Aims of the session

 To gain an understanding of memory and how it works

 To gain a range of strategies for revision and know how to use them effectively

 To have some practical tools to take away and use to support revision at home



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



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



Hexagons

Links ideas together; active revision to form connections in your

memory between pieces of information.

Eating right will mean that you have more energy for exercise which will then support revision even more by triggering chemicals

Exercise

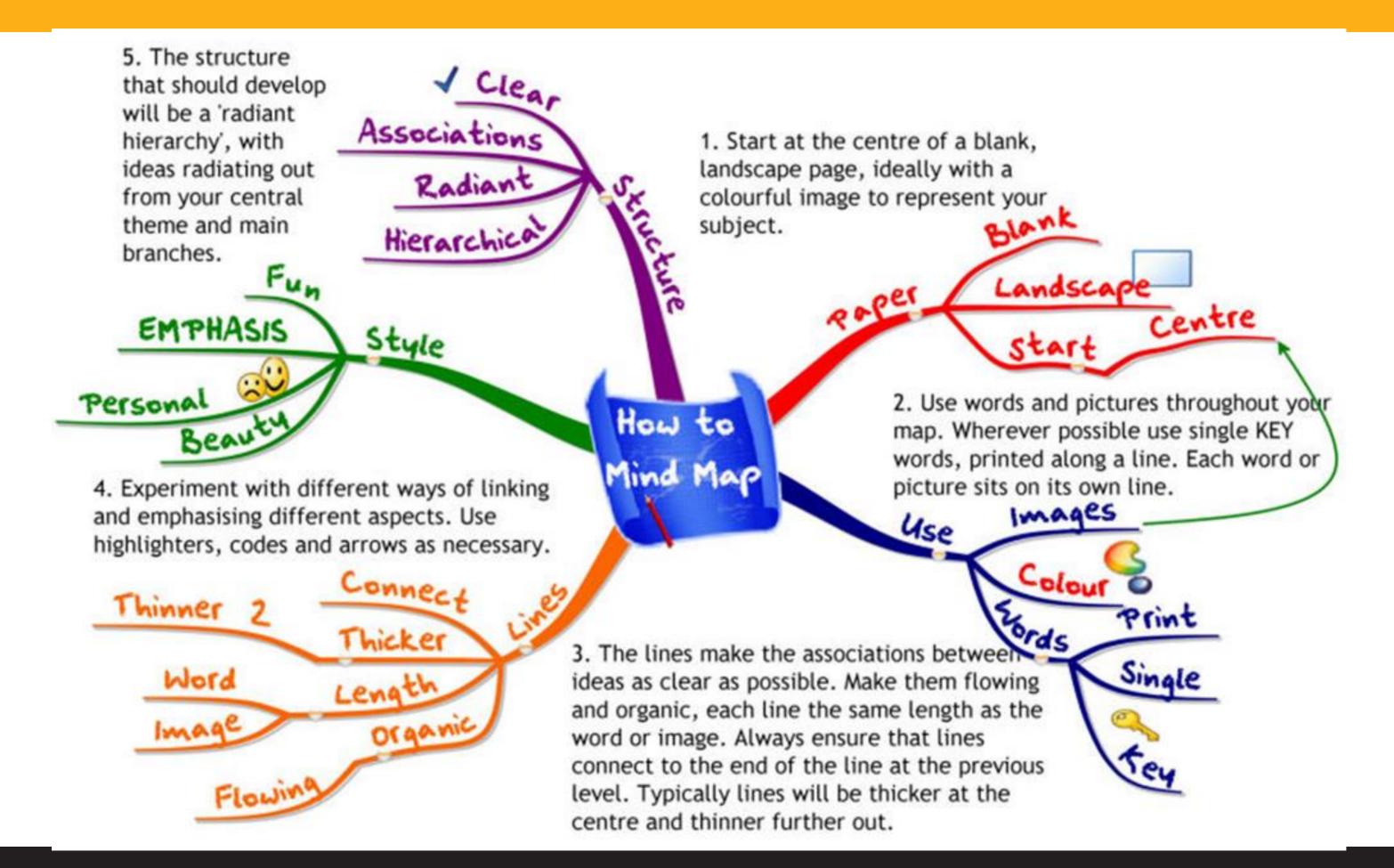
Tight

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

Mind maps

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







Tips for using a mind-map effectively:

- Spend time creating it
- Make clear links between ideas
- Look at your mind-map once a week
- 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 do the same one and continue to fill in the gaps



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

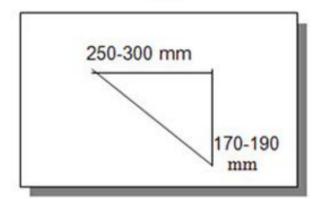
Common rise and run of a concrete stair?

