbing the burn victim's foot and pulling him out of the house to the front lawn.

Deputy Chief Jim Walters, who was asked just after the incident whether Stevens saved the man's life, said, "no doubt." He also stated that he expected Mr Stevens to receive an award for bravery.



TURN TO THE NEXT PAGE

Without looking back at the passage, jot down as much as you can remember about the story. Use the following questions as prompts for more memory retrieval.



Who

What

Where

When

Why

How

Now count up the number of points you remembered and compare it to the story that you read at the start of the session.

Story 1:

Precisely recalled information = (1 full point per piece)

Partially recalled information = (1/2 a point per piece)

Total:

Story 2:

Precisely recalled information = (1 full point per piece)

Partially recalled information = (1/2 a point per piece)

Total:

1. Based on our discussions over this session, the past session and your take home activities, when is it difficult to pay attention?

- a. When the information is not interesting or important
- b. When the information is not out of the ordinary
- c. When there are a lot of distractions around (e.g., noise)
- d. When tired, irritable, upset, etc. (your state of mind)

Make notes of any more distractions you can think of below:



2. How can our attention be improved?

- a. By being aware of what you are doing, and why you are doing it (e.g., "I am parking the car")
- b. By focusing closely on the information (place, person, words, etc.), and paying attention to detail (e.g., "I'm parking on the 4th level, and the exit...a green door is to my right.... and from here I can see the clock tower")
- c. By repeating the information
- d. By making mental notes of the information or event



3. Case studies

Based on the 5Ws and the H, and the information we have learned about attention, what are the best strategies to improve attention in the following case studies?

Case Study 1: You meet a friend in the street. He tells you that some old friends are meeting at 7pm at the Greyhound Pub and would like you to join them later. How will you remember this message?



Case Study 2: After a busy day, you rush home, cook dinner for the family and prepare to have some time for yourself in the evening. You just sit down in front of the TV to watch your favourite programme when you are interrupted by your partner/kids/the phone ringing. At the end of the programme, you are unsure what has happened as you found it difficult to keep up with the storyline.

- What can you do to help you remember what the partner/kids/person on the phone said?
- What can you do to ensure that you can enjoy time watching the TV programme and keeping up with the storyline?



Case Study 3: You are late for a meeting with a friend and have looked all over your house for your keys. How can you pay more attention to where you have put your keys in the future?



Case Study 4: You meet Rosemary and Adam Webster for the first time. How can you pay attention so that you remember their names next time you meet?



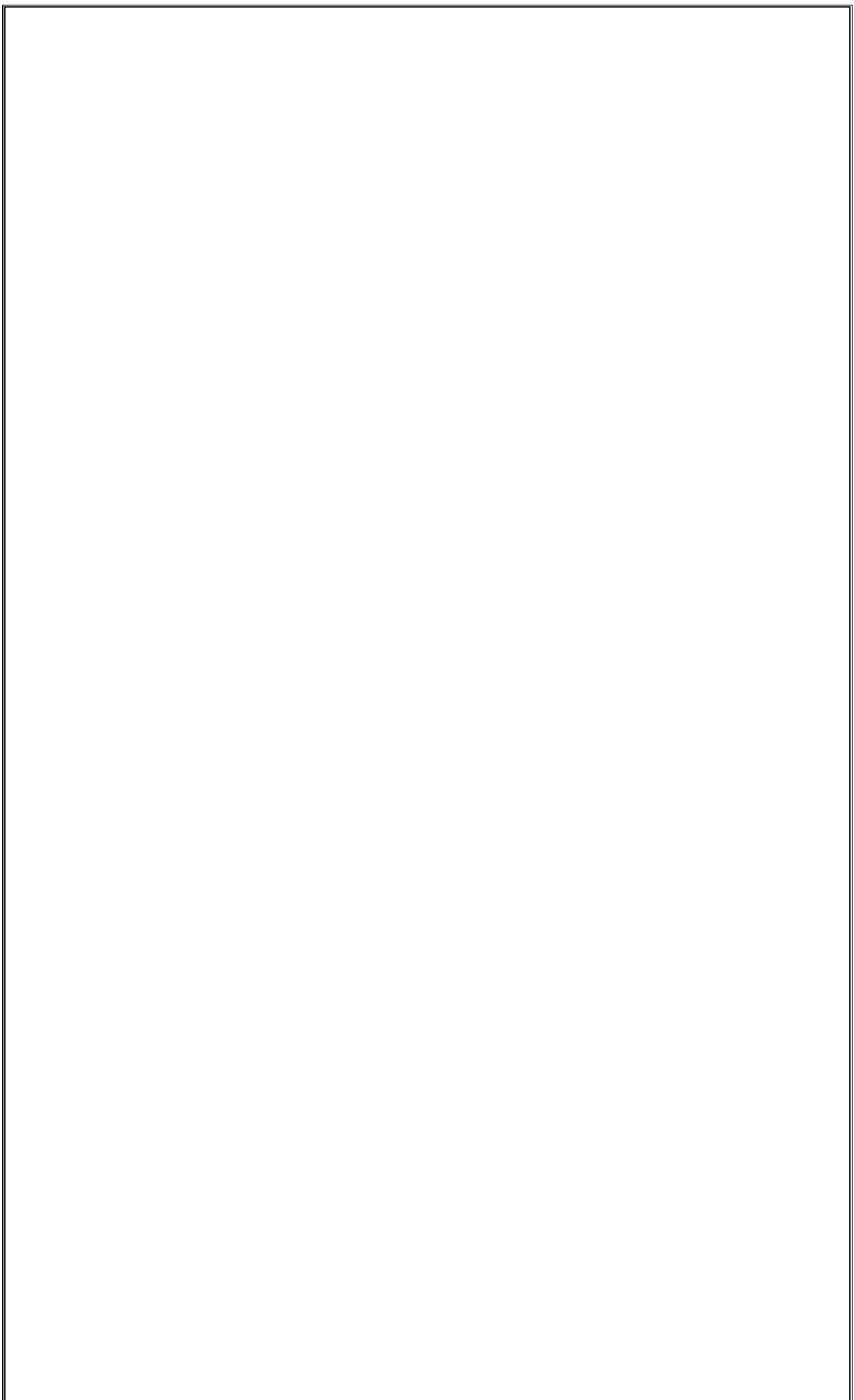
**Strategies to remember the information you are given in a conversation:
(e.g., Greyhound Pub example above)**

