

**SOUTH  
HUNSLEY**  
Sixth Form

**SOUTH  
HUNSLEY**  
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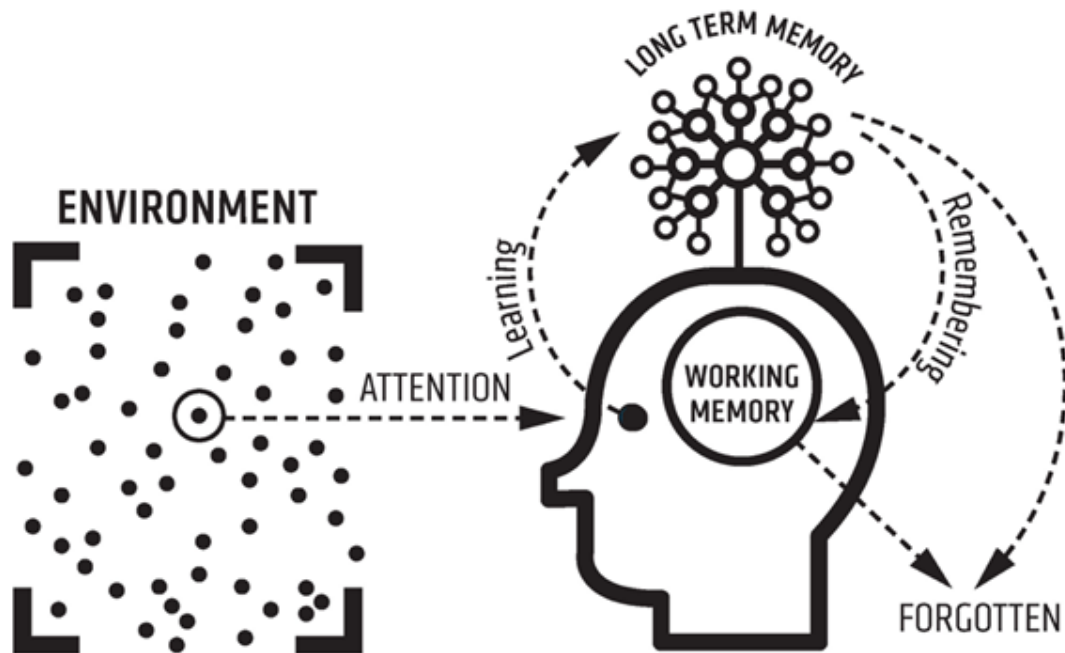
# **REVISION STRATEGIES**

**A HANDY GUIDE ON BEST PRACTICE  
REVISION TECHNIQUES AND GETTING  
THE MOST OUT OF YOUR LEARNING**

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# MEMORY - THE SCIENCE OF LEARNING

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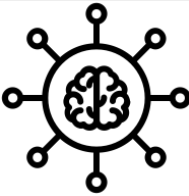



1. We have a certain amount of attention to pay and this can be limited and can dramatically vary depending on the individual or the environment. In the diagram above, **'attention'** means we acknowledge new information and this is then transferred into our working memory.
2. Our **working memory** is where you do your thinking and where you take in new information. It is finite and we can only absorb a limited amount of information at a given time otherwise it gets crowded (research suggests we can hold 5 things in our working memory at one time). This may be up to 30 seconds.
3. Information is processed into our **long-term memory** through **'learning'**. This long-term memory is effectively unlimited, and we can retrieve information from here back into our working memory as needed in a given moment. When we remember something, it comes from here. However, if we don't use the information it fades (is forgotten). **Learning is therefore a change in your long-term memory.** Whatever you think about, that's what you remember. Therefore, revision activities must require you to think hard.
4. Information in our **long-term memory** is interconnected and linked with prior knowledge. Anything that is not connected or not successfully stored well enough in our long-term memory is forgotten and this is completely natural.
5. If students undertake enough **retrieval practice**, generating the information in our long-term memory, it increases a level of fluency within the subject.

