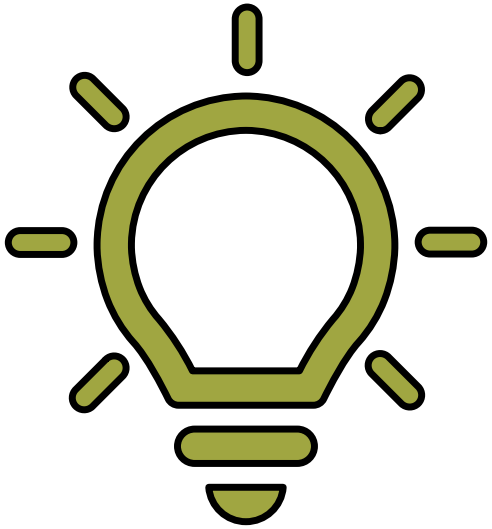


Memory Tips and Revision Guidance

AIM:

TO DEVELOP FURTHER PRACTICAL STRATEGIES FOR REVISION

Forgetting and remembering

Repeating things really strengthens our memory.

However here is just a little bit more science about your brain to hopefully fully help you understand that **learning is not as difficult as it seems**. It really needs two key ingredients:

- **Your time**
- **Your effort**

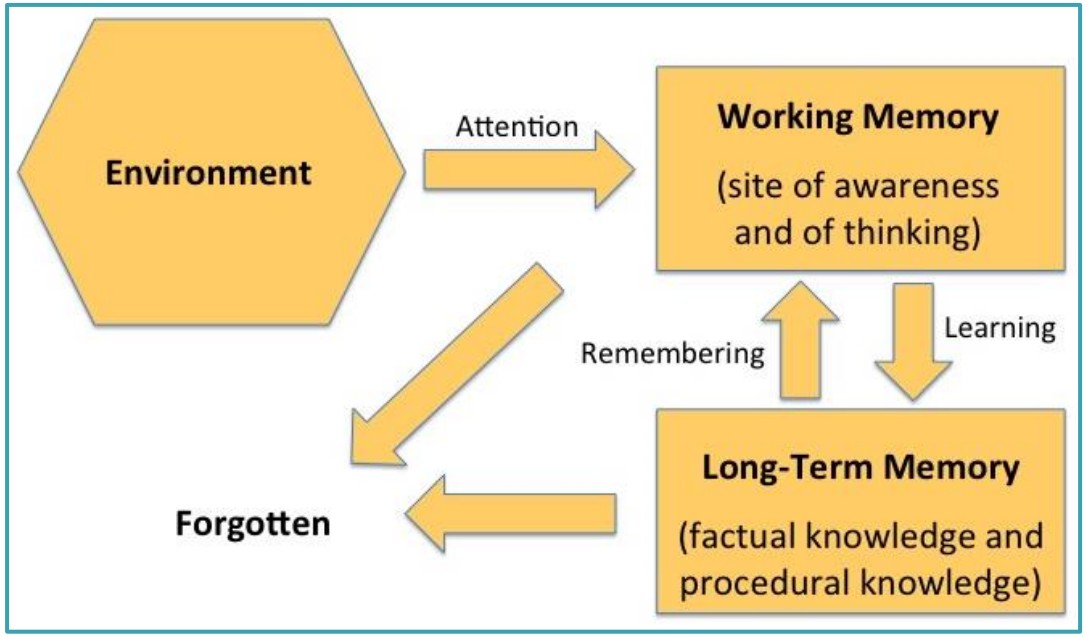
If you can dedicate that then you could be on to a winner!

Forgetting and remembering

Every waking second, of every single day we are bombarded by information from our surroundings/environment. Sights, sounds, smells, all battling for our attention!

- **What we do notice in any moment enters our working memory** (the stuff we are currently thinking about – like this slide, or your teacher's voice…*or something else if you are not paying attention/being distracted!*)**.**
- **Most (loads!) of what enters our working memory gets forgotten straight away. But some is learned.**
- **If it is 'learned' it enters our Long-term memory.** We can still forget some of this over time, but **VERY importantly** information that becomes part of your Long-term memory **could be remembered in future**.

This sort of sums it up!



Forgetting and remembering

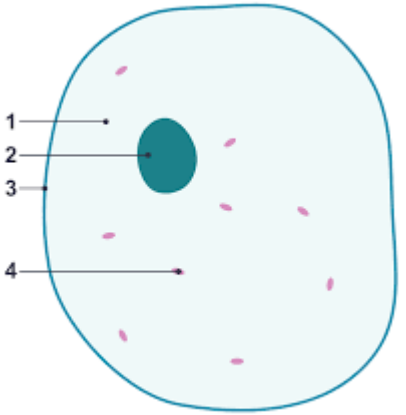
So if getting things into our Long-term memory is so important and useful, how do we make that happen, what is the secret?!

Basically: We remember what we think about

Though this seems obvious, what it really means is:

- The **more you think about something** the more **it is in your working memory** which means the more chance you have of **sending it to your long term memory (our aim)**.
- The **more you concentrate** on the thing you really want to learn **the more attention it gets** in your working memory so the more chance of it **becoming a long term memory**. (Distractions, chatting, noises, a wasp in the classroom! All steal the attention away which is scientifically why learning and remembering stops – see, 'nagging' teachers have a point!)
- The more you **repeat and reuse information** the more you have to think about it again (surprise surprise), the more chance it gets stored in long term memory. This is called retrieval and recall (more on this later).
- Finally, our long term memory is better with things we can **apply meaning** to and can **make links and connections** between. So the more we learn actually helps us to learn even more (strange as it seems!).