1. Repeat it over and over again
2. Write it down as soon as you get home
3. Say "Can you please give me a call to remind me?"
4. Use imagery (picture your friends sitting around a table with drinks on them [pub], and with greyhounds sitting beside each [The Greyhound pub], and the clock chiming 7 [7pm])
5. Slotting the information into your daily routine (e.g., telling yourself, "Right, after I do the dishes, I should get ready to go to the Greyhound")
6. Using the 5Ws and 1H (try and find, and remember, the answers to all these question): Who? What? Where? When? Why? And How?



Strategies to help you remember a name:

1. Repeat the name (to yourself)
2. Use the name in the conversation when possible
3. Write it down
4. Make associations with the name (e.g., where he/she was seated when you first met him/her)
5. Create an image for the name, by the way it sounds (e.g., Angela Webster, can be pictured as an angel, a web, and a star, all put together to form one picture)
6. Associate the name with a personality characteristic (e.g., "Oh John, the angry young man")
7. Use humour (e.g., call everyone "Charlie". This technique may not help you remember the right name, but it may get you out of the situation!)



Strategies to help remember where the car is parked:

1. Be aware of parking the car (try not to be distracted by other thoughts)
2. When getting out of the car, pay attention to the landmarks (name of building opposite the car, or floor level in car parks, etc.)
3. Look for big and small details
4. Make a mental note (say, "I have parked the car in front of ...")

Strategies to help you remember a face:

1. Look at it as a whole
2. Look for some characteristic detail, what makes this face unique?
3. Imagine how it would look if drawn as a caricature or a cartoon
4. Try imagining this face with your eyes shut

Strategies to help you put a name to a face:

1. Associate the name and the face to personality characteristics
2. Try to find the name in the face (e.g., "What about this person's face makes her look like an Angela?")
3. Make associations with other people you know or know of with the same name
4. [remember the techniques of how to remember a name, and how to remember a face (from session 3)]



Take Home Activities



Task 1

- Choose two newspaper articles of about the same length (a local paper may be best for this)
- Read the first one through, making sure you think about the 5Ws and the H.
- Put the article out of sight
- Record all of the key points that you remember in the box below:



- Now repeat the above stages for the 2nd article, and again, write down everything you can remember.



If you have asked yourself the: who, what, where, why, when and how questions when you are reading something, it is useful to use the same questions when you are trying to recall the information.

Task 2



Choose 2 or 3 memory difficulties that may be affected by how you pay attention. Write them down in the grid below.
(You may wish to look back at your responses from the previous take home activities to help you).

1. Which attention strategies would you normally use to help you remember information?
2. Which are the strategies have we discussed that you do not use?

Memory Difficulty	Attention Strategies I currently use	Attention Strategies I am going to try
e.g. remembering content of conversations with my husband	e.g. asking him to repeat if I have forgotten	e.g. focussing on the 5 W's and the H

Continued...

- Think about these attention strategies and try to use them from the moment you get home.
- Before the next session, make a note of the things you found most difficult/most successful about implementing these strategies.

E.g., Were any of the strategies successful?
Were any of the strategies not successful? Why?
What will you do differently next time?



SESSION 5:

Introducing Internal Memory Aids



Review of session 4



Discussion topics

- What did you learn from your take home activities?



1. What is meant by internal memory aids?
2. What kind of internal memory strategies do people use now?

Write these down here:

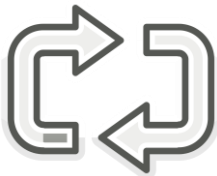


What are internal memory aids?

These are memory aids that require you to mentally process, organise, and think about the information you wish to remember, instead of relying on external aids.

Over the next three sessions we will discuss some of the internal memory aids people use. You may find some of them useful. Remember that you will probably not use all of them and you will find some suit you better than others. The aim of this session is to help you select the best techniques for your own personal 'toolbox'.

Rehearsal and Repetition: Does practice make perfect?



This strategy involves repeating information silently in your minds or vocally (out loud) that you want to remember. You can use this technique for quick, immediate recall.

Example: repeating a number you have found in the telephone directory until you can dial it.

- Think of a time you needed to memorise information and recall it, for example a presentation/speech or facts for an exam.
- What type of strategies did you use to remember the information?



Chunk it! Chunking

Chunking involves grouping or clustering items together to form units. It is particularly useful in remembering a string of numbers, like phone numbers, post codes, etc. This strategy works because it effectively reduces the number of bits of information to store in your memory.

- Spend some time trying to remember the following telephone number:

01842586729

- Once you have learnt the number, cover it and write it down here:



- How did you remember the number?
- How many 'chunks' did you divide the number into?