## In summary, what do we know about memory?

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- Consistent practice and revisiting previous material strengthen memory and boosts learning
- Our working memory is finite and limited and so overloading this or cramming for revision doesn't work
- Information, if not revisited, is 'lost' from our memory

# OVERVIEW OF REVISION STRATEGIES

		
<b>Self Test</b> Use your notes/ textbook to create a quiz to self test yourself	<b>Flash Cards</b> Create a set of flash cards with Q&As, ready to test yourself	<b>Past Papers</b> Complete exam past papers and use the mark scheme to self assess
		
<b>Revision Clock</b> Break down the topic into 12 sections and complete a revision clock	<b>Brain Dump</b> Complete a brain dump with as much as you can recall then check your notes to see what you forgot	<b>Mind Map</b> Create a mind map from memory, then check, review and add to your mind map
		
<b>Infographic</b> Create an infographic with sketches and note from memory	<b>Summarise</b> Write an overview of the key topics from memory then refer back to your notes	<b>Retrieve, Record &amp; Review</b> Record yourself retrieving as much information as you can verbally then listen back and review

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# THE KEY PRINCIPLES OF EFFECTIVE REVISION

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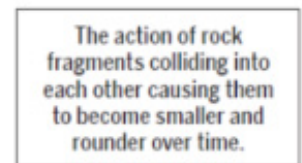
## RETRIEVAL PRACTICE - FLASHCARDS

Simply put, recalling information from memory is simple and powerful. Retrieval practice is a learning strategy which makes you think hard and brings information to mind. It is the action of actively retrieving knowledge that boosts learning and strengthens memory. **It means trying to remember previously learned information as opposed to simply re-reading it.** It builds confidence over time and allows you to identify gaps in your knowledge.

Examples include:

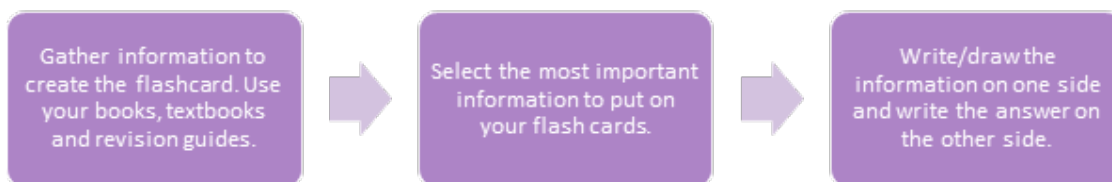
- Knowledge quizzing, low stakes testing and multiple-choice tests.
- Completing past paper questions or practice answers.
- Answering verbal questions asked by teacher/peers/parents.
- Summarising, creating flashcards or revision materials where you can 'test' yourself.

One particularly effective strategy is the creation and use of **flashcards**. Flashcards are generally a card containing a small amount of information on either side as an aid to learning. The use of flashcards is for low stakes testing to improve recall and to strengthen memory.



An effective flashcard may include the following (*in each subject they will be used in a different way*):

- A key term/key word with definition on the back.
- A key date with the event on the back.
- A key equation with its use in practice on the back.
- A past paper question/plan and a model answer on the back.



In order to use flashcards most effectively, the **Leitner System** is a desired strategy for spaced testing. Once you have created a set of flashcards, create three boxes/areas marked as the following:

<b>BOX 1:</b> Every day	<b>BOX 2:</b> Twice a week	<b>BOX 3:</b> Once a week
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- Test yourself on the flashcards in the Box 1 pile. If you get the answer correct on the flashcard, move it to the Box 2 pile. If you get it incorrect, it stays in Box 1.
- Twice a week, test yourself on the flashcards in Box 2. If you get the answer correct on the flashcard, move it to the Box 3 pile. If you get it incorrect, it stays in Box 2. The aim is to get all of the flashcards to Box 3

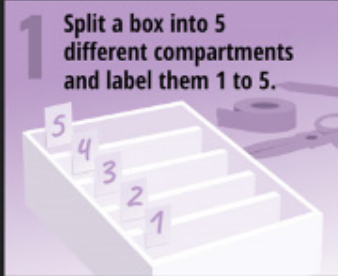
## Retrieval and Flashcards

Do's	Don'ts
<ul style="list-style-type: none"> <li>• Put a single piece of information on each flashcard.</li> <li>• Sort your flashcards according to your confidence with them (see above).</li> <li>• Create 'decks' for each topic. This may be a different colour card for each subject/unit.</li> <li>• Mix up topics so you aren't always testing yourself on the same topic.</li> <li>• Practice the information you struggle and need to improve on.</li> <li>• Use PLCs, checklists or revision guides as a way to monitor your retrieval practice.</li> <li>• Move beyond recalling simple facts to detail and analysis.</li> </ul>	<ul style="list-style-type: none"> <li>• Spend more time making the flashcards than using them.</li> <li>• Put lots of information onto each flashcard.</li> <li>• Revise the flashcards in the same order every time that you use them.</li> <li>• Only read the flashcards – test your memory!</li> <li>• Assume everything you've written is correct.</li> <li>• Throw away your quizzes or brain dumps.</li> <li>• Avoid testing yourself on tough topics or ones you dislike. You want it to be difficult.</li> </ul>