That was confusing!



Just keep in mind the key point: We remember what we think about

For example, the reason you might remember an important address in full better than the parts of an Animal Cell is probably because:

a) You think about the address more often, you give yourself a reason to use it

b) The address has had more of your attention

c) You have repeatedly used it, time and time again

d) It is important to you, you have given it meaning and understand its links

Imagine the time it takes to become an expert say at every single button function and special skill on FIFA and how much working to long term memory activity that takes! Time and effort – key ingredients to help us learn, no matter the subject or task!

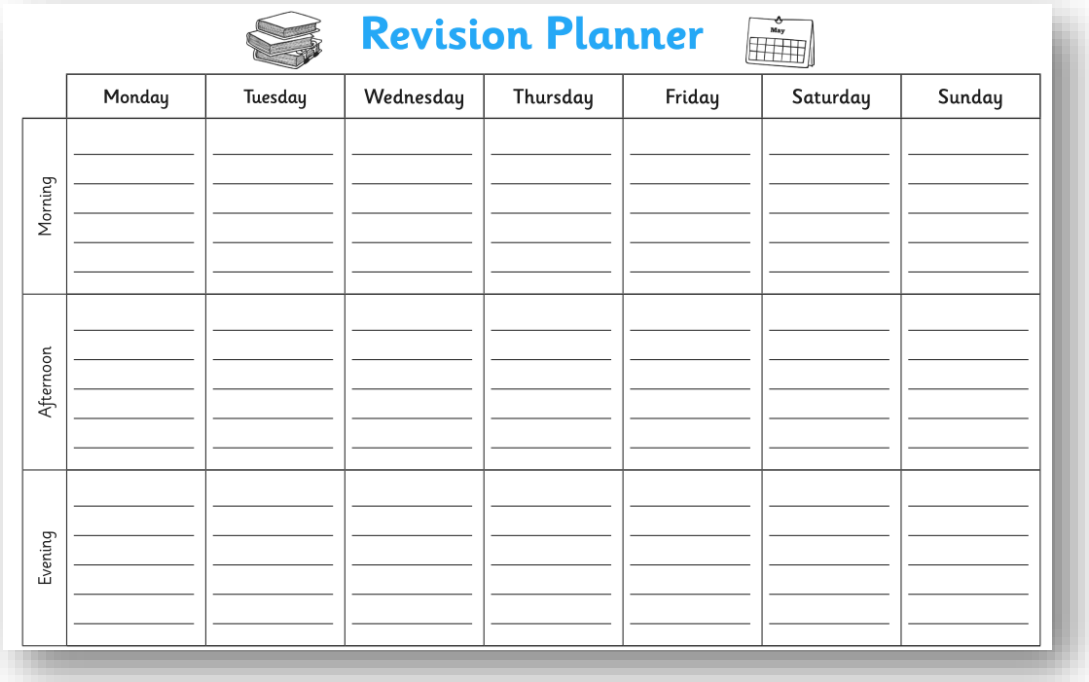
Memory Tips for Revision - Essential

There are so many ways to revise effectively, and **the best ways** all share one thing in common – you **are actively testing and using your memory**.

- It is absolutely fine to write and read notes **to begin with**, to sure make you have all the work covered. But it is not the best way to revise on its own!
- **Get yourself a list of all the topics** you need to know for a subject or a test/exam (your teachers can help with this!). **You need topic lists!**
- Then **decide which bits you find really difficult**, and which bits you find easier (you could **rank them**, you could use a traffic light system etc). The stuff you find hard should get more of your time and effort and be on your revision plans often.

How to schedule a revision timetable (properly!)

- Target subjects and topics that need the most attention – **remember your topic lists**. (e.g. Don't just write *'Science'* – make a note of <u>what</u>, for example *'Genetics and DNA'*)
- Not all topics will need the same time. Build up your hours more and more as you get closer to the exams. **Past pupils who have been successful will have been doing several hours each evening and more on weekends and holidays**.
- If you know you have a very important event that will stop you revising on a date then block that date/time out now! – that then tells you that you need to build in more time somewhere else to make up for it instead of panicking later.
- **Try to plan at least a few weeks ahead at a time.**



Memory Tips for Revision

Let's look at a selection of practical ways to revise which fits in with everything we have talked about:

1. Revision Clocks
2. Memory Dumps [top technique!] ★
3. Flashcards (proper ones!) [top technique!] ★
4. Quizzing/Self-tests
5. Mind-mapping (not just spider diagrams!)
6. Past Papers [top technique!] ★

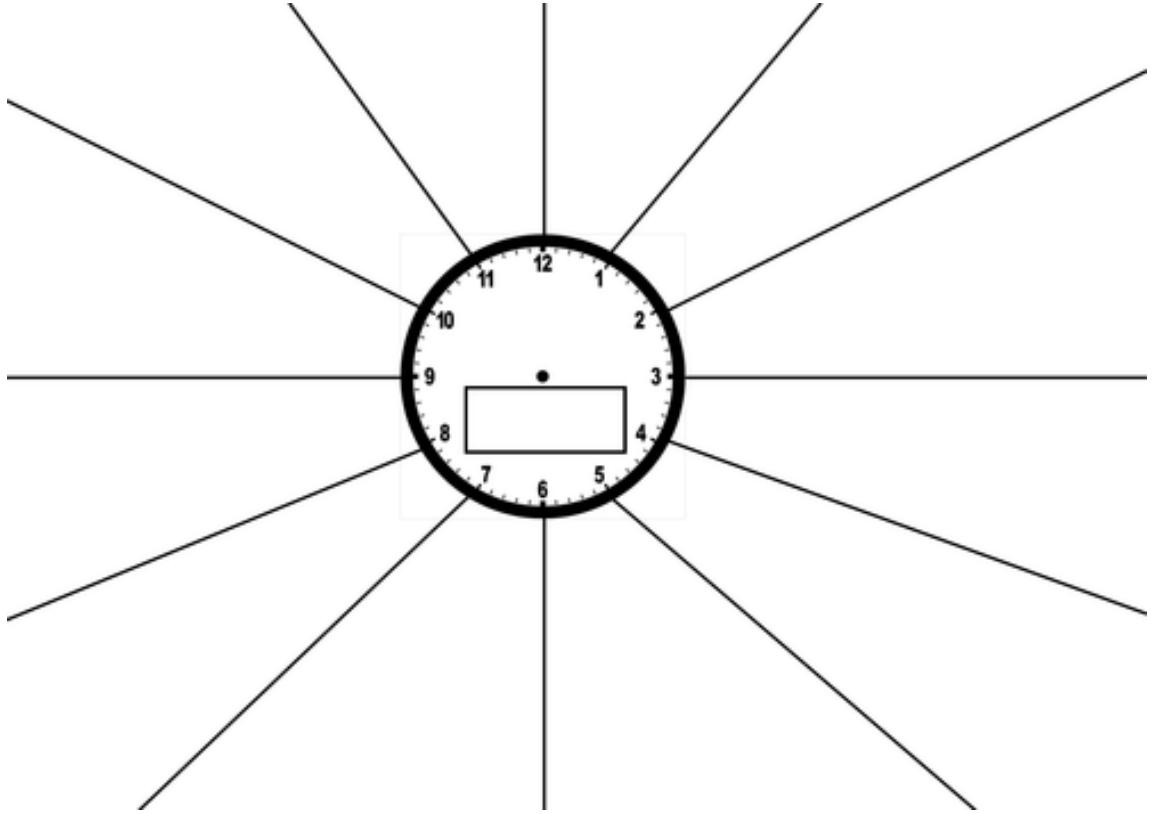
Revision Clocks

How and when to use:

Alongside longer notes to condense and produce a summary. To make it a proper revision and retrieval task to test memory you spend some time learning your notes then put them away when making the clock!

Around a clock template you fill in each segment with as much info about a key part of the topic as possible. Each part of the clock is also your time limit to really test your memory.

Your teacher could tell you what the heading should be in each part of the clock, or you could decide them yourself if you were revising independently.

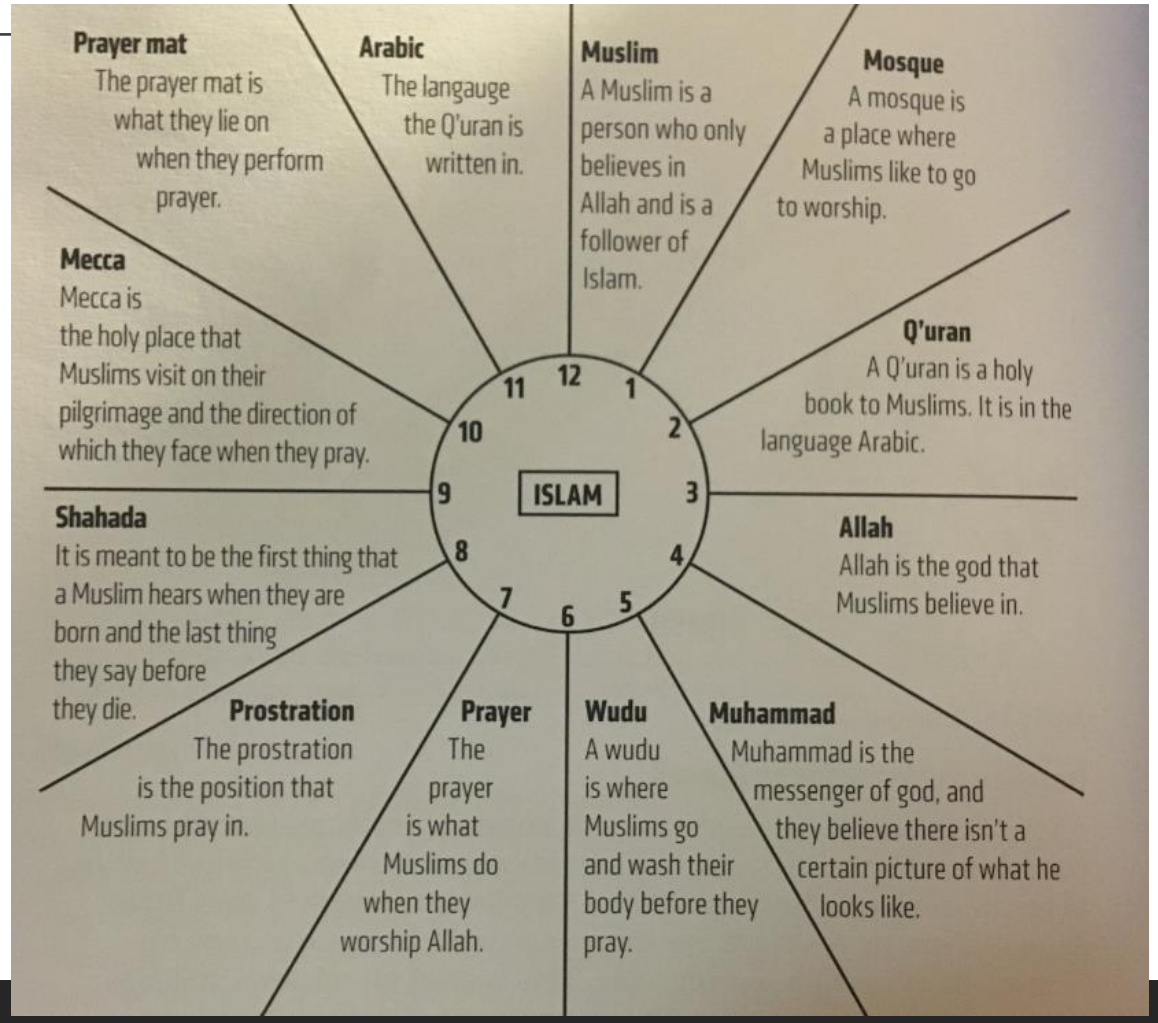


Revision Clocks – an example

A completed Revision Clock where someone has spent 5 minutes writing down a key fact from memory on the topic of Islam, for Religious Studies.

If the person had left any gaps then it is helpful to spot where issues are for more revision. By doing this **they strengthened their memory by thinking about the key parts of the topic**.

Can you think of a subject or topic where you could try this?



Memory Dump – top technique!

How and when to use:

Sometimes called a Brain Dump. It is similar to a Revision Clock but simpler to do!

All you need is your topic list and some blank paper. Choose something to learn from the list or get someone else to pick something for you at random to make it tough! Then set a time limit and really concentrate to read and review your notes (maybe 10 minutes).

Put your notes away and try to write, draw, transfer everything you can remember to the blank piece of paper (use another time limit!). Once done **compare it to your notes** – what did you remember, what had you forgotten? Either way you are now thinking about it yet again!

Keep doing this and **your memory will strengthen**.

Flashcards (proper ones and tips!) Top technique!

How and when to use:

Small cards which have a **question on the front or a key word** (one or two maximum), with the **answer/linked facts on the back**. You look at the front and then try to remember the key facts from the back without looking.

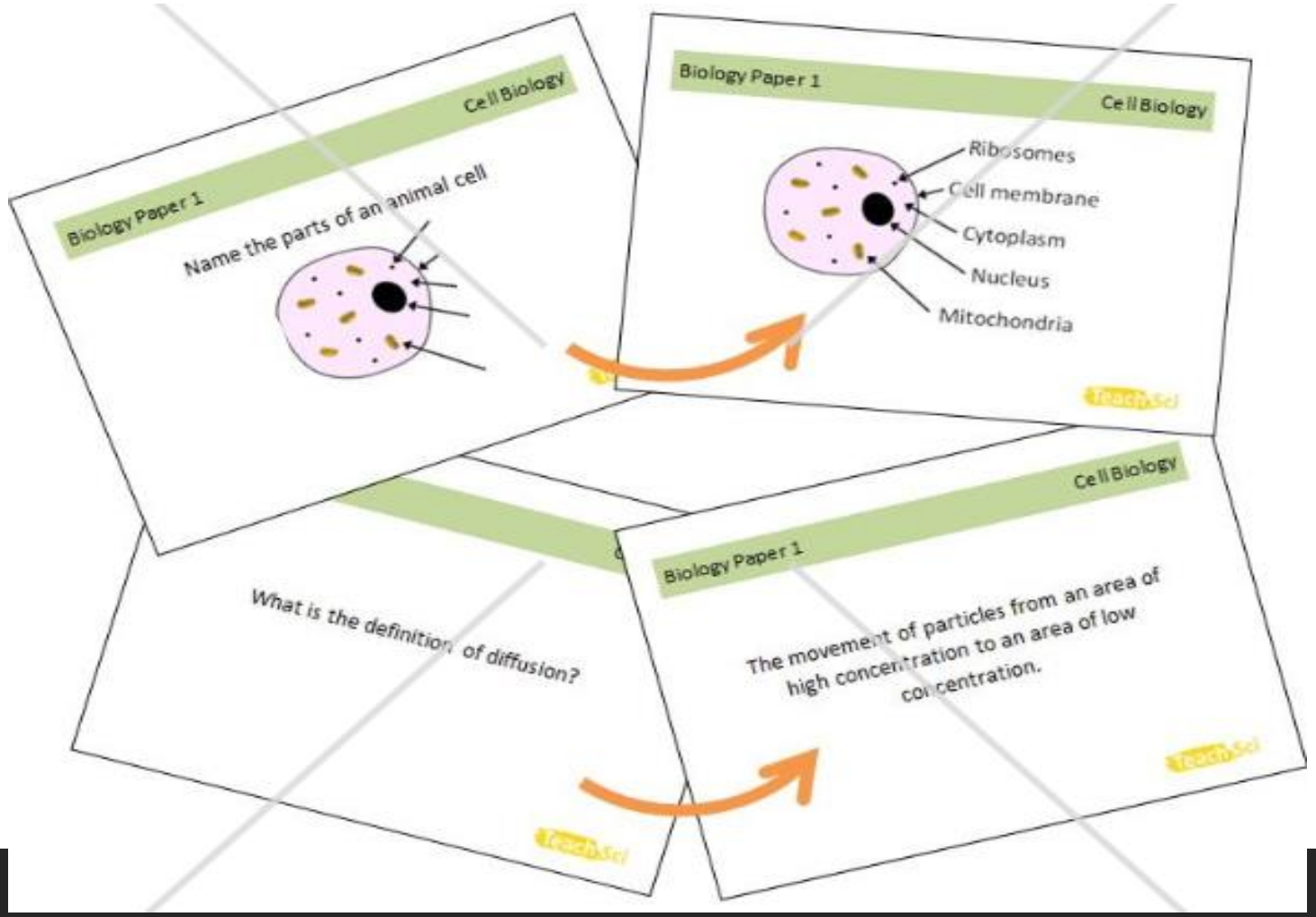
They are **good for revising clear and short facts or points**. Don't use them to set yourself essays!

They don't need to be expensive or stylish. **Spending ages making them look fancy is not the point**. You can consider using different colour cards for each subject as this helps with organisation and also your memory.

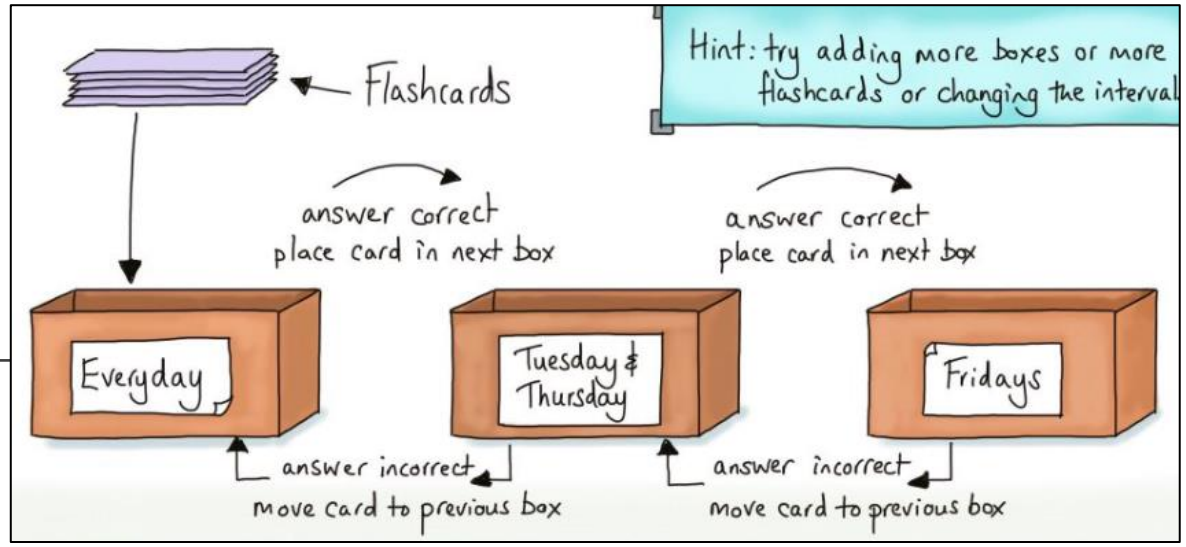
Use them regularly, shuffle the pack, **test yourself, get others to test you**. All will force you to use your memory.

There are websites which can help you make them or have some ready made for download (see www.quizlet.com).

Flashcards – an example



Flashcards



An advanced way of using flashcards:

Set up three boxes (could use old shoe boxes).

Label them as(for example):

Box 1 'Everyday' **Box 2 'Tuesday and Thursday'** **Box 3 'Friday Only'**

Put all your flashcards in Box 1 to begin. You should aim to look at these Flashcards everyday. However if you test yourself and get an answer correct, put the card into Box 2. If you were wrong it goes back in Box 1.

Box 2 you only look at twice per week. **Every time you get a card correct it moves to the next box in the list.** That means the stuff you keep getting wrong stays where you have to repeat and think about it more! Things you get right you revisit less but your memory is getting stronger and stronger with them.

You can tell revision is working too when you see your stacks of cards moving along the boxes!

Quizzing and Self-tests

How and when to use:

This one is quite obvious but can still be done 'better'. You simply **write out or collect lots of short quiz questions on a topic**. It is good to organise your questions by subject and topic too.

You can often collect these **from revision guide books, revision websites, or write your own**. Always include the correct answers (so that someone else can test you too!).

The aim is to **use them little and often** to exercise your memory. The important thing is it **does not matter if you get any wrong**, this is just **practice**!

My Clever Memory Quiz Recipe

One Question based on last lesson:

Two Questions from last week:

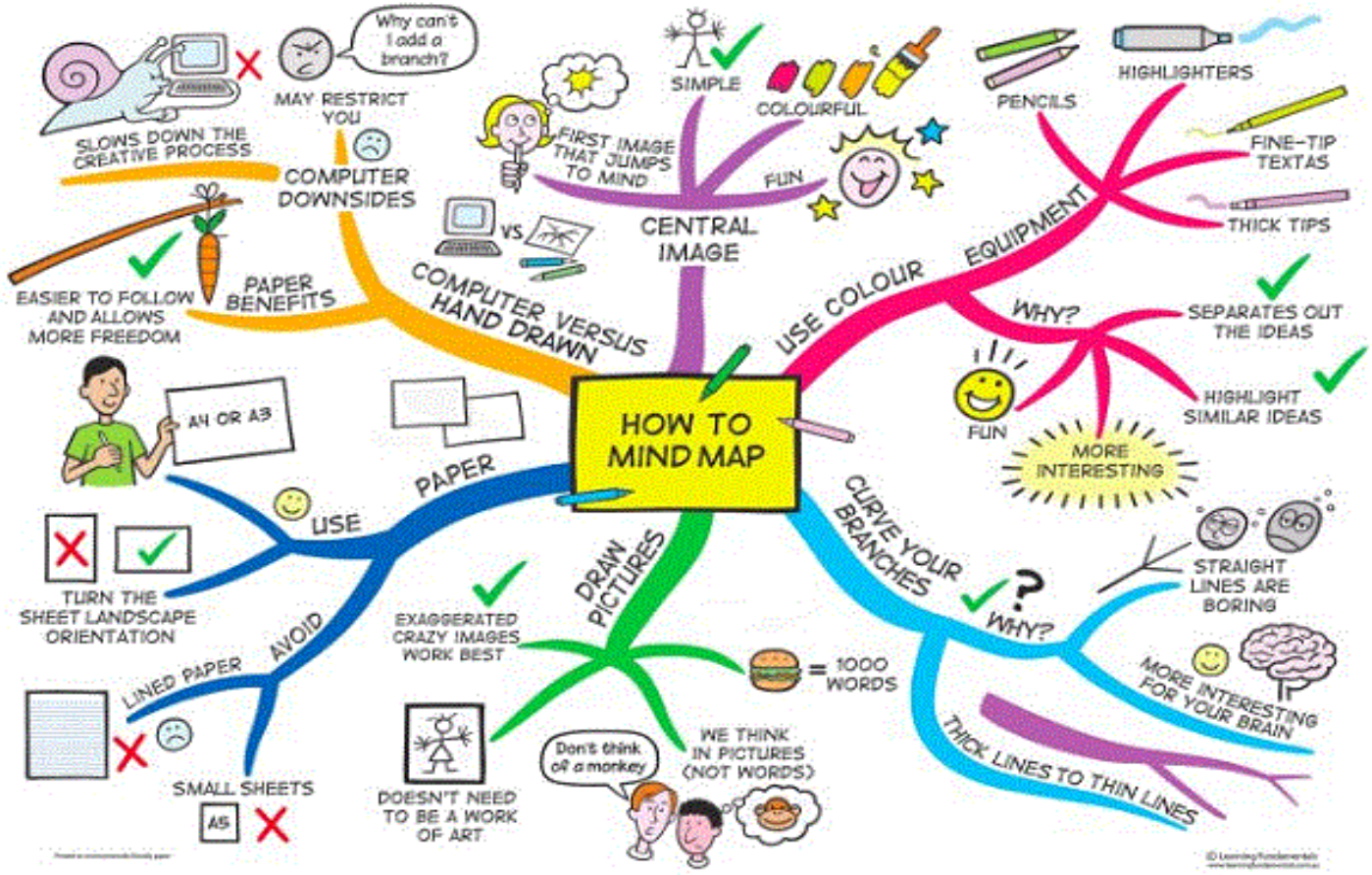
Two Questions from last term:

Two Questions from last year:

You could make use of your quiz questions much more effectively by designing a quiz **using questions from different times of your learning**
(remember the points about long term memory and we remember what we think about!)

Mind-mapping

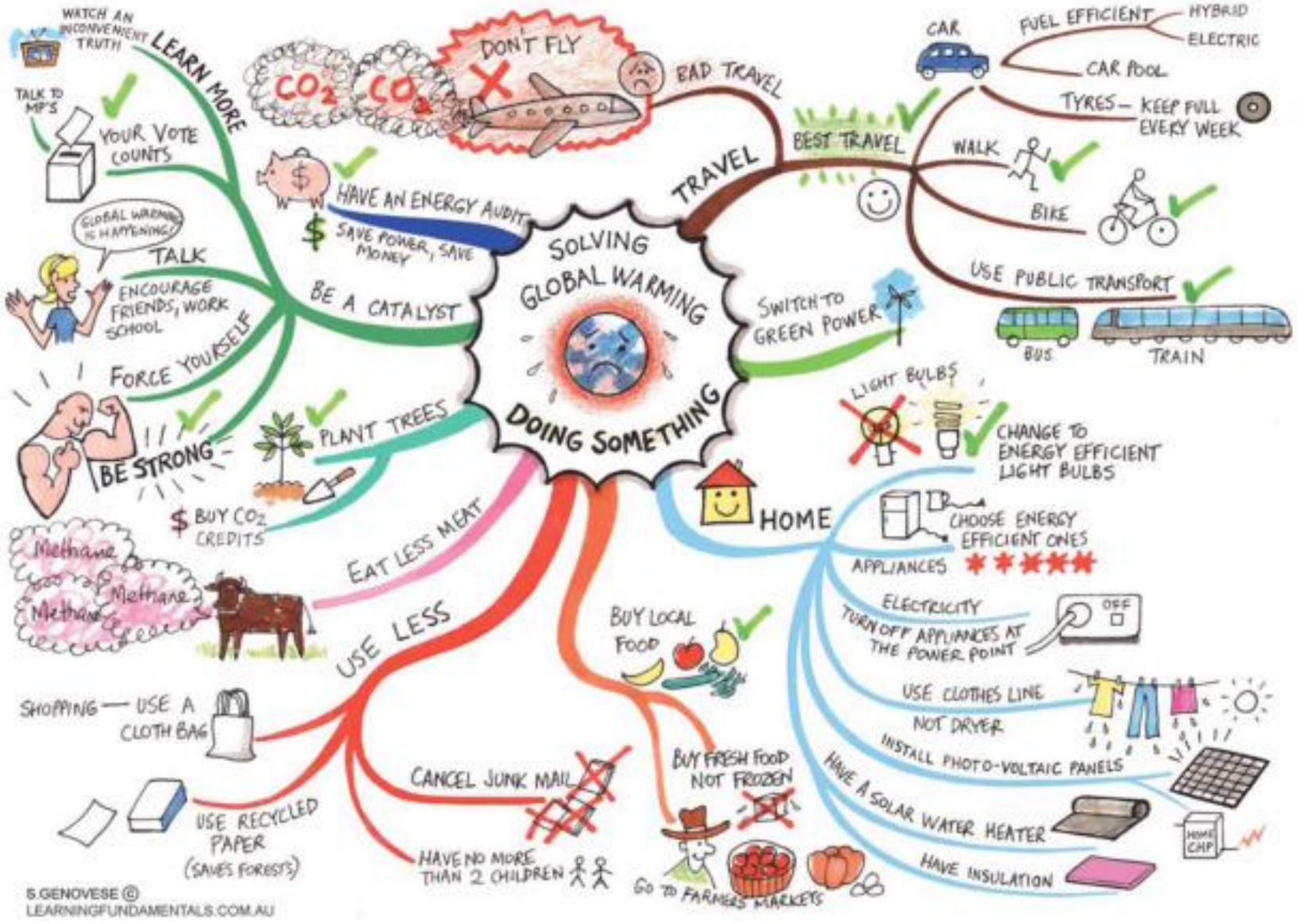
- Turn the page landscape
- Start in the centre and leave enough space around this
- Thick branches are to represent main topic headings or points (you could use colour for each)
- No more than 5-7 main branches (what our memory can handle)
- Images and clever pictures can help make things ‘stick’



Mind-mapping for revision and notes

- Just imagine how effective mind mapping could be to **summarise big topics you have to learn about**.
- They could be **used for lots of subjects**.
- They provide you with a way of **organising information so it becomes easier to learn**, and therefore **helps you remember** it
- Just to show you how amazing they can be, a few more examples…

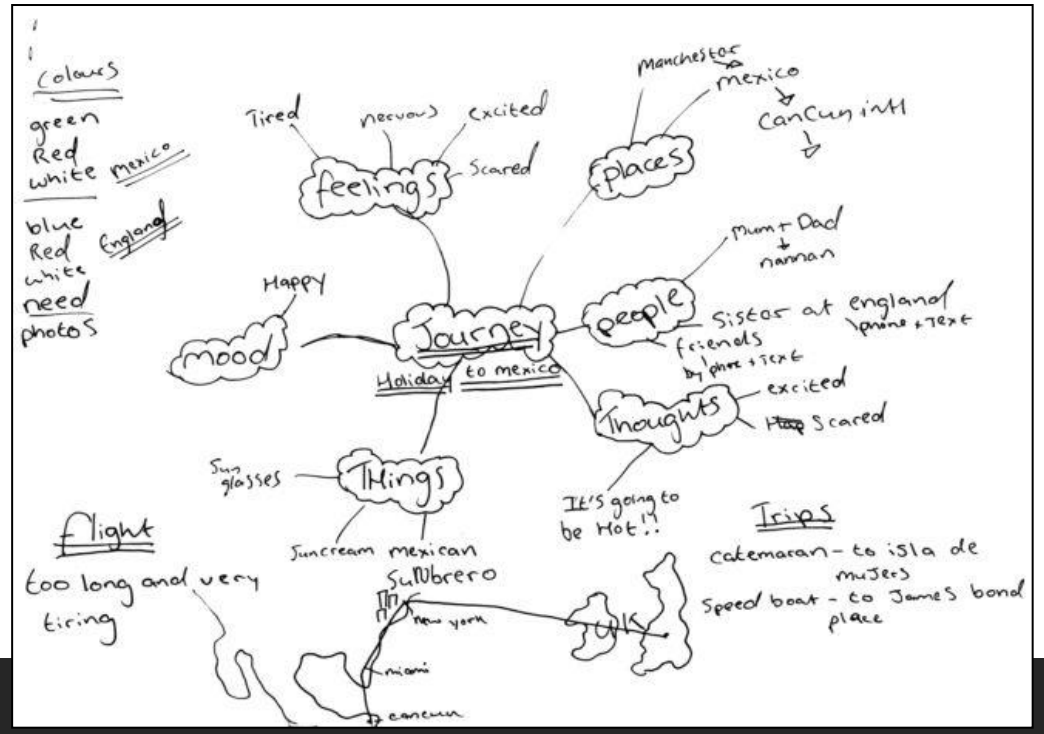
Energy Resources mind-map example



Global Warming mind-map example

What is **NOT** a mind-map?

When most people start to produce what they think is a mind-map, it actually turns out to be a sort of 'spider-diagram'. They think it is the same thing, **but would you say these are the same thing?**

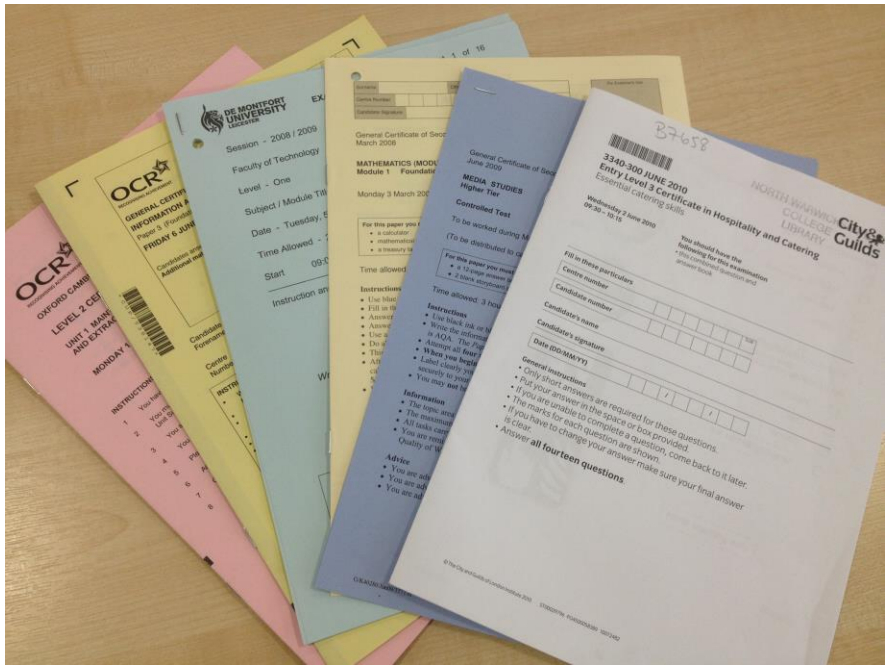


Past Paper Questions – Top technique!

How and when to use:

You are unlikely to pass a driving test without getting behind the wheel of a car and practising a number of times first – that is what driving lessons are for!

Tests and exams are similar in that people are much more successful if they 'have got behind the wheel' and given things a trial run before the real thing. This means **using past paper exam questions to test what you know, find out what you can or cannot do**!

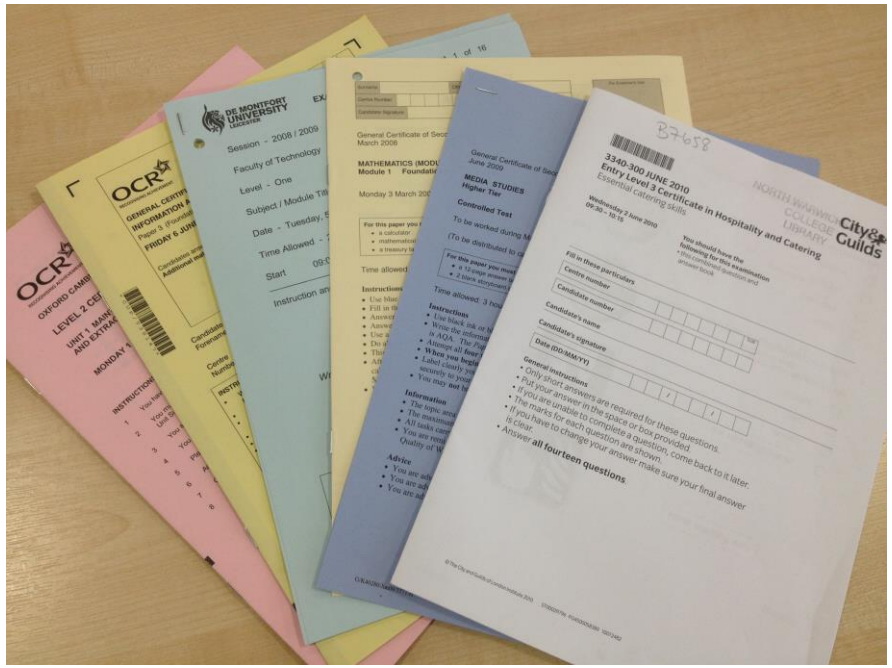


- **They help with exam technique; knowing how to answer questions.**
- **They help you learn how to cope with exam pressures.**
- **They help you work out which areas need more work before the big day!**

Past Paper Questions – where to get them?

You can find selections of past paper materials **on Exam Board websites** such as www.wjec.co.uk

However, your **teachers probably have access to much more** than this and sometimes have packages that let them choose exact topics or questions that will help you, so it is always worth checking with them. **You should then use the examiner answers to check what you got correct**.



After you have used other revision methods and as you get closer to tests or exams, practising with plenty of Past Papers is very effective!