Categorisation

This technique involves our grouping of items according to particular categories. You can make your own categories based on one of the many principles of grouping. Groups can be made on the basis of colour, shape, common themes, etc.

Example: You need to buy apples, pens, a sharpener, pears, a rubber, oranges, and a pencil. One way to recall these items is to memorise them all as one group. The other way is to group them into two categories, and recalling the two categories (fruit and stationery) may help you remember the items in each.

Try this exercise: Look at the grid of pictures. Take a few minutes to group the information into common themes. Choose the themes that would suit you best and assign each item to a theme.

E.g., Theme 1: Animals – cat, dog, stork

You can make notes of your themes and the items that go with each theme below:



Now try to remember as many of the items as possible. List them here. Use your themes to guide you:



Total number of items remembered.....

- Why can we remember more when items are put into themes?

Chunking the items into categories decreases the amount to remember and the categories can be used as a prompt to remember more information. The categorisation also adds meaning to the items to be remembered - making them more memorable.

- What other pieces of information can you organise (chunk or categorise) in your everyday lives to help you remember something?



- Can you remember the phone number from the beginning of the session? Write it down here, or as many of the numbers as you can remember.

Take Home Activity



Task 1

Think about the different ways you already use to learn and remember information that is important to you. List them here:



Task 2

Now think about some of these strategies that we talked about today for organising the information and processing it more meaningfully. The next time we meet it might be helpful to discuss how you went about **learning something new**. Attempt to use some of these new strategies you learnt in the session to learn something new or to help you remember information.

Think about the following questions:

1. What did you attempt to learn?
2. What new strategy did you use?
3. Was this strategy helpful?
4. If not, why do you think it didn't work so well, and what other approaches can you use in the future?



SESSION 6:

Internal Memory

Aids II



Review Session 5



Discussion topic

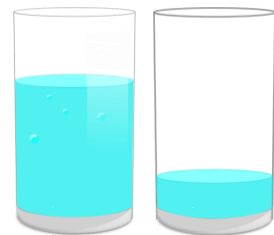
1. What did you learn from the take home activity?



Deep vs Shallow Processing

Our ability to remember information can depend on the way we process it. If we only process a piece of information in a **shallow** way, it will form a weaker memory trace and be more likely to be forgotten.

If we process the information using **deep** processing it will become a stronger, more long-term memory trace and we are more likely to remember it.



Exercise (part one):



Look at the newspaper image and for a couple of minutes and discuss what you remember with the group.

What is deep-level processing?

Deep-level processing involves understanding and **attaching meaning** to the information you want to remember, and rehearsing it in a meaningful way which requires effort.

If you want to learn some new information and to organise it in your mind so that you are better able to recall the information later, it is better to use deep processing.

What is shallow-level processing?

Shallow processing is when we only think about and process the new information in terms of what it looks like or sounds like.

For example, if we repeat the same word over and over again without really thinking about the word and its meaning, it may help it stay in your short term memory but won't help you remember the word long term.

Examples:

Example	Shallow processing	Deep processing
Trying to remember the word "Kat"	Repeating the name	Imagining the person with cat ears and tail
Creating a password and trying to remember it	Repeating the set password to yourself	Changing the password to something which is already meaningful to you, e.g. your partner's birthday
Trying to learn about a topic in a lecture	Listening to the lecture	Writing the information down in your own words

Discuss and write down more ways we can process information more deeply:

A large, empty speech bubble with a blue outline, intended for students to write down their ideas for deep processing.A large, empty speech bubble with a blue outline, intended for students to write down their ideas for deep processing.A large, empty speech bubble with a blue outline, intended for students to write down their ideas for deep processing.A large, empty speech bubble with a blue outline, intended for students to write down their ideas for deep processing.

Write down some more examples of shallow processing in everyday life:



Exercise (part two):



Look at the second newspaper image and this time think about it in terms on what is happening, meaning, and try and make some associations.

Discuss what you remember with the group and write below how you found recalling this image compared to the first, shallow processed photograph.



Visualise it! Visual imagery

This strategy involves the use of making mental pictures of information that you would like to remember. This strategy can be used effectively to remember names of people, faces, where you have kept something, etc.

Example: You can remember the name Theresa Lockhart, by making a mental image of Mother Theresa with wearing a locket the shape of a heart that can be opened with a key.

Or, for the name Teddy Fisherman, perhaps you could picture a teddy bear on a fishing trip.

It's a good idea to make your images as elaborate as possible.



Exercise: At a friend's party, you meet Susan and Andy Wright.

Take a few minutes to think of a mental image of how you would remember their names. After you have committed the image to memory, jot down or draw the image you have created in the space below:



Tips for creating effective visual imagery



1. Form images in your mind

- a. It's usually good to use concrete nouns (like ball or tree) as they are easiest to visualise
- b. It is more difficult to visualise numbers or abstract information (e.g., 'democracy') so more effort to create visual images is required, but it is possible.

For example, try to associate the abstract information with concrete nouns. What type of image can you come up with to represent 'peace'?



2. Create associations between images

- a. **Interaction** – Make them interact in some way, not just pictured beside each other
- b. **Vividness** – Make the images really clear in your mind
- c. **Bizarreness** – Unusual or ridiculous images can be remembered the easiest. For example, if you are trying to associate an image of a mouse and a pen, imagine writing with a real mouse as though it is a pen
- d. **Emotion** – Images that evoke an emotion, especially, a positive or funny emotion can be beneficial. Stay away from negative emotions!

Associations

Associations can also help you remember by connecting new information to old information (or routine tasks) that is already in your long term memory.