### USING FLASHCARDS TO REVISE

by @inner\_drive | www.innerdrive.co.uk

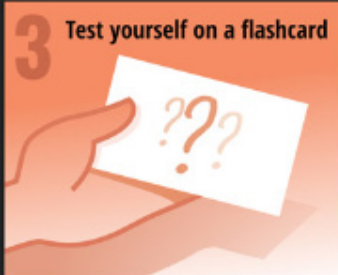
**1** Split a box into 5 different compartments and label them 1 to 5.



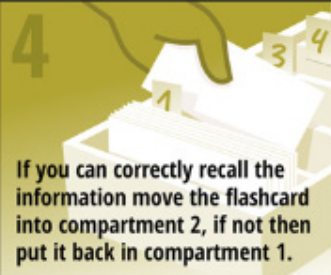
**2** Place all your flashcards in compartment 1.



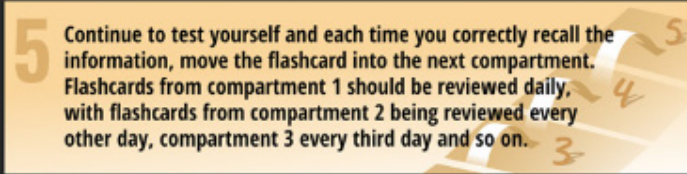
**3** Test yourself on a flashcard



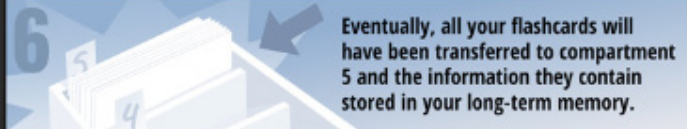
**4** If you can correctly recall the information move the flashcard into compartment 2, if not then put it back in compartment 1.



**5** Continue to test yourself and each time you correctly recall the information, move the flashcard into the next compartment. Flashcards from compartment 1 should be reviewed daily, with flashcards from compartment 2 being reviewed every other day, compartment 3 every third day and so on.



**6** Eventually, all your flashcards will have been transferred to compartment 5 and the information they contain stored in your long-term memory.



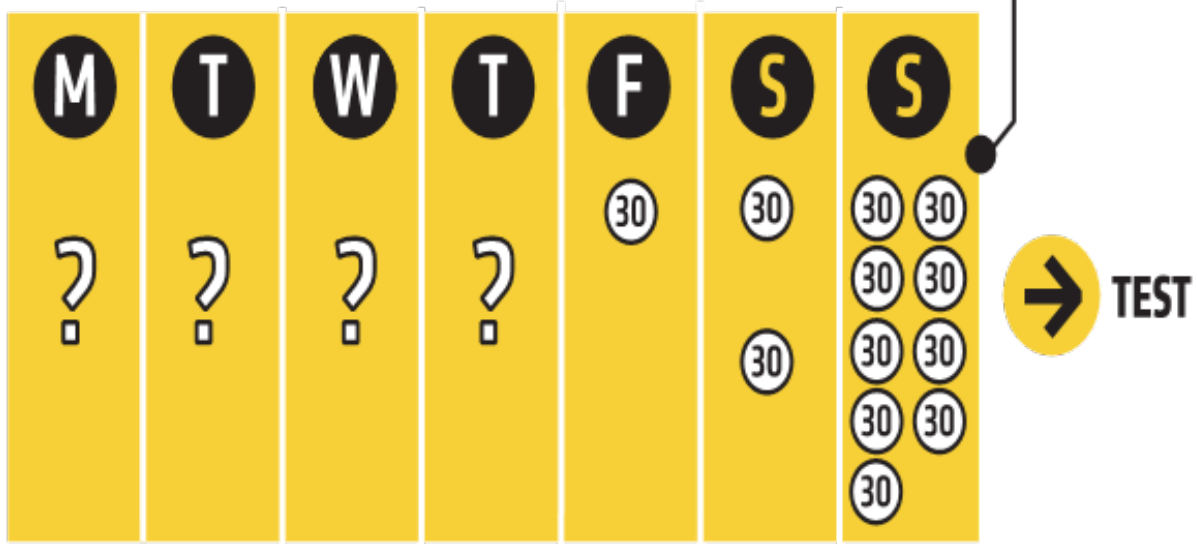
This video will help support you in using the Leitner System:

<https://www.youtube.com/watch?v=C20EvKtdJwQ>

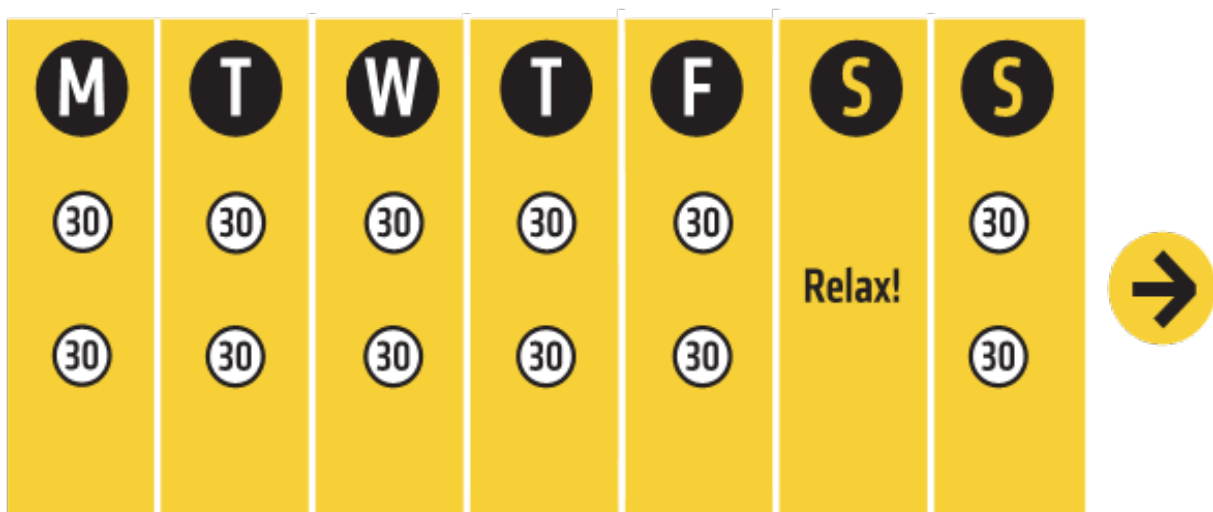
# SPACING AND INTERLEAVING - PLANNING YOUR REVISION

**Spacing** out your revision into smaller chunks over a period of time helps you to remember the material better and ensures you are less stressed with your revision. This ensures you are not **cramming** as it will overload your memory and make you overconfident. By leaving time between revising and testing, the harder your brain works, the more chance of remembering.

Let's say you have a test one week and you have 5 hours to prepare for it broken down into 30 minute chunks. Very often that process looks like this.



Instead of mass practice, a much more effective way of revising is to space out your revision like this:



By breaking up your revision into 30 minute chunks and spacing out the time between revision, you will consolidate what you have learned and retain the material much more effectively.

**Interleaving** involves switching between ideas and topics during a study session and not revising in blocks of topics. This ensures that you are not studying one idea or topic for too long. Mixing up your revision and chunking it supports learning and strengthens your memory as we know you need to review information over time to reinforce learning. *If a subject involves a narrative (story), revise this in one piece.*



For example, instead of organising your revision week like this:

M	T	W	T	F
MACBETH	AN INSPECTOR CALLS	CREATIVE WRITING	UNSEEN POETRY	JEKYLL AND HYDE
MACBETH	AN INSPECTOR CALLS	CREATIVE WRITING	UNSEEN POETRY	JEKYLL AND HYDE
MACBETH	AN INSPECTOR CALLS	CREATIVE WRITING	UNSEEN POETRY	JEKYLL AND HYDE

A much more effective way of organising your revision would be like this:

M	T	W	T	F
MACBETH	UNSEEN POETRY	AN INSPECTOR CALLS	JEKYLL AND HYDE	CREATIVE WRITING
AN INSPECTOR CALLS	JEKYLL AND HYDE	CREATIVE WRITING	MACBETH	UNSEEN POETRY
CREATIVE WRITING	MACBETH	UNSEEN POETRY	AN INSPECTOR CALLS	JEKYLL AND HYDE