Carbohydrates?

Canine Parvo Virus?

What is an expression?

Back



- Classified as plants
- · Starches, sugars, & fiber
- Simple (sugar) or complex (starches, fiber)
- Supply energy
- Water hose diarrhea with mucus and blood
- Sunken eyes
- Anorexia
- Rapid, weak pulse
- Destroyed intestinal villi

Combining two or more values using some operation: add, multiply, greater than etc.

Value Value +, x, >...

Value 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.

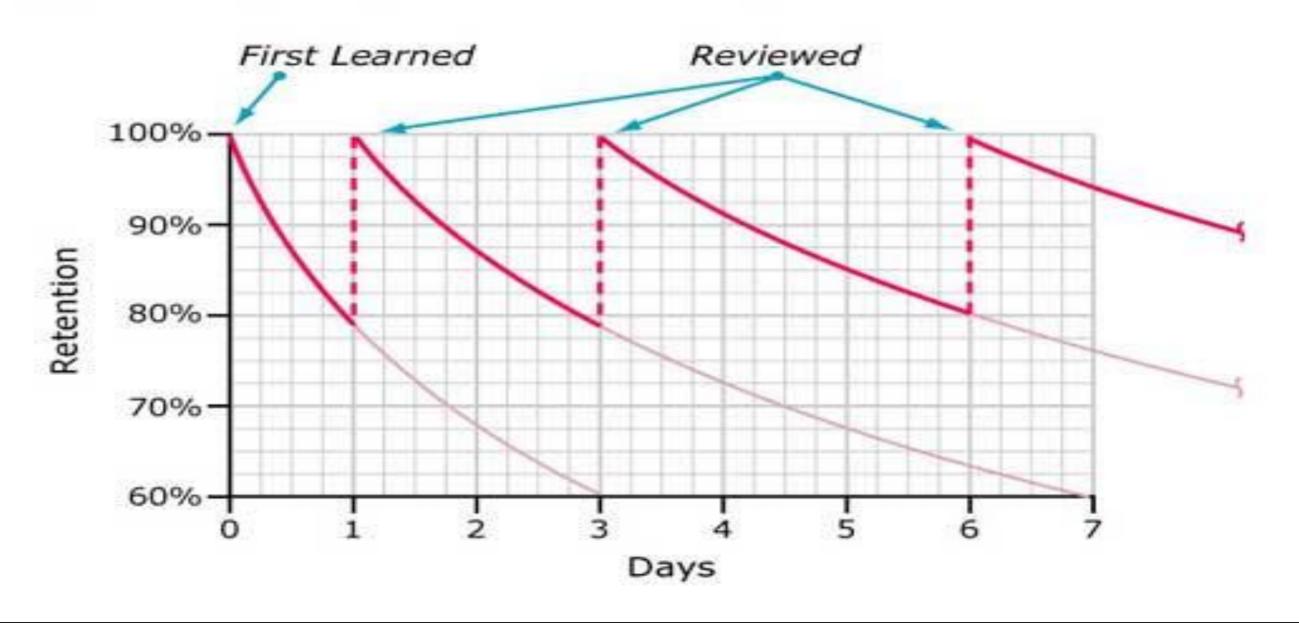


Spaced Learning

"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





Ideas to support revision

Being in the presence of some of the elements from the original memory helps retrieval.

For example: revising the same subject in the same room/space, using the same colour pen, putting post-it notes up



Make it stick – the Science of Successful Learning

Video shared with the students

Work done by cognitive scientists and psychologists over 10 years

Effective Revision Strategies