Example: Your friend's birthday on the 27th of December can be remembered as two days after Christmas

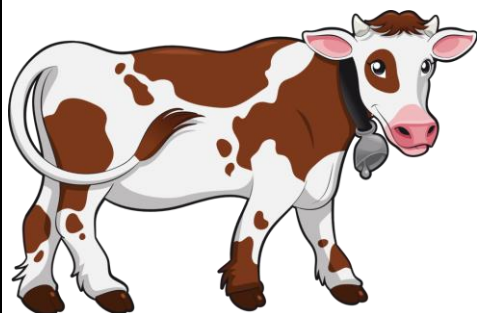
Example 2: You might try to remind yourself to phone your friend after lunch.

When do you use associations?



The story method

This strategy requires you to make a story that incorporates all the different bits of information that you wish to recall into the story itself.



Example: If you want to remember to post a letter and buy some milk and sweets for your children's party tonight you could make a story such as:

There was a boy who went to the post office, but on the way he met the milk-man who was taking his cow out for a walk, so the boy gave the cow some sweets to eat, which made the cow so happy it began to party.



Exercise:

Imagine you wake up and have a lot of things to do today. You need to buy bread, eggs, dates and soap, drop off 2 suits at the dry cleaners, collect a prescription, and meet a friend at the cinema.

Using visual imagery and the story method, spend 5 minutes making up a way of linking and remembering the information. Try to make the images as bizarre and vivid as possible.

First letter cues

Using the first letter of words can be a useful strategy for learning lists. The first letters can be arranged alphabetically, or the first letters can also make a prompt word that can help jog your memory of the list.

Example: If you need to remember to buy carrots, apples teabags and sugar, you could use the first letter cue: CATS.

Rhymes

Making up simple rhymes and songs can aid recall of information. The added effort to create a rhyme will mean the information is more deeply processed.

Example: The rhyme, "Thirty days have September, April, June, and November..." helps you remember how many days there are in a particular month.

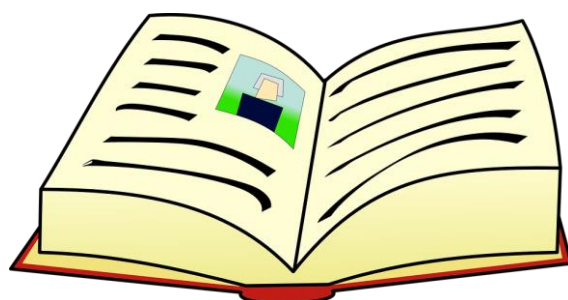
Take Home Activity



Task 1

Earlier you were asked to come up with a visual imagery story to remember what to do during the day. Are you able to remember the story now?

Without turning to the previous page, take a couple of minutes to remember the story and then write it in the space below. Did you accurately remember all the things you need to do?



Task 2



- Attempt to use some of the internal memory strategies discussed in today's session to **learn something new**.
 - Maybe try to learn someone's name?
 - Or try to remember the tasks that need doing for the day?
 - Or apply some of these strategies to other things you are trying to remember at work or at home?
- What successes and problems did you experience?



- What techniques did you prefer and why?



SESSION 7:

Internal

Memory Aids

III



Review Session 6



Discussion topics

- Feedback from take home activity and experiences of last week's internal aids
- What were the main positive and negative points made by the group and what can be done to reduce problems and enhance success?



Positives

Negatives

How can we improve our success with internal memory aids?



Internal memory aids III:

Little and Often....

It's better to work for a few minutes several times a day than for one long period. The same is true about trying to remember something. Try to spread out the information to remember over a certain amount of time, and try to remind yourself little and often.



Exercise:

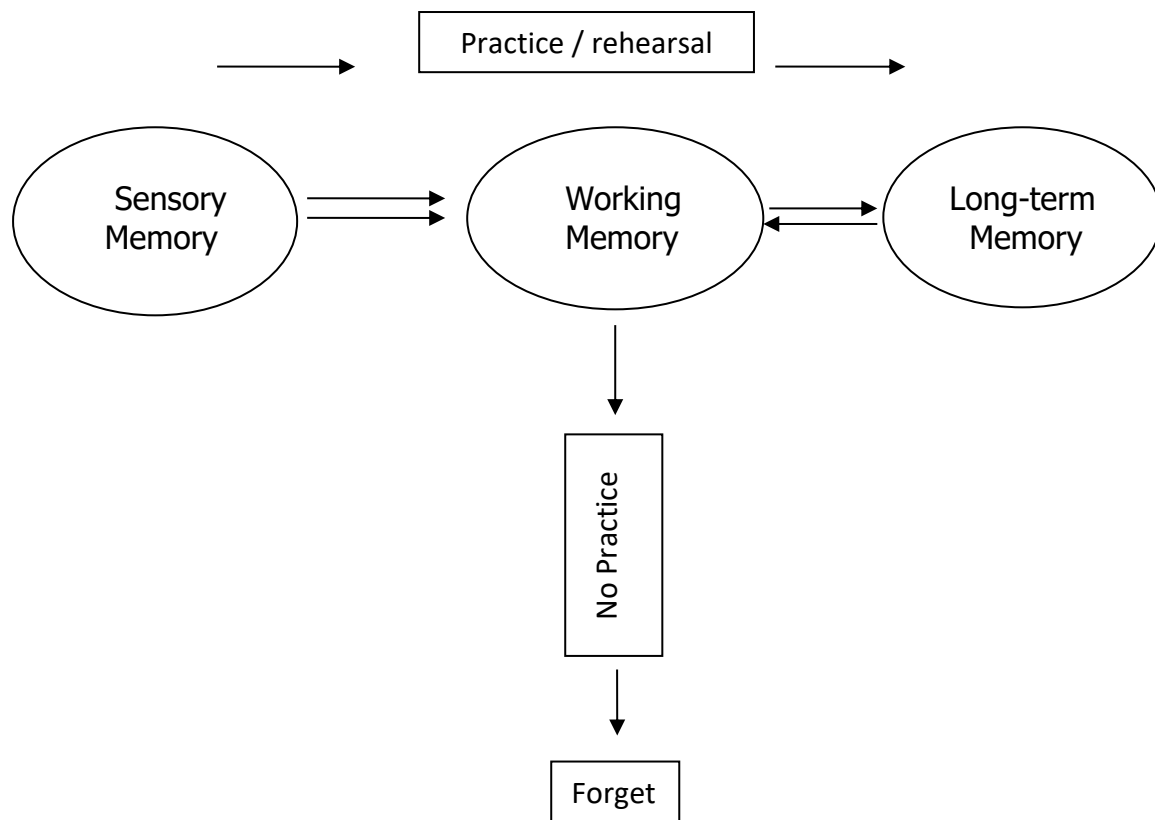
Listen to the list of 20 words and try to remember as many of the words as possible.