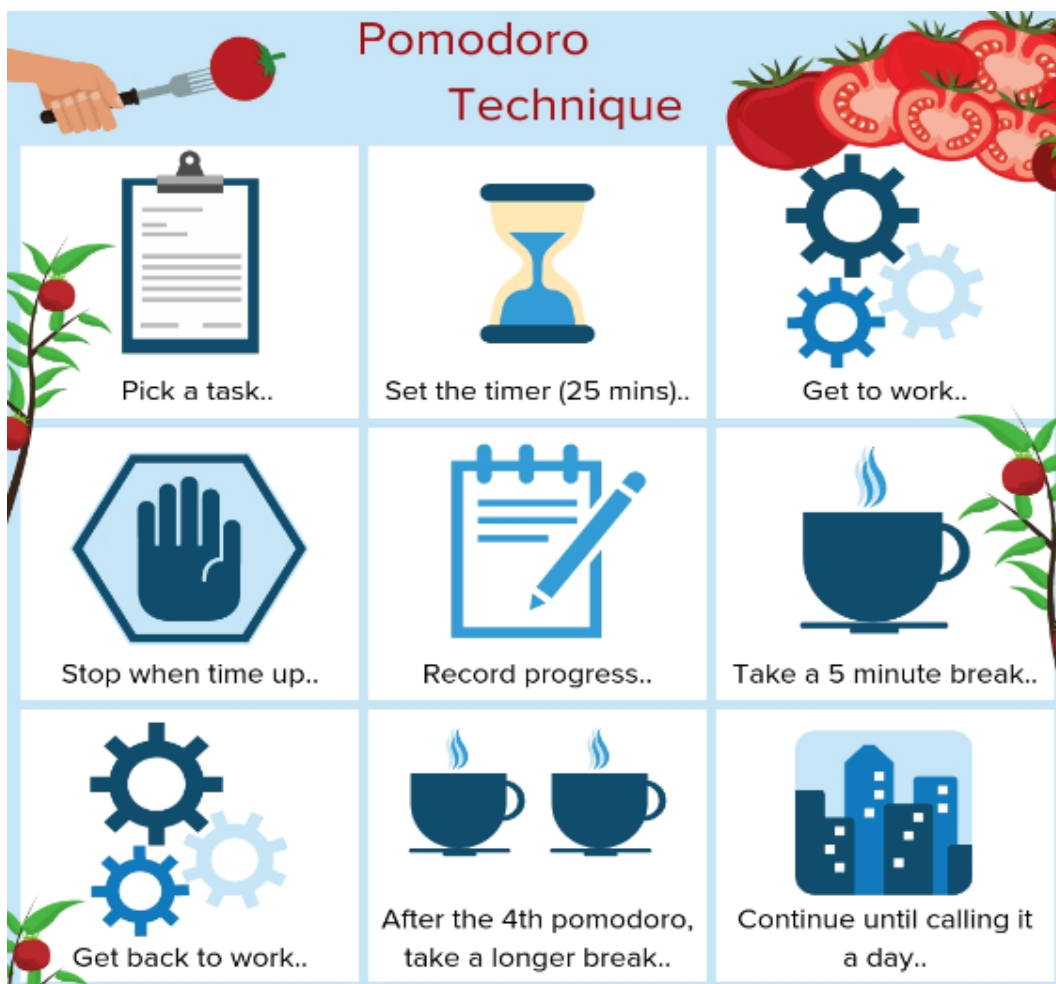
As you are doing this, another highly effective strategy is to try to think of connections between topics you are studying considering similarities and differences.

Studying one topic for a long time can give them impression you have mastered it but often this can be misleading.

# DELIBERATE PRACTICE

Do's	Don'ts
<ul style="list-style-type: none"> <li>• Spend time practising what you will be tested on.</li> <li>• Practice the areas you struggle and need to improve on.</li> <li>• Make sure you review your practice – get a teacher to check it or review your notes and answers against mark schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Use notes, the point is you are doing it from memory!</li> <li>• Only practice areas you find easy or do well at.</li> <li>• Spend too long on a question – stick to timing and practicing what it will look like in exam conditions.</li> </ul>

Practice is essential. You can revise all you like but without practice, it is wasted. Start by spending time reviewing a topic/unit before quizzing/testing yourself with **no notes and from your memory (this is vital for revision)**. Once you have finished, check your answers. **This will support you in showing where your 'knowledge gaps' are and where focus needs to be in your future revision.** Revision shouldn't keep you in your comfort zone, you need to be thinking hard and identifying your own areas for development. Avoid simply revising topics you enjoy. A technique to support deliberate practice is the **Pomodoro Technique**.



Practice should be applying the knowledge and skills you need to succeed so may involve exam questions or planning answers.



