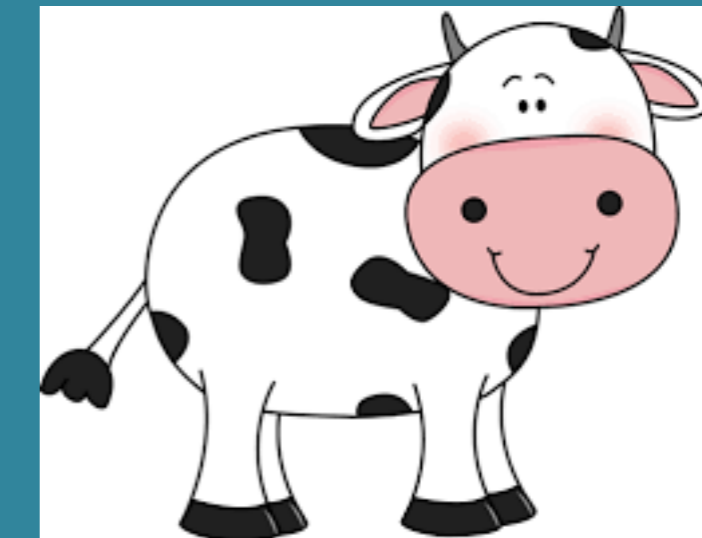
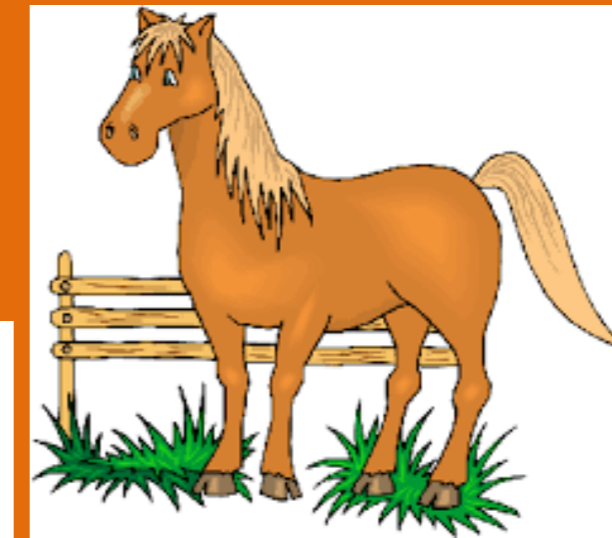
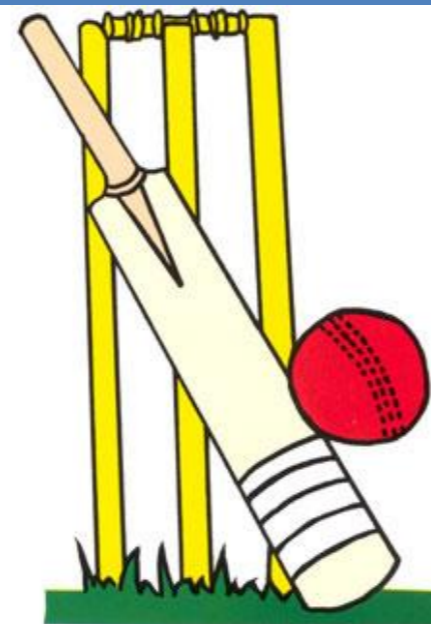
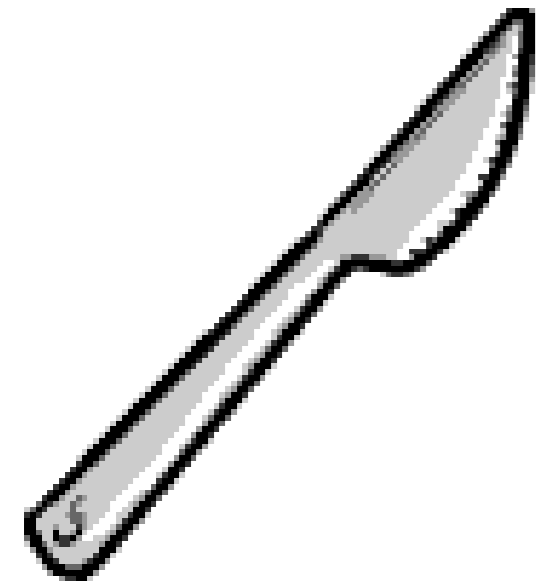
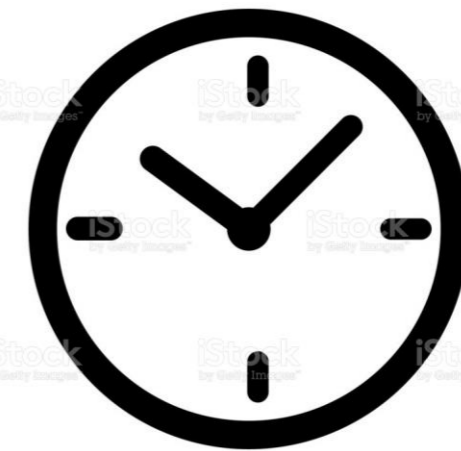


Welcome and please help yourself to refreshments .
Please memorise the images below



Why now?



Aims of the session

- To gain a basic understanding of memory and how it works
- To know what an effective study environment looks like
- To gain a range of strategies for revision and how revision might work in different subjects
- To understand how to use revision resources in the most effective way



Why is memory and revision so important?

Linear exams

All content tested at the end (in most subjects)

Two years worth of knowledge to revise, know and be able to apply to an exam question



Knowing what you need to learn

Create a list for each subject of topics, then break that down into smaller sections

Use the exam board materials – specification for example – to help with this

Then, RAG rate the topics based on how much you know (test yourself beforehand if needed)

Use this to help you plan your revision



What is the difference between long term and short term memory?

Short-term memory

- typically lasts between 15 and 30 seconds
- it holds the information we're currently working with or using for cognitive tasks
- this can be new information delivered by our senses or old information retrieved from the long-term memory



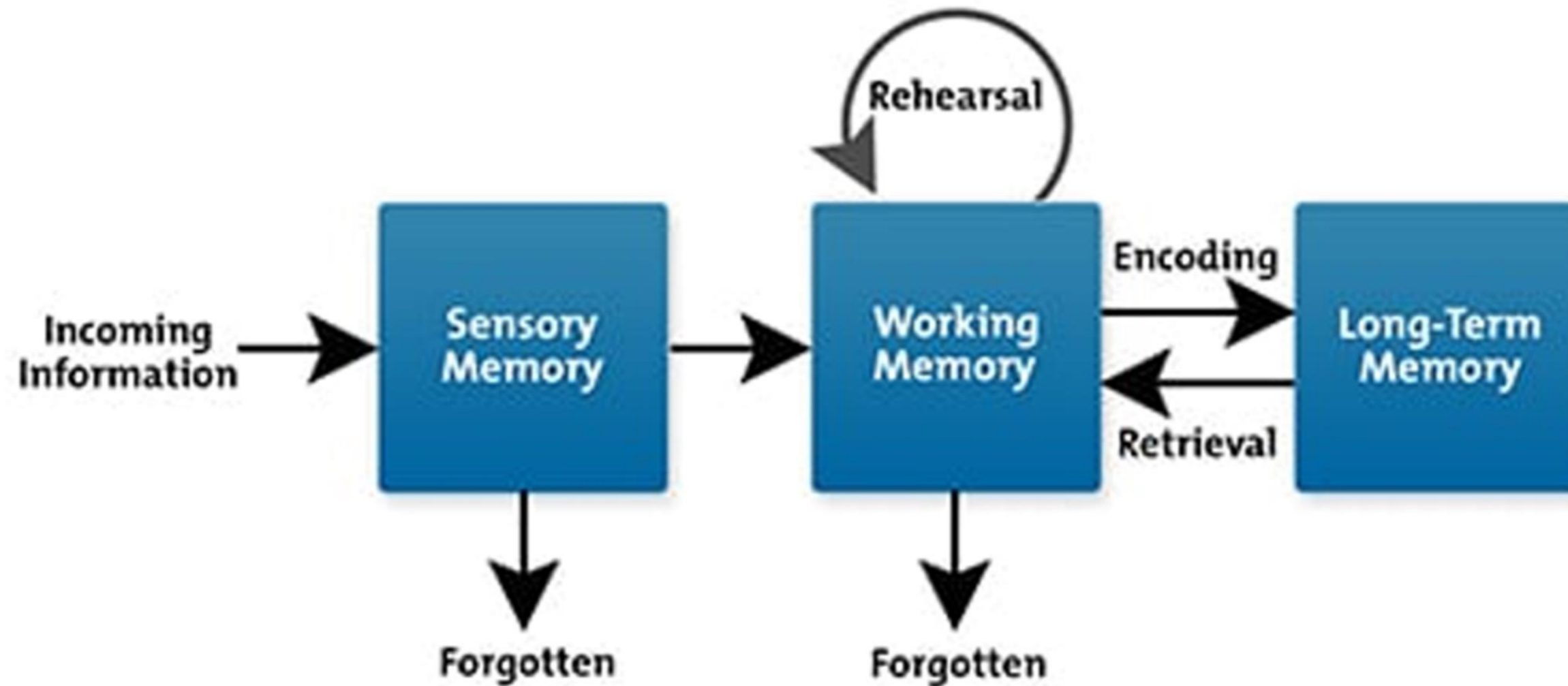
What is the difference between long term and short term memory?