Write down as many of the words that you can remember now:



We tend to remember words best if they have been read at the beginning (called the *primacy* effect) or at the end (called the *recency* effect) with everything else in the middle most likely to be forgotten.

Can you remember this diagram that was shown to you during Session 2?



It is thought that memory is good for the words read at the beginning because they have moved to our long-term memory, and words that are remembered at the end are still in the short-term (working memory).

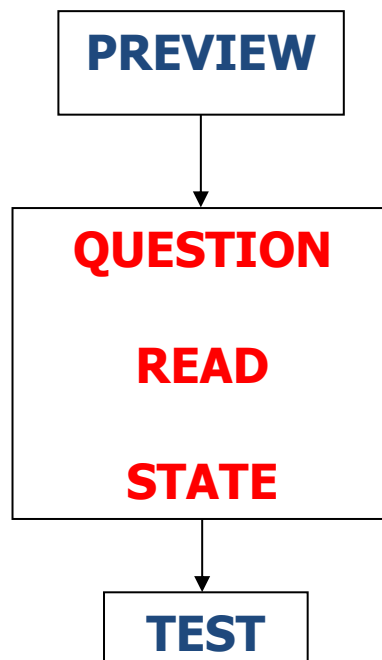
In order to get all of the words (or information that needs to be remembered) into your long term memory, you will need to repeat them little and often.

Example:

If someone asks you to give a message to someone, repeating the message immediately afterwards to yourself will be useful. Then, every so often, remind yourself what the message was, especially after a time doing something else. You can gradually increase the intervals between reminding yourself of the message and it should get stored in long-term memory. When you next see the person to give the message to, the message should be easier to retrieve.

The PQRST Method

This strategy is particularly useful when you have some material from books and articles you wish to remember. PQRST are first letter cues that stand for **P**review, **Q**uestion, **R**ead, **S**tate, and **T**est. This technique also helps you to understand the material at a deeper level.



P – Preview: read through the information once and get a feel of the whole text

Q – Question: ask yourself questions about what you have read

R – Read: re-read the whole text

S – State: see if you can answer the questions you had posed

T – Test: see if the answers you came up with were correct



**Exercise:**

Read the following article and try out the PQRS method.
It's ok to make notes on the article page as you are reading!

Tornadoes are vertical funnels of rapidly spinning air. Their winds may top 250 miles (400 kilometres) an hour and can clear-cut a pathway a mile (1.6 kilometres) wide and 50 miles (80 kilometres) long.

Twisters are born in thunderstorms and are often accompanied by hail. Giant, persistent thunderstorms called supercells spawn the most destructive tornadoes.

These violent storms occur around the world, but the United States is a major hotspot with about a thousand tornadoes every year. "Tornado Alley," a region that includes eastern South Dakota, Nebraska, Kansas, Oklahoma, northern Texas, and eastern Colorado, is home to the most powerful and destructive of these storms. U.S. tornadoes cause 80 deaths and more than 1,500 injuries per year.

A tornado forms when changes in wind speed and direction create a horizontal spinning effect within a storm cell. This effect is then tipped vertical by rising air moving up through the thunderclouds.

The meteorological factors that drive tornadoes make them more likely at some times than at others. They occur more often in late afternoon, when thunderstorms are common, and are more prevalent in spring and summer. However, tornadoes can and do form at any time of the day and year.

Tornadoes' distinctive funnel clouds are actually transparent. They become visible when water droplets pulled from a storm's moist air condense or when dust and debris are taken up. Funnels typically grow about 660 feet (200 meters) wide.

National Geographic Online



Test yourself – try and recall as much as you can using the PQRST method!



Remember: Preview, Question, State, Read and Test



Breaking down tasks:

Information can be more easily stored if it is broken down into manageable chunks. As with the telephone number earlier, this can be done with other types of information. One example is recipes, which are naturally broken down into manageable steps. With a partner in the group, try to learn the follow recipe for chocolate truffles.

Chocolate truffles:

1. *Crush the digestive biscuits together until smooth*
2. *Mix the chocolate, coconut and crushed biscuits together in a bowl*
3. *Add the tin of condensed milk*
4. *Combine them all together until you end up with a sticky dough*
5. *Put the mix in the fridge to cool and become less sticky to handle (10 mins)*
6. *Roll the dough into balls, roll them in cocoa powder and place in cupcake cups*
7. *Keep in fridge to harden for around 20 minutes*

When you have learnt the recipe, cover the instructions above and write it down in the space below.



Which other strategies did you use to remember the information?





Memory retrieval top tips:

When we are trying to retrieve information, such as the reason why we went into a room, it is always worthwhile to:

1. *Relax* – the more we stress or worry about remembering, the less likely we are to retrieve the information
2. Use *mental retracing* – what were you doing just before?
3. Think about the *context* you were just in (context dependent memory)
4. Use *alphabetical searching* – Think 'what does the word begin with?', particularly useful when a word is on the 'tip of the tongue'
5. Understand that *everyone experiences memory difficulties* at times



Take Home Activity

Task 1



Part 1

- Attempt to use some of the internal memory strategies discussed today.
- What successes and problems did you experience?
- Which technique did you prefer and why?



Part 2

- Identify a task you would like to complete (e.g., setting reminders on mobile phones, remembering the name of someone new).
- Write down what the task was and how you felt about the learning process. Were you successful? Were you able to complete the task a few days later?



Task 2

Bring your diary with you to the session next week!

You will not have to share the information inside the diary with anyone, but it would be useful if you had yours with you as we will be discussing the use of diaries.

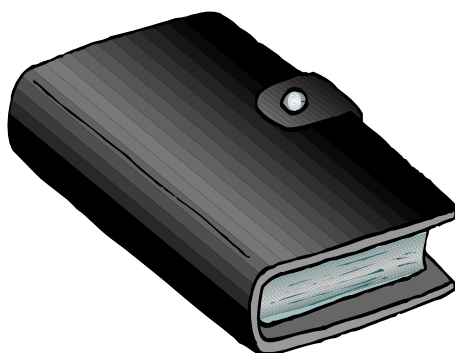
If you do not have a diary, it may be best to buy one (even if it's a small pocket one) after the next session.

It doesn't have to be a paper diary, many people use an electronic diary on their smartphones.



SESSION 8:

**Introduction to
External Memory
Aids & Diaries**



Review of session 7

Discussion topics



- What did we learn from our take home activity?



Complete the following table, reflecting on the internal memory aids we have covered in the sessions and have a think about the external memory aids that we can use:

	Internal memory aids	External memory aids
Definition	<ul style="list-style-type: none"> • Inside you • Require active mental processing of information • • 	<ul style="list-style-type: none"> • Outside you • Can be touched • •
Examples	<ul style="list-style-type: none"> • Rehearsal • Associations • • • • 	<ul style="list-style-type: none"> • Timers • Diaries • • • •

What are external memory aids?

External memory aids are any strategy that requires a physical aid. They are external to your mind i.e. you can touch them.

It may be useful to use an external memory aid instead of internal in certain situations, for example if there is long gap before retrieving the information (e.g. a dentist appointment in a few months' time) or if you have a lot of other things to do in between.

We will be looking at a variety of different external memory strategies and ways we can use them to make them more effective.

Introduction to diaries

Diaries are an excellent memory aid for many keeping different types of information in one place. You may keep notes, dates, appointments and to do lists in your diary.

The physical act of writing information in your diary will also force your brain to process it more deeply and help you remember it. It may be either a paper book or an electronic diary on your smartphone.



Using a diary effectively

Discussion questions:

1. Do you currently use a diary?
2. What kind of problems do you think you face when using a diary?
3. What are the possible solutions to these problems?



Use the table on the next page to record particular problems that may affect you, and the possible solutions to these problems:

	Potential problem with diary use	Possible solutions to the problem
1	e.g. Forget to write in my diary	Set alarms to remind me to write in the diary before bed Make writing in the diary part of my daily routine
2		
3		
4		
5		
6		



Useful tips when using a diary:

- Make the diary part of your everyday routine
- Always keep it in the same place and get into the habit of checking it regularly
- Buy a diary that is best suited for you and your lifestyle
- A good one would have space for hourly appointments and an opportunity for you to see the week at one glance (on one page)
- Having space to enter some notes on each page / under each day is useful
- It's useful if your diary has space to enter phone numbers and addresses
- If you wish to separate your entries into two or more categories (e.g., personal and professional engagements) use different coloured ink for each, or split each day/page into two sections, one for each category
- Use Post-it notes to write temporary reminders which can be stuck in your diary
 - Post-its can be moved from one page to another, to remind you to do things you had planned to do
 - to-do lists can be written on Post-its and each item can be scored off as and when they are completed, and the remainder of items can be remain on the list, with the Post-it simply being moved to the next day's page
- Entries can be both prospective (things you want to do) and retrospective (things that you have done)
- Your diary itself can become a memory place, where you can leave other notes, bills, memos, etc.
- Encourage family and friends to write / ask you to write things in your diary, or have a family diary
- Use coloured pens to make important notes stand out, or colour code your entire diary!



Potential problems encountered in using a diary:

- Deciding what type/size of diary will be best for your lifestyle
- Forgetting to make an entry
- Forgetting to check entries
- Transferring information from one diary (or piece of paper) to another
- Mislaying diary
- Forgetting to cancel appointments that have been called off/cancelled
- Making haphazard entries making locating entries difficult
- Not understanding what a diary entry means because you haven't written enough detail



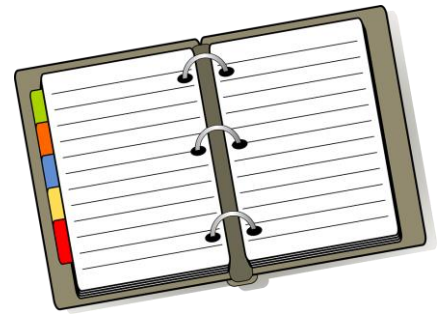
Possible solutions:

- ✓ Transfer information from notes to your diary as soon as possible or keep a fixed time daily where transfers are done
- ✓ You could try writing all information on Post-its and stick them in the diary for entries later
- ✓ Always keep the diary in one place (take the phone to the diary if possible), this may prevent you losing it
- ✓ Alternatively, you could put your diary in a bag that you always take around with you (this also helps in case you need to make some appointments when you are out of the house)
- ✓ Make entries as soon as possible (e.g., while fixing an appointment)
- ✓ Alternatively, make and check entries at a fixed time daily
- ✓ Once a planned activity has been carried out, cross it out or tick it off so that the focus is on upcoming activities
- ✓ Get a diary with hours marked out on each page, so that entries can be written in next to the appropriate time and date
- ✓ Make entries with enough detail so you will understand what you need to do later, but keep them short and simple so they are easy to read quickly (writing legibly may also help!). You could use the 5 W's and the H strategy to help use write entries: Who? What? When? Where? How?
- ✓ Enter phone numbers and addresses only in the phone / address section, and not randomly elsewhere



Energy levels

Making the most of your energy: Pacing activity



How do you plan your days?
Do you **plan** your day, or do you **respond** to your day?

Making the most of your energy is very important, especially if you experience fatigue.

We are now going to look at ways you can make the most of your energy during the day, and avoid burnout or exhaustion.

Remember the 3 Ps:

1. PLAN

Plan your day: Make a list of things to do.
Set time slots to do the tasks, making them generous and allowing for breaks.

2. PRIORITISE

Decide what is most important to be done today.
Perhaps put a star next to the important things.
Decide what can be done another day.
List your to-do list in order of importance.

3. PACE

Take regular short breaks.
Break your tasks into steps and take a break between steps.
Pace yourself during activities, do not rush.
Pace yourself during the day.

Pacing requires self-discipline as it's natural to want to get to the end of a job. However, it is much better to take things steadily rather than continuing with an activity to the point of exhaustion and being forced to rest for longer.



Planning and pacing tip:

Be kind to yourself and don't push yourself too hard and overwhelm yourself with things to do. Make a to-do list including everything, even getting up and getting dressed. Congratulate yourself for anything you have ticked off at the end of the day.

It's also very important to **monitor** closely how you are feeling throughout the day. Be on the lookout for signs such as: Yawning, tiredness, aches and pains, brain fog and difficulty thinking.

If you are tired, do one of the following things:

- **Stop.** It is ok to finish something another day
- **Delegate** the task or ask for help
- **Take a break** and come back to the task when you have more energy
- **Do a different task for a while,** if you are not yet exhausted but need a change



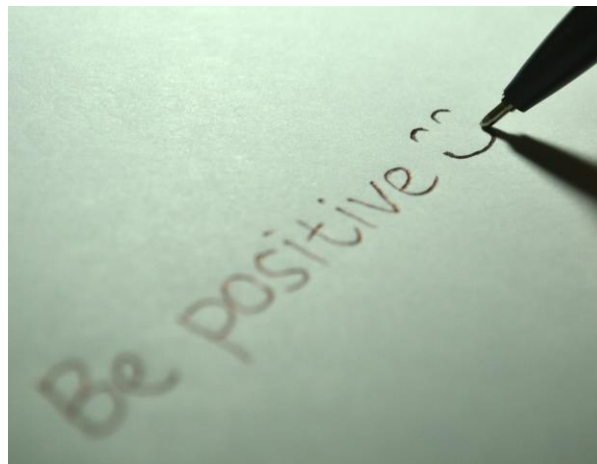
What specific things can you do to ensure that the energy you have is used efficiently?





Developing a positive attitude about using both internal and external memory aids:

1. Everyone needs to use them whether they have a memory problem or not
2. Experiment – try to develop your own techniques to help you remember better
3. Make sure you *recognise a purpose* for the strategy – if you have any questions about why a strategy is useful or how it works, ask your group leader to explain
4. Be flexible – use different strategies to suit various situations
5. Remember – try to use 3-6 aids for better memory



Take Home Activity



For the next week, consider starting using a diary as a way of keeping track of what you need to do in the next week. If you already use a diary, think about using a new strategy to make your current diary more effective. Begin using the diary or the new strategy over the next week! Make sure it has plenty of space and perhaps think about how you can attach a pen to it.

- What techniques do you plan to use to make sure the diary works?

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- What information will you record in the diary? (e.g., appointments, 'to-do' lists, things to remember)

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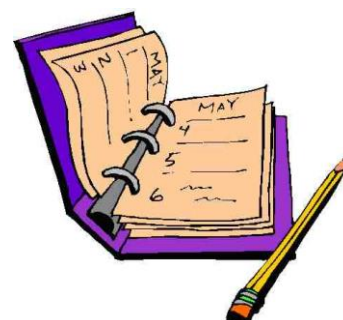
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- Have you experienced any difficulties in the first week of using it and planning your week?

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SESSION 9:

External

Memory Aids

II



Review of Session 8





Discussion topics


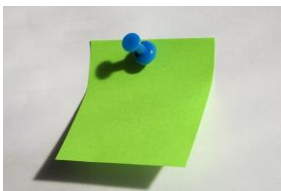



- Take Home Activity: Success and difficulties



Diaries are not the only external memory aids available to help you remember things. There are many options, and it will be the most helpful if you select a few external strategies you can use together which fit in with your lifestyle.

Below is a list of many of the available external memory aids. Think about the potential problems when using each one.
What are the solutions to these problems?

Memory aid	Problems	Solutions
Smartphone apps 		
Other people 		

<p>Lists</p> 		
<p>Post-its</p> 		
<p>Calendars</p> 		
<p>Personal organisers</p> 		
<p>Noticeboards</p> 		

Timers / alarms



Computers



Dictaphones



2. Are there any memory aids that you would like to use?
What prevents you from using these memory aids now?



Case Studies: Making life a bit easier

Using the following memory aids (and any others that you can think of), discuss which external memory aids each person in the case studies may need to use to plan his/her day.

- Notepad beside phone
- Notepad beside bed
- Notepad to carry around
- Lists
- Diary
- Calendar/wall chart
- Pill box/medication
- Leave something in a prominent place (or the same place always)
- Leave something in a prominent place so that it acts as a prompt
- Notice-board
- Alarm clock
- Computer
- Timer
- Ask someone to remind you
- Pacing Activity
- Dictaphone/Voice recorder



Case Study 1

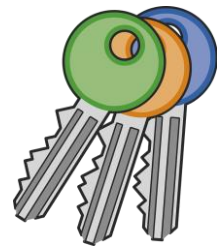
Katy is struggling to keep up with remembering what to do each day. She is out and about all day and has to remember lots of things. Last week Katy missed 2 appointments.

- Which external memory aids can Katy use to help her keep track of everything she needs to do?



Case Study 2

Alan is finding it difficult to find things around the house. He keeps misplacing his keys and glasses which means he wastes a lot of time finding them. He also struggles to take his medication on time.



- Which external memory aids can Alan use to help him with these memory difficulties?



Case Study 3

Miranda leads a very busy life. She is working part-time and has kids and finds that she tries to do everything at once. By late afternoon Miranda is exhausted with fatigue. She feels very stressed late at night with lots of 'things to do' the next day buzzing around in her head.



- What can Miranda do to feel less fatigued and stressed, and get everything done that she needs to?



Case Study 4

Michael very efficiently wrote notes about important conversations and messages on pieces of paper. He ended up losing a lot of the pieces of paper and is having difficulty with his vision.



- Which external memory aids can Michael use to help him with these difficulties?



Useful tips when using external memory aids:

- Incorporate things into daily routine (e.g., charge phone every night, leaving the charger in one place all the time)
- Keep your list in a prominent position and keep writing things down as soon as you remember something
- Use different **colours** (to prevent monotony from setting in) ... marker pens, post-its, etc.



Take Home Activities



Task 1: Trying out new external memory aids

This week, begin to experiment with some different external memory aids to those you have used in the past.

- First, list the external memory aids which you already use:

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-
-
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- Now, make a note of any new aids you would like to try, and how you will put this plan into action:

External aid	First step	Putting it to use
e.g. Notice board	Buy a pin / white board	Keep a note of all info needed for day and inform family to write on it too
1.
2.
3.

Now put your plan into action! Try out the new memory aids and record the problems you face and the successes you've had in using them.

Task 2: Remembering to do things in the future (Prospective memory)



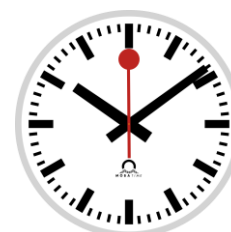
1. Choose an afternoon or evening to complete the following memory task. In order to complete the task you should try to use any external and/or internal memory aids that you feel will help you to remember what you have to do. You may decide to use just one aid, or a combination of methods.

Write the time you are starting the task here (start time) _____

Below are three boxes. Aim to mark an X in the first box one hour after the start time, and record the actual time when you've done this in the space provided (no cheating!). You should then mark an X in the second box two hours after the start time, and in the third box three hours after the start time. (This task will take three hours)

	Actual time remembered
	Actual time remembered
	Actual time remembered

- How did you remember to do this task?
- Which external memory aids did you use?
- Which internal memory aids did you use?
- If you used a number of methods, which methods were most useful?



SESSION 10:

Review & Fine - tuning



Review session 9



Discussion topics

- Successes and difficulties with take home activity tasks

Successes



Difficulties

What are the solutions to your difficulties?

- Look back through all the sessions – attention strategies, internal memory strategies, external memory aids. List your favourite and most effective strategies below, which you think you'd like to continue using.

	Favourite Aids/ Strategies	Why you like them
Attention		
Internal		
External		

Back to session 1...

- Think about the main memory problems you recorded in the session 1 take home activity (pg14) and re-enter them in the table. Then, as before, state how often each occurs now (i.e. hourly, twice daily, weekly and so on) and reflect on how much you feel they affect you now.

	Memory problem faced	How often this occurs	How much it affects you 1= not at all 5= severely	Techniques used (if any) to deal with it
1				
2				
3				
4				
5				

Discussion Topics



- Group feedback
- What did the group gain from attending this programme?
- What were the difficulties you faced and how did you overcome them?



That's it!

We hope you have enjoyed the sessions and will continue to use the strategies you have learnt over the last ten weeks.

Please keep this workbook so you can look back to refresh the strategies in your head as and when you need them.

Thank you for attending the programme.

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What happens next....

Final Take home activity:

Continue to use the strategies we talked about during the session to manage your memory difficulties at home. Look back over this workbook if you ever need to remind yourself.