# SUMMARISING AND CHUNKING INFORMATION

**Chunking information** into manageable chunks to revise is a powerful strategy as it aids motivation and ensures your working memory is not overwhelmed.

1. **Breaking up the information into paragraph or section chunks** – this ensures you can work through, revise and learn, one part of the text at a time. Give each section a heading to support your understanding.
2. **Only highlight the core information and do not highlight everything** - what is actually needed?
3. **Take out the information you have highlighted and bullet point it onto a revision card** – use this knowledge to explain the 'story' and narrative and to test yourself.

Muhammad Ali, arguably the greatest boxer in the history of the sport. He was born in 1942, in Louisville, Kentucky in the United States. He was named after his father, Cassius Clay, Sr., who was named for the 19th century abolitionist and politician Cassius Clay. He changed it to Muhammad Ali in 1964. He became a boxer at the age of 12. As an amateur boxer he won many titles, culminating in the Light Heavyweight gold medal in the 1960 Olympics in Rome, Italy. When Ali returned home to the states, he was so proud that he wore the medal around his neck wherever he went. After a week, he went to a café and ordered a drink. The waiter said "I'm sorry, we don't serve coloured people". Ali was so incensed by this! He had represented his country, won the gold medal, and come back to this kind of treatment. Muhammad Ali ripped from his neck and threw it into a river. Ali turned professional at the age of 18. Ali's record was 100 wins, 5 losses when he ended his amateur career. Ali became the World Champ at the age of 22. Clay was famed for his unorthodox fighting style. Rather than match his opponents with brute force, Clay brought tactics and strategy into the ring. With his fast-moving style, he was equally adept at dodging a punch as at delivering one. His fancy footwork soon became known as the 'Ali shuffle'. Ali also fought a great psychological game, often beating fighters before they stepped foot in the ring. It was in the pre-fight build up to his first world title fight with Sonny Liston that Ali famously said "I will float like a butterfly and sting like a bee". In 1967, when Ali refused on religious grounds to be drafted into the US army to fight in Vietnam, he was stripped of his title and banned from boxing, two decisions he successfully overturned in court. This he achieved by defending himself brilliantly without a lawyer. In 1971, Ali lost the title to Joe Frazier. Ali went on to win it back and then fought in two of the most famous fights in the history of boxing; The Rumble in the Jungle, versus George Forman and The Thrilla in Manilla, again versus Joe Frazier. Ali is the only boxer to have held the World title on 3 separate occasions. Ali retired from professional boxing in 1981, at the age of 39, with a career record of 56 wins and 5 losses, and as a three-time World Heavyweight Boxing Champion. Throughout his boxing career Ali was won over 50 million \$.

Muhammad Ali became a Muslim around the age of 22, and a member of a group known as the Nation of Islam (or the Black Muslims) and was inspired by the teachings of Malcolm X. Muhammad Ali has been married 4 times, and has had nine children. There have been many films made of his life, most recently with Will Smith in the title role. Ali was awarded the coveted title of 'Sportsman of the Century' by the BBC in 1999. Although suffering from Parkinson's disease, Ali still makes many public appearances. He refuses to allow his disability to beat him. He travels around the world doing great work for charity.