Long-term memory

- keeps everything in storage
- neurons make new physical connections and synapses with each other when a new long-term memory is formed
- implicit memories include habits and skills that we can do automatically
- explicit memories are things we're consciously aware of and are intentionally trying to remember.
- we need to consciously activate the pathways in our brains in order to retrieve information from our long term memory



How to get information into your long term memory



<https://vimeo.com/142378753>



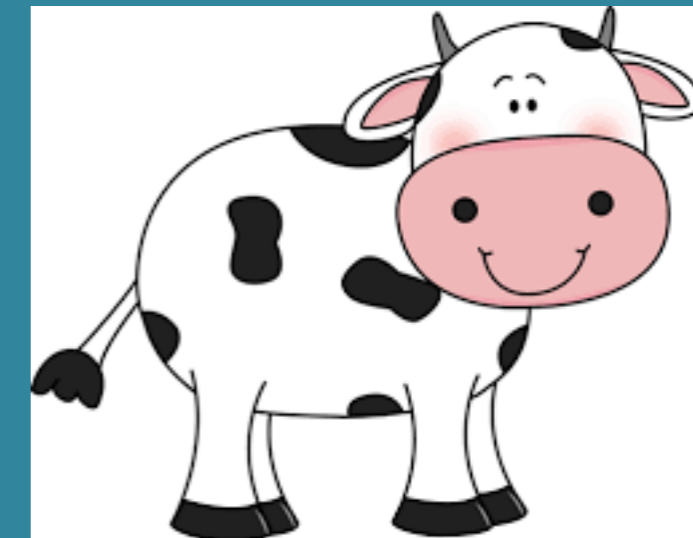
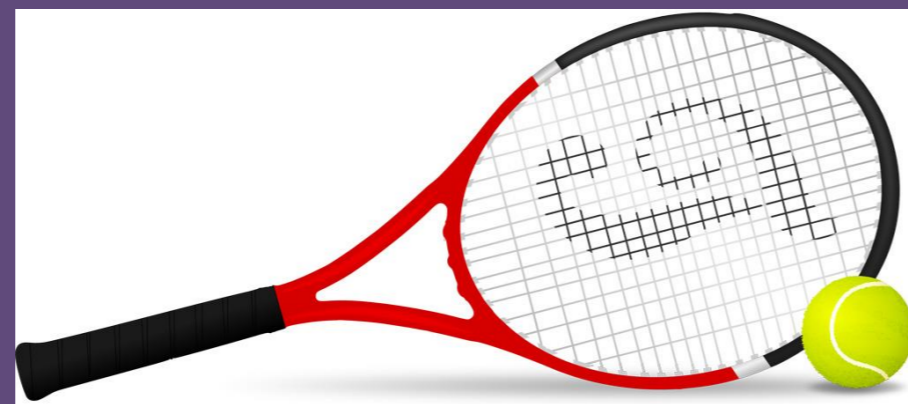
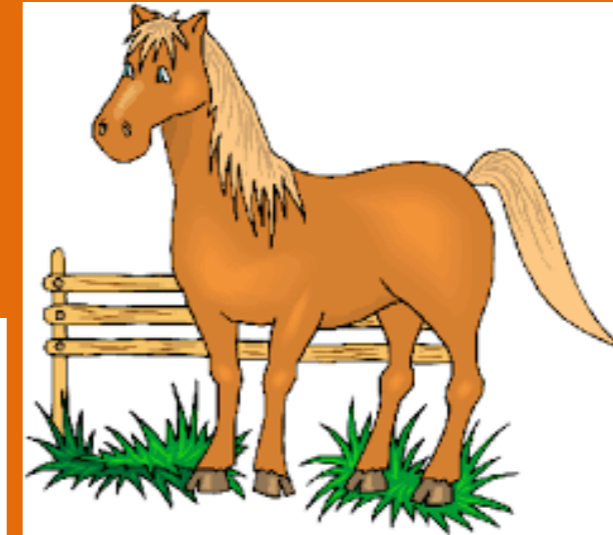
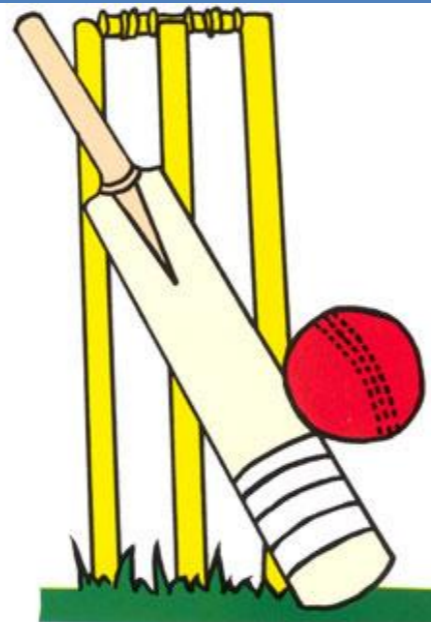
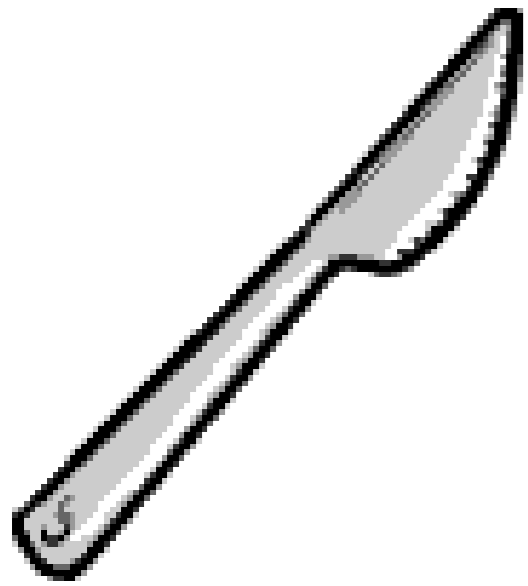
How to get information out of your long term memory to check if it is actually there

Retrieval – from scratch and with a gap between learning the information and testing yourself on it

Memory is stored in categories and can be retrieved most effectively through links and associations



What can you remember from the images?



Make sure you have a list of what you need to know and plan for enough time to revise it all multiple times.



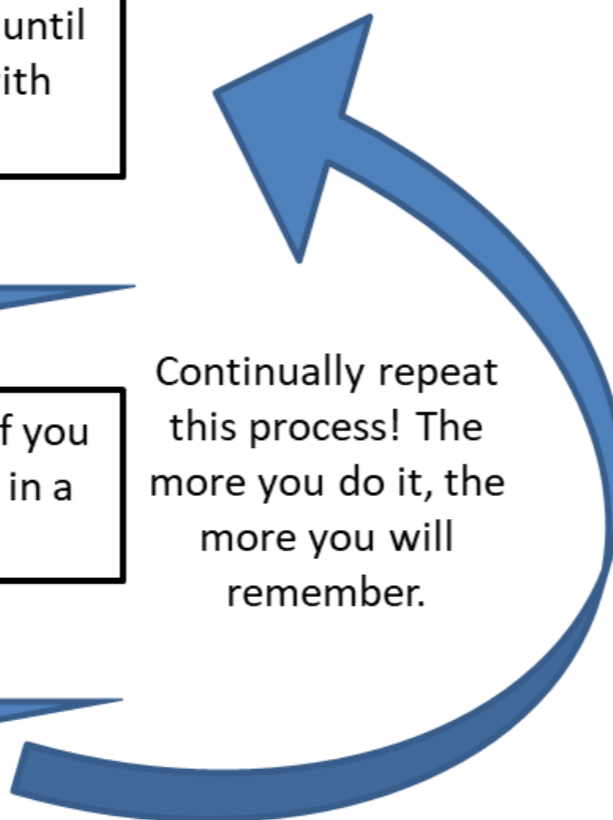
Create your own mind maps/flash cards/revision materials – whatever you find helps you to process the information.



Retrieve anything that you know about the topic whichever format you choose – keep going until you have got everything you can. Begin with topics you are least confident in.



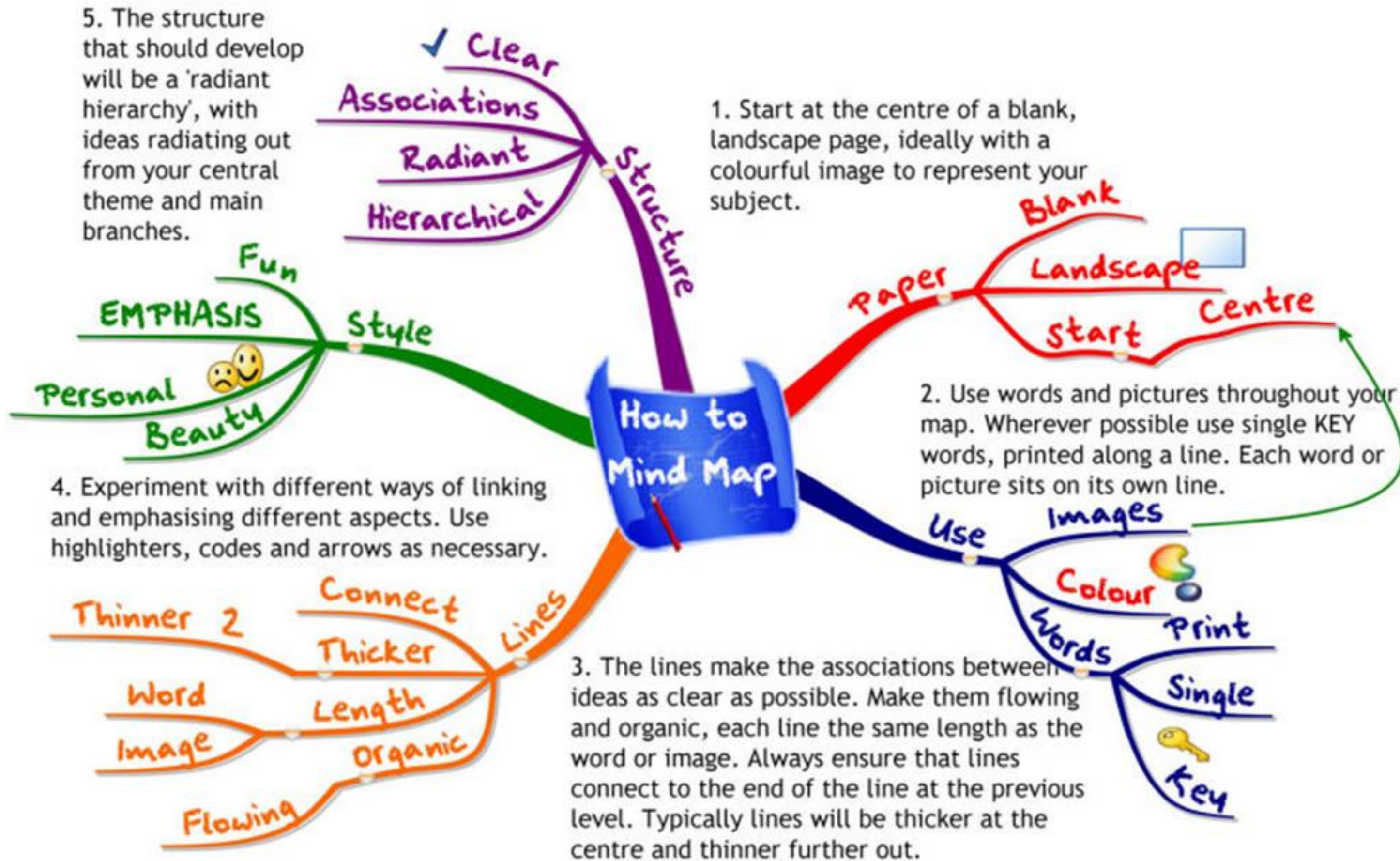
Go back to your revision materials – check if you were correct and add anything you missed in a different coloured pen.



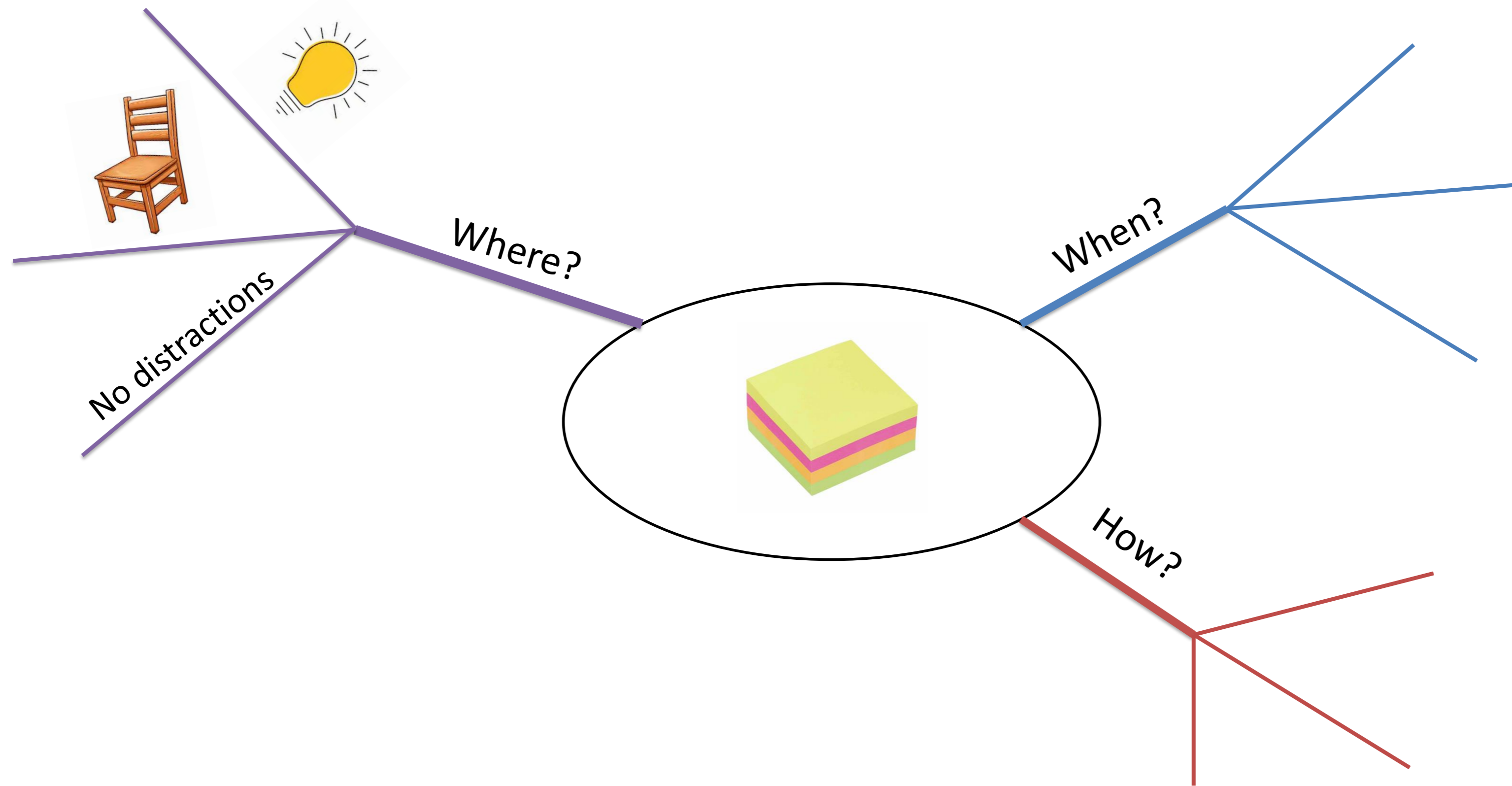
The key to revision success!



Making connections is vital



Effective revision sessions mind-map



Making connections is vital

Tips for using a mind-map effectively:

- Spend time creating it
- Make clear links between ideas
- When revising, actively recall the information for each branch; what does each word mean and how does it link to the other words around it?
- Map from memory – recreate it from scratch and then use either your original mind-map or your notes to fill in the blanks in a different colour



Making connections is vital

Mind maps

Really useful for subjects that require a lot of knowledge about one topic area;
Humanities for example



Making connections is vital

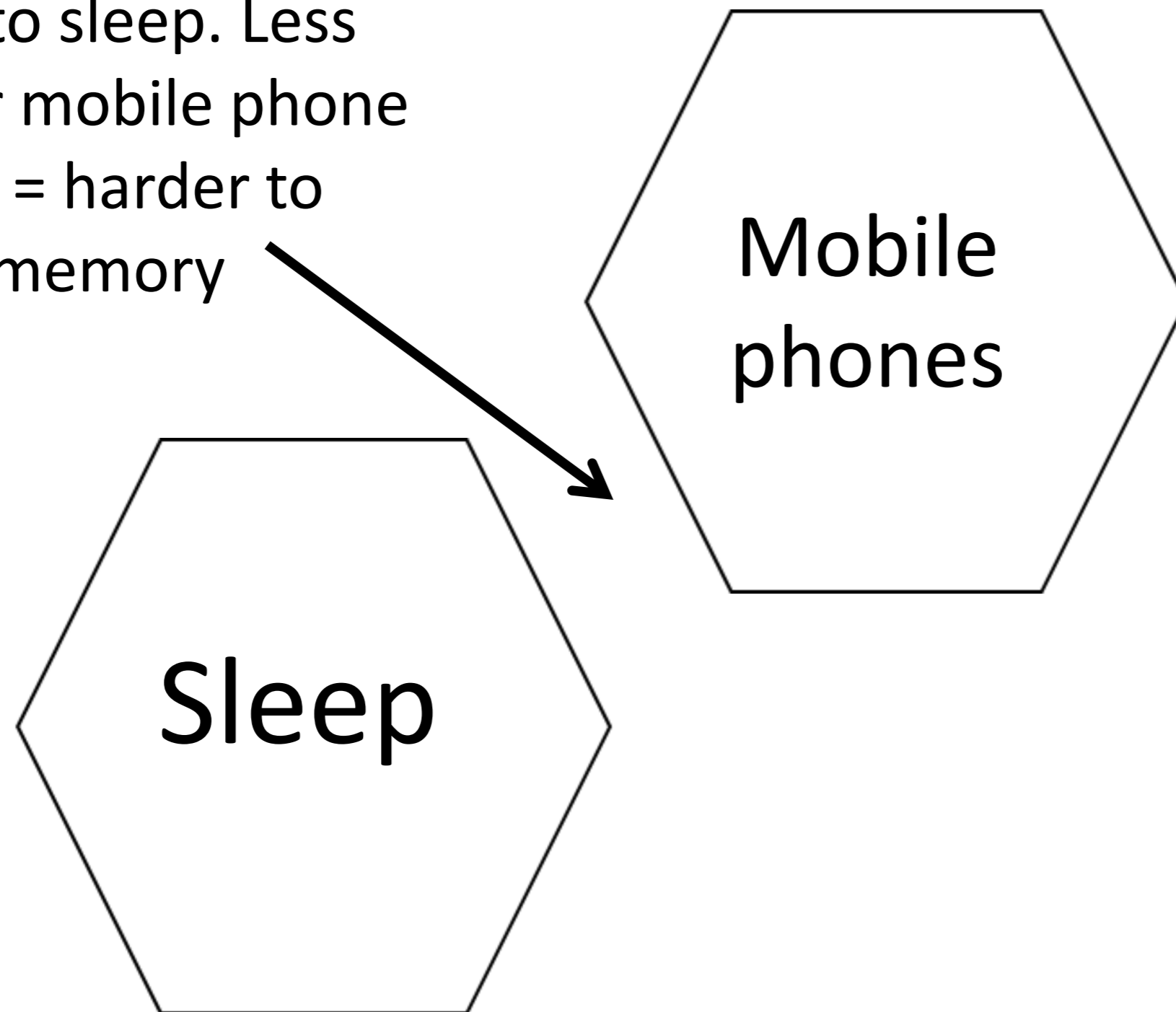
Hexagons

- Links ideas together; active revision to form connections in your memory between pieces of information.
- Every two sides that meet must have a clear link and every time you revise in this way, you need to remember the links and why you have made them.
- You can either just write key words in the hexagons or you can annotate the links between them with reasons that they are linked.



Making connections is vital

Mobile phone screens prior to bed affect sleep – less melatonin = harder to get to sleep. Less than 5 hours after mobile phone use. Less sleep = harder to commit to memory



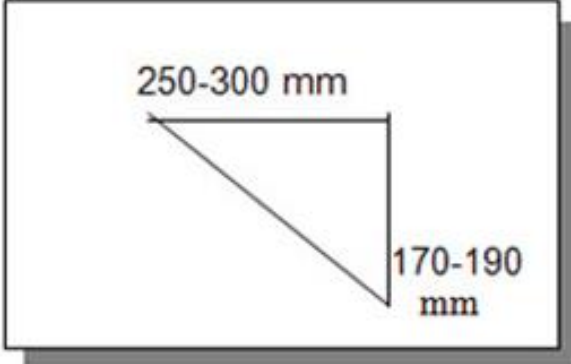
This is a particularly useful technique for subjects such as English Literature, which requires you to make links within a text.

What about subjects that require you to learn a range of terminology and definitions such as Science?

Flash cards

Effective flashcards:

- ✓ Make the flashcards yourself – the process is as important as the finished product
- ✓ Each card should only have 1 question and 1 answer (even if that answer has several parts)
- ✓ Use images as well as words to help you remember
- ✓ Your deck of flashcards should *not* just be “dictionary definitions.” It needs to be your own interpretation.

| Front | Back |
|--|--|
| Common rise and run of a concrete stair? |  |
| Carbohydrates? | <ul style="list-style-type: none">• Classified as plants• Starches, sugars, & fiber• Simple (sugar) or complex (starches, fiber)• Supply energy |
| Canine Parvo Virus? | <ul style="list-style-type: none">• Water hose diarrhea with mucus and blood• Sunken eyes• Anorexia• Rapid, weak pulse• Destroyed intestinal villi |
| What is an expression? | Combining two or more values using some operation: add, multiply, greater than etc. Value } Value } +, x, >... Value } |



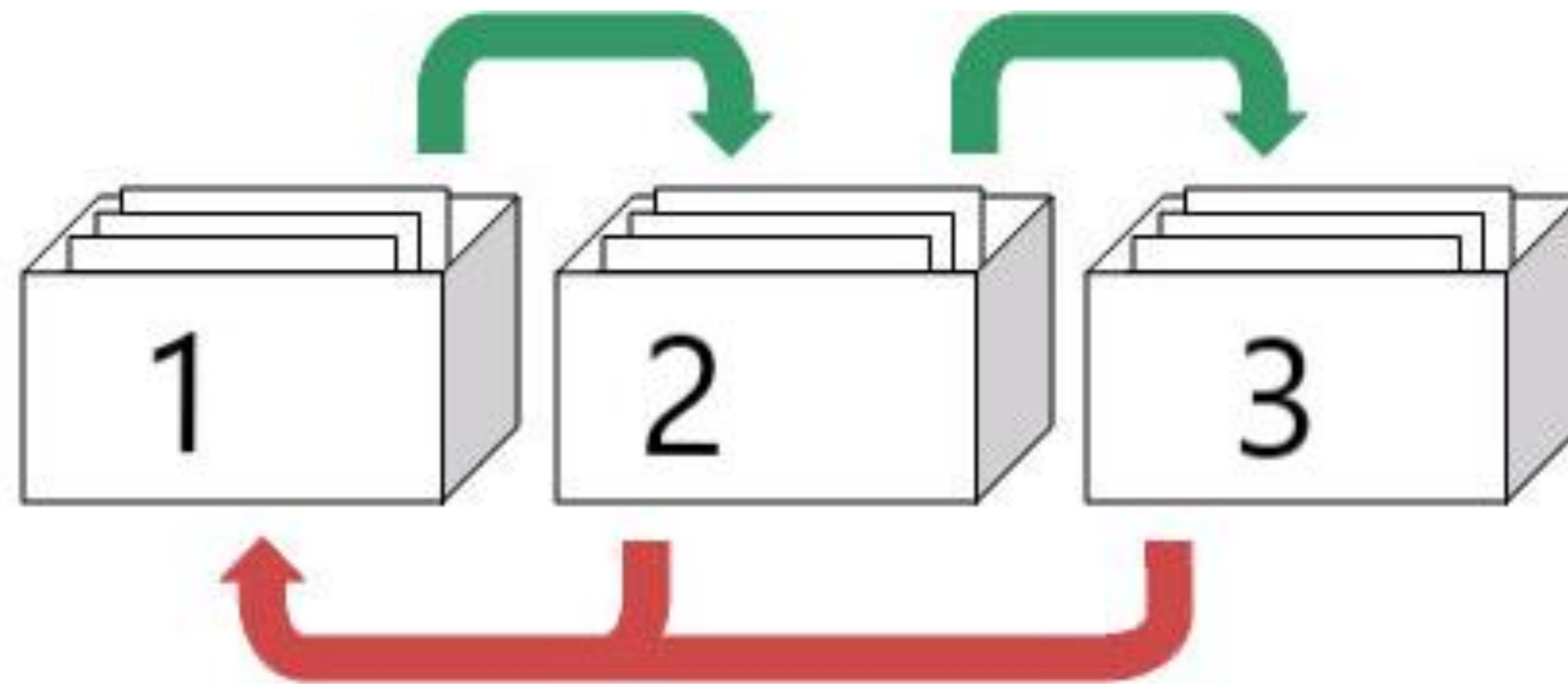
Tips for using your flashcards effectively:

- ✓ Set a goal to review each flashcard in your pack 3 times per day.
- ✓ The best way to use flashcards is as a quick impromptu study session. 15 minutes at the bus stop and 30 minutes between classes is better than hours and hours of continuous study at the end of the day
- ✓ You should think about each card. Use the word in a sentence, remember some places you've heard it, say it aloud to yourself, etc. Engage with the content, don't just say "yes, I know it" or "no, I don't."
- ✓ Set aside the cards you know **ONLY** after you can answer them correctly after a night of sleep.
- ✓ You could also put the cards into categories



The Leitner method

<https://www.youtube.com/watch?v=6S2LJIAydyg>



Daily

Weekly

Monthly



Graphic organisers

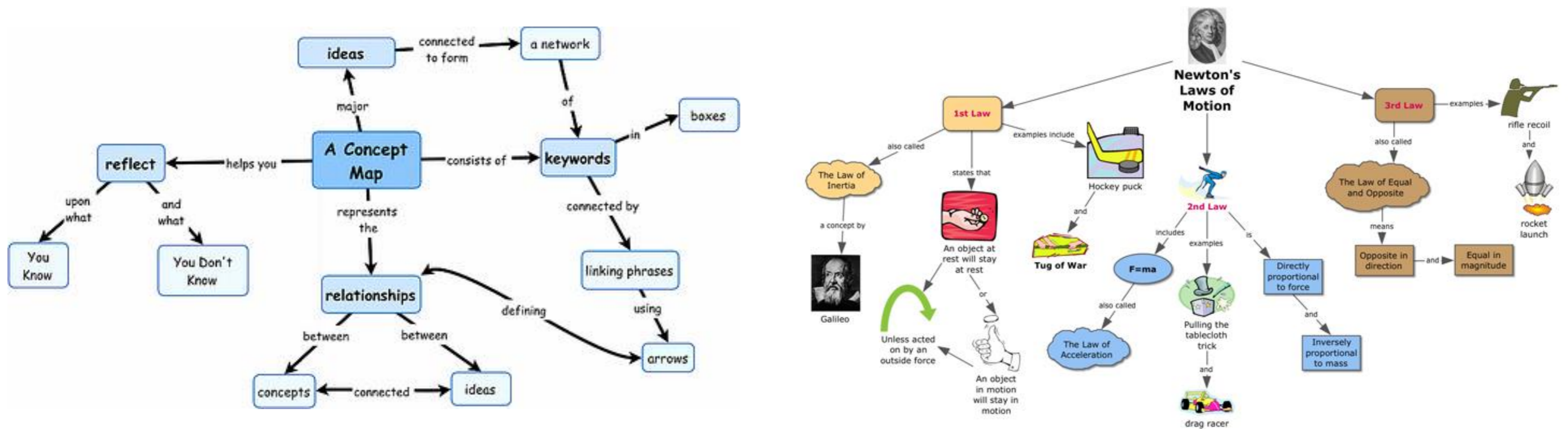
A graphic organiser is a good way to organise information in a way which will help you remember.

They are good for planning, categorising, summarising and a host of other ways to process information.



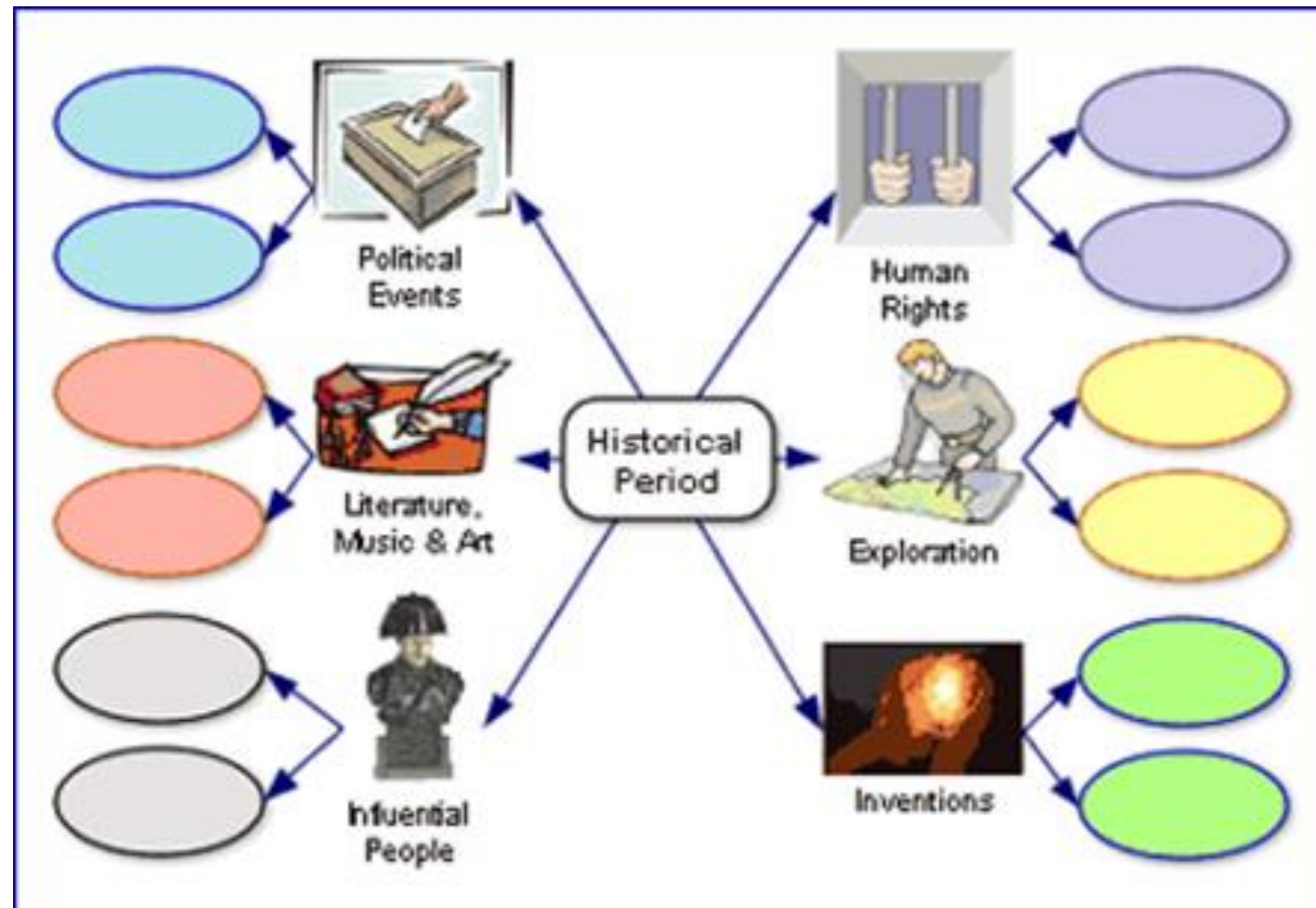
Concept maps

Concept maps graphically illustrate relationships between two or more concepts and are linked by words that describe their relationship.



Webs

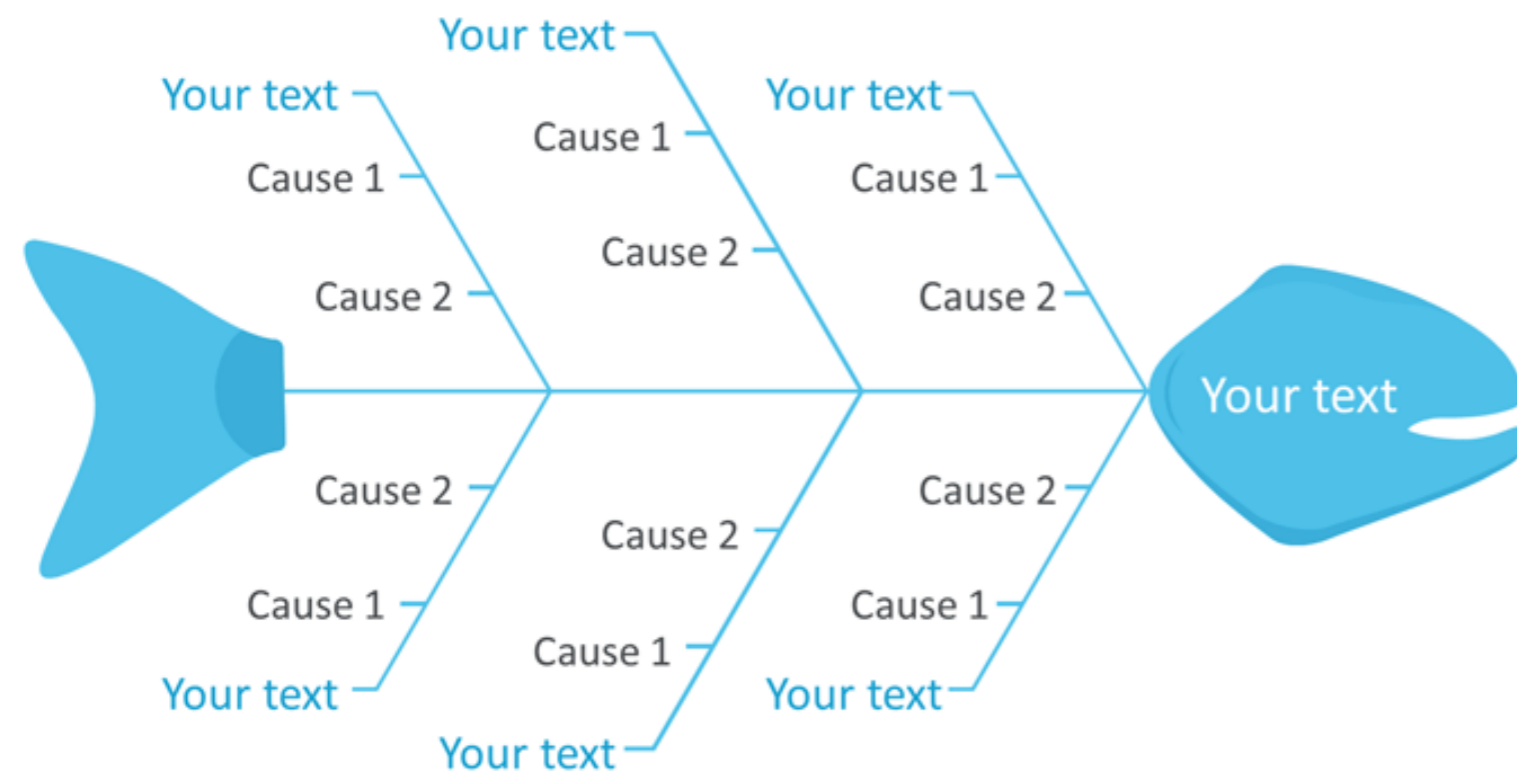
Webs show how different categories of information relate to one another



Fishbone diagrams

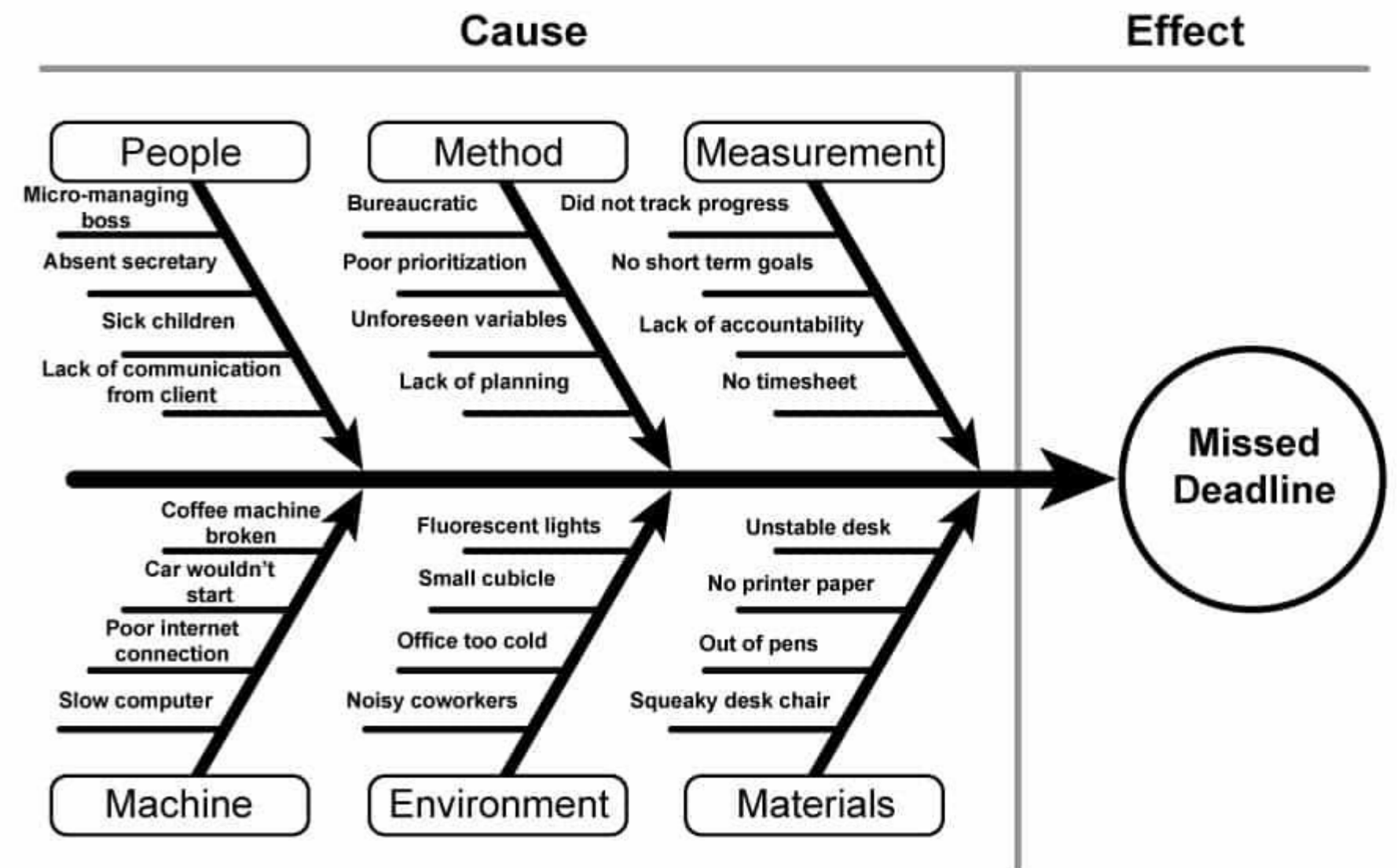
These are superb for mapping solutions to problems or procedures which lead to an end result. They also work brilliantly as planning tools for extended writing.

Fishbone Diagram

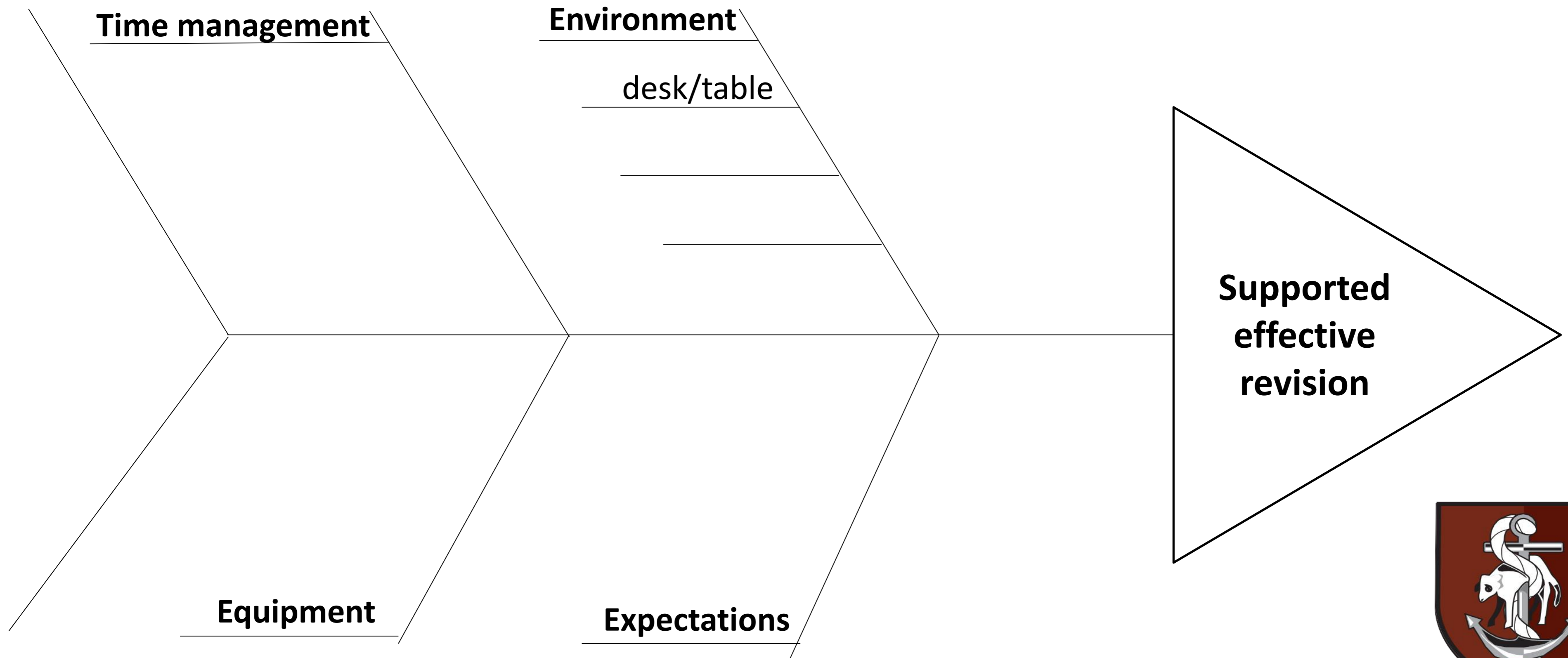


© Templateswise.com

Fishbone Diagram Example



Parental support Fishbone



Other forms of Graphic Organiser

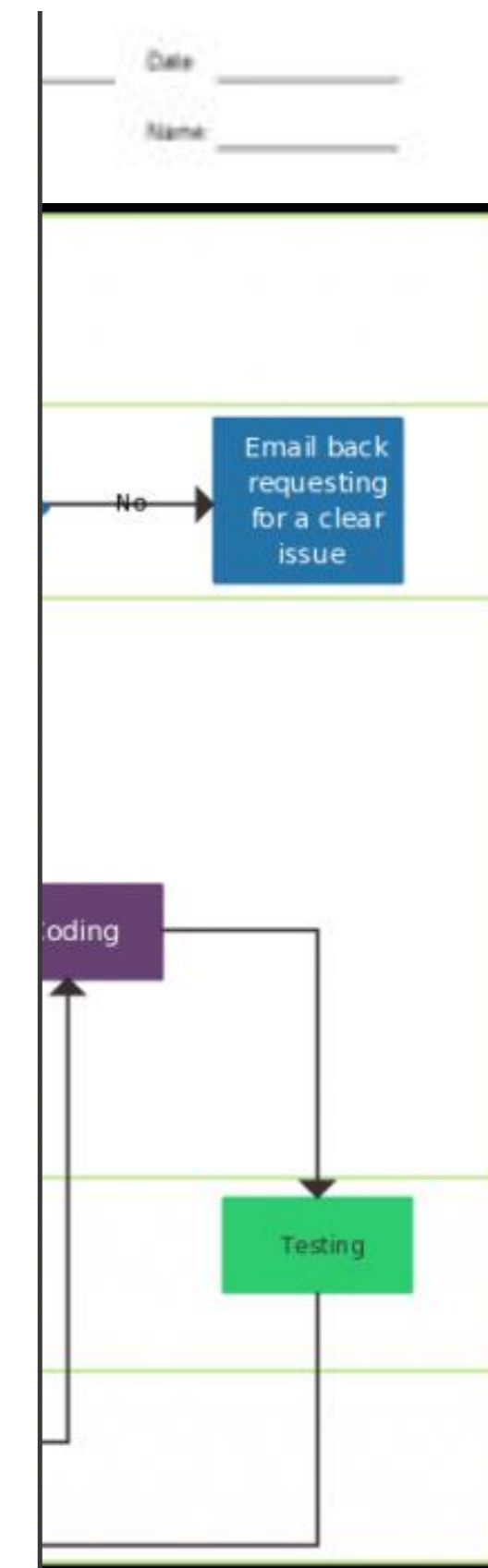
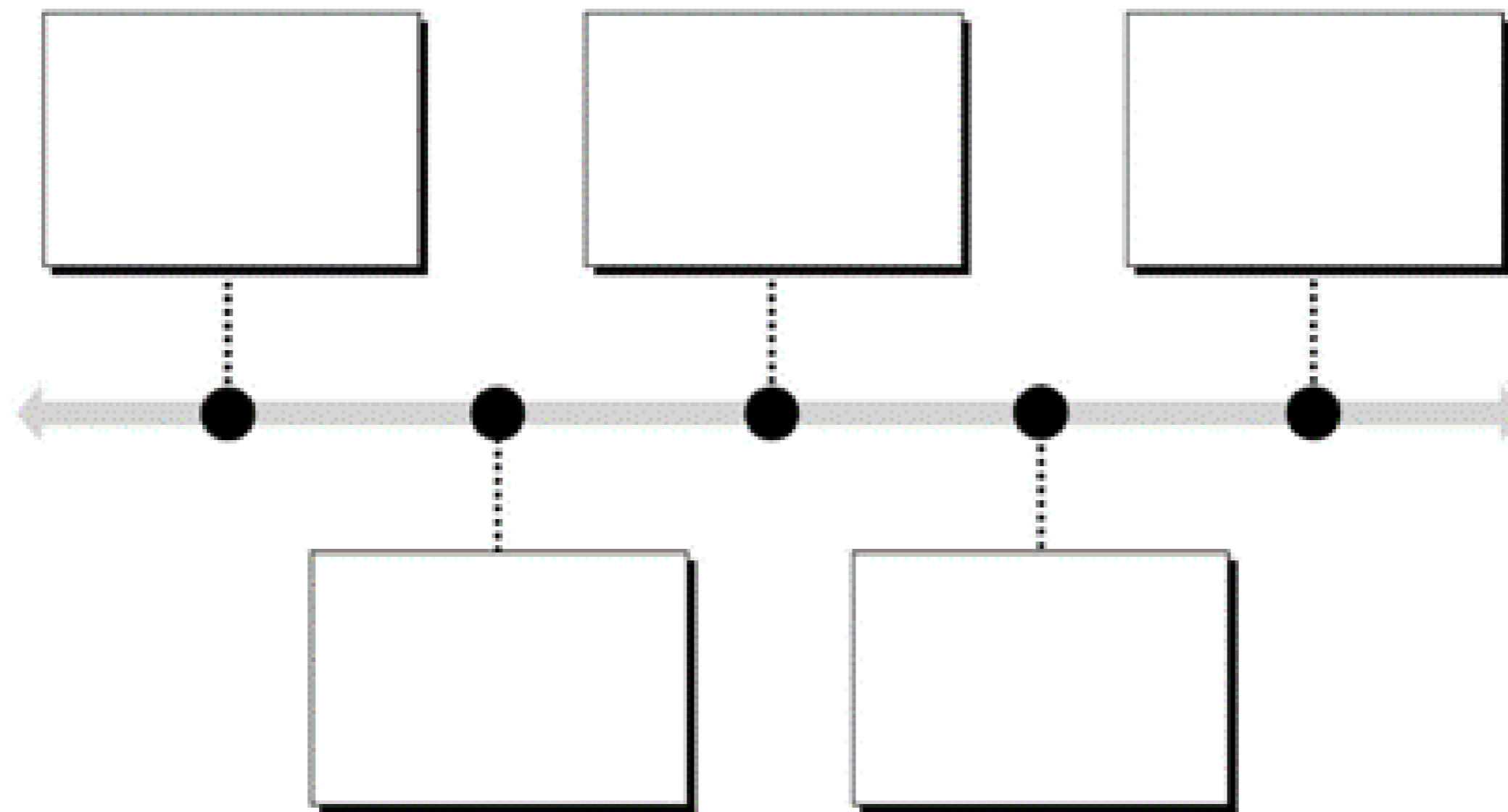
WHAT YOU NEED TO I



Sequencing Timeline

Write the person's name on the line. Then write important events in the order in which they happened.

Important Events in _____'s Life



Using technology



- Some excellent websites/apps where you can create your own revision resources
- Some apps are effective at giving quick quizzes that self-mark, giving instant feedback on areas you have learned or still need to work on
- There are apps that can track your screen time which could help to keep you focused
- You can quickly fill gaps in your knowledge as you find them



- Technology is often a distraction
- You may be tempted to use prepared revision materials that will not be as effective
- There is a lot of material on line – it is difficult to assess which are useful and which aren't useful
- Your teachers will have given you everything that you need; use this rather than unreliable data from the internet



Tips from other students

Stay in a routine, even when on study leave, so that you don't feel tired in a morning exam as you are used to getting up

Start early – this will stop you getting stressed later on. It will also build confidence as you can see what you already know

Use your study periods effectively – you will regret all the socialising if you have to cram at the end

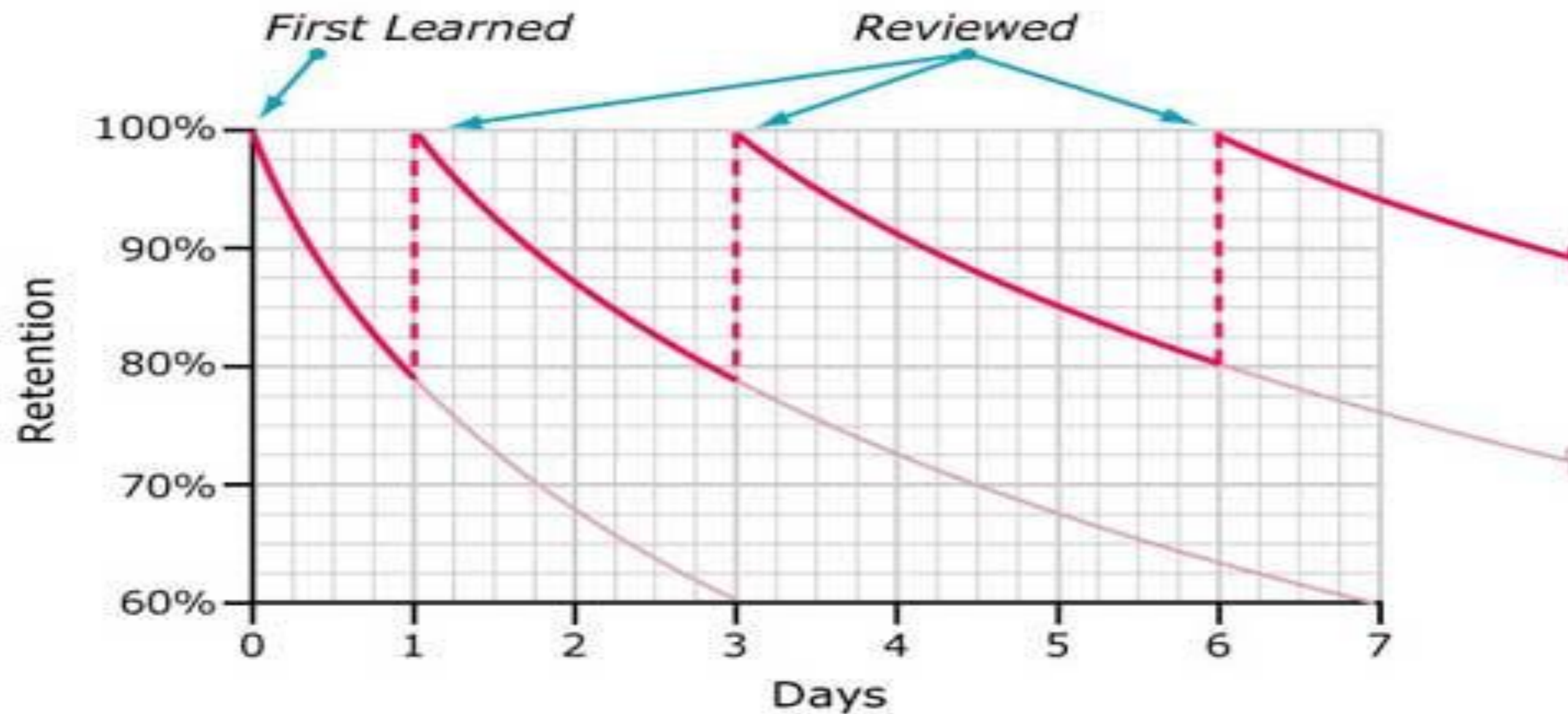


Spaced Learning

“one of the most robust strategies across the entire history of experimental research on learning and memory”

- Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major October 2014

Typical Forgetting Curve for Newly Learned Information



Key tips for creating an effective revision timetable:

- Keep it simple and be realistic
- Add boxes for exactly what you want to achieve in each session
- Prioritise and be clever (Maths for Physics later)
- Fit in time to continually revise what you have learned; don't schedule everything just once
- Approach subjects in different ways
- Consider where you are going to revise
- Print it off, ideally in a bigger size so that you can add notes to it
- Be flexible; it should be a working document



| | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|-------------------------|--|-------------------------------|--------------------------------|------------------------------------|--------------------------------------|--|--|
| 9-10 | | Period 1 PS Biology Cells | | | | | |
| 10-11 | | | | Period 2 PS Biology Genetics | | Hour on Maths Trigonometry | |
| 11-12 | Period 3 PS Chemistry Thermodynamics | | | | Period 3 PS Chemistry Halogens | | 20 mins test on Cells 20 mins test on Vectors |
| LUNCH BREAK | | | | | | | |
| 1-2 | | | | | | 20 mins test on Genetics | |
| 2-3 | | | Period 4 PS – Maths Vectors | | | | Hour on Thermodynamics – focus on what I didn't know on Thurs) |
| 3-4 | House football | | | | 20 mins test on Vectors | | |
| 4-5 | | | Out with friends | 20 mins test on Differentiation | | 20 mins test on Differentiation (flashcards that I didn't know on Thurs) | 20 mins test on Trigonometry and 20 mins test on Halogens |
| 5-6 | Hour on Maths Differentiation | Hour on Chemistry Polymers | | | | | |
| TEA/DINNER BREAK | | | | | | | |
| 7-8 | | Meal out with family | | 20 mins test on Thermodynamics | | | |



Key points

The earlier you start your revision, the better

Use spaced learning techniques to ensure that the information goes into your long term memory

Make sure you build in time to retest yourself and also to revisit material multiple times

Create effective resources now that you can use again



Finally...a summary of how you can support your child with their revision

- Plan with them and share their revision timetable for home commitments
- Provide a quiet space in which to work
- Stationery and revision guides – check the spec!
- Test them - flashcards, revision questions
- Access to exam board materials
- Eating and sleeping well
- Rest breaks and other activities for stress management



Thank you for your time and if you have any questions, please just ask.

If you find that you have questions after this evening, please contact

me via the email below:

mbarnard@heckgrammar.co.uk



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GRAMMAR SIXTH FORM