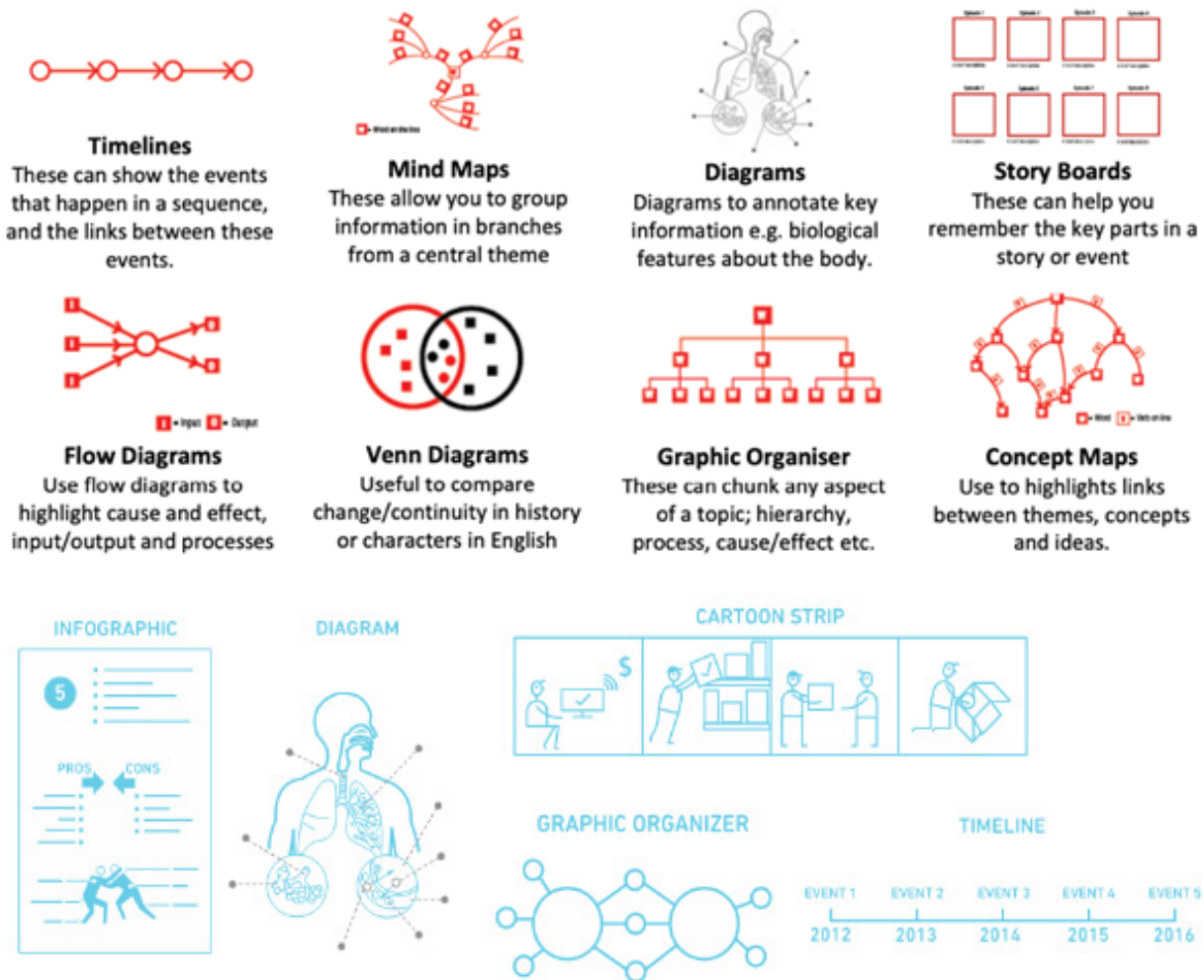
## Paragraph 1: 'Born':

Muhammad Ali, arguably the greatest boxer in the history of the sport. He was born in **1942**, in **Louisville, Kentucky** in the United States. He was named after his father, **Cassius Clay, Sr.**, who was named for the 19th century abolitionist and politician Cassius Clay. He changed it to Muhammad Ali in 1964. **He became a boxer at the age of 12.**

<b>Born:</b> <ul style="list-style-type: none"> <li>• 1942</li> <li>• Kentucky</li> <li>• Cassius Clay</li> <li>• 1964</li> <li>• 12</li> </ul>	<b>Boxing:</b> <ul style="list-style-type: none"> <li>• 1960 Rome Olympics</li> <li>• Professional at 18</li> <li>• 100 wins, 5 losses at amateur</li> </ul>
<b>World Champion:</b> <ul style="list-style-type: none"> <li>• 22</li> <li>• 'Float like a butterfly, sting like a bee'</li> <li>• Vietnam 1967</li> <li>• 3 times World Champion</li> <li>• \$50 million</li> </ul>	<b>Life:</b> <ul style="list-style-type: none"> <li>• National of Islam</li> <li>• Married 4 times</li> <li>• 9 children</li> <li>• BBC Sportsman of the Century 1999</li> </ul>

# DUAL CODING

When reviewing something you have learnt, combining words and pictures can be powerful. Research suggests that combining words and images increase your learning by visually representing information in two different ways. Examples of this include creating a:



## INEFFECTIVE REVISION STRATEGIES - WHAT DOESN'T WORK

With the above in mind, it is vitally important to think about strategies that students may employ that have a limited or no real benefit on learning or memory. These include:

- Simply writing out notes or copying from a textbook/exercise book.
- Cramming revision to the 'final minute' overloads your working memory so you can't learn at all. It can also cause stress/anxiety before exams.
- Re-reading and doing nothing with the information. Trying to focus on 'too much information' on a single page and cramming revision.
- Highlighting information for the sake of it.
- Not enough silent work or attention to a given task. Attempting to revise while multitasking and doing other things.
- Comfort zone revision of easy material that pupils have already mastered because it makes you 'feel good'.

# DEVELOPING REVISION **ROUTINES AND HABITS**

Within your revision, it is vitally important to establish a strong routine. Having goals are good for setting a direction. What do you want to achieve in this revision session? Habits are incredibly powerful in helping you to succeed. If you have the mindset of wanting to be a better student and build the habits to become the person you want, the results will come. Getting one percent better every day counts for a lot in the long-run.

In order to support the forming of good revision habits, there are a number of areas to consider:

- **Make it obvious** – revise in one area, leave your materials out ready to support organisation and ensure routines are stuck to. Ensure your environment is clear, uncluttered and comfortable.
- **Start small and build up** – reduce distractions where and when you revise and get your family to encourage the creation of a revision timetable and placing it somewhere visual in your house. Ensure someone else is knowledgeable of this timetable to enable accountability and aid support. Start revising for a short amount of time and build up over time.
- **Make it attractive** – collaborative focused revision (with friends) is beneficial (alongside attending interventions or revision sessions) but you could also ensure there is a 'reward' at the end of a revision session. If I complete this, I can do this. Write a revision contract.
- **Make it satisfying and rewarding** – challenge yourself, track your own revision progress and ensure you stick to your revision timetable. Small steps build success and motivation. Use PLCs or checklists to support. Focus on 'I'm a hard worker' than 'I want a Grade 8'.

# CREATING AN EFFECTIVE **REVISION ENVIRONMENT**

Goals are good for setting a direction but systems are best for making progress. We know that working memory can only hold a small amount of information at once. Therefore, in order to revise and learn effectively, you should use techniques which free up your working memory and stop it from being overwhelmed. One way is working in an environment which is free from distractions.

Whilst **phones** are a brilliant intervention, research has found that they have a negative impact on revision and learning. It can reduce concentration, impacting working memory, impact your sleep due to the bright lights and distractions, reduce your motivation to reduce and through listening to music, you are more likely to remember the lyrics to the song than the material you are revising.

Find a quiet, tidy room with minimal distractions – your bedroom, library or classroom.

Put your revision timetable, exam timetable and other documents visible on your wall

Make sure you have a drink and snack with you, staying hydrated and full is important



Put your phone in another room, it is too much of a distraction -

Loud music is a distraction, if you must listen, it needs to be low tempo, without lyrics

Have all your revision materials and stationary on your desk ready to go - make it obvious

# REVISION TIMETABLE - THE RETROSPECTIVE METHOD

The Prospective Method is the traditional approach to putting together a revision timetable. The Retrospective Method doesn't start with a timeline. It begins with a list. You look at what you need to know for each subject by breaking it up into topics. You prioritise each topic with a traffic-light system.

- Green: I know everything in this topic and I'm ready if it came up in the exam or assessment
- Yellow: I understand the basics but I'm struggling in some areas.
- Red: I don't understand this topic at all.

For example, in Maths:

- Fractions
- Decimals
- Laws of Indices
- Standard Form
- Financial Mathematics
- Algebraic Expressions

Once you have colour coded the topics you will have a clear indication of the ones that need the most work (the ones in red). You work on those first and you mark off the date alongside it.

Like this:

- Fractions
- Decimals 5th April
- Laws of Indices
- Standard Form
- Financial Mathematics
- Algebraic Expressions 6th April

Then you focus on the ambers and then the greens (which you could probably do in one go).

- Fractions 8th April
- Decimals 5th April
- Laws of Indices 7th April
- Standard Form 8th April
- Financial Mathematics 8th April
- Algebraic Expressions 6th April

Then you've finished your first cycle. Consider where you're up to. And colour-code the dates, in line with how you feel about each topic.

- Fractions 8th April
- Decimals 5th April
- Laws of Indices 7th April
- Standard Form 8th April
- Financial Mathematics 8th April
- Algebraic Expressions 6th April

This is a great way to measure your progress and to identify what you need to look at next. You could use the example template below to plan your revision using this method:

Topic	First Review	Second Review	Third Review
<b>EARTH &amp; SPACE</b>			
Earth, Moon & Sun	28/07/23	30/07/23	03/08/23
Water & Carbon Cycles	29/07/23	01/08/23	20/08/23
Space	26/07/23	18/08/23	05/09/23

For more ideas, use the link here:  
<https://www.bbc.co.uk/bitesize/articles/zn3497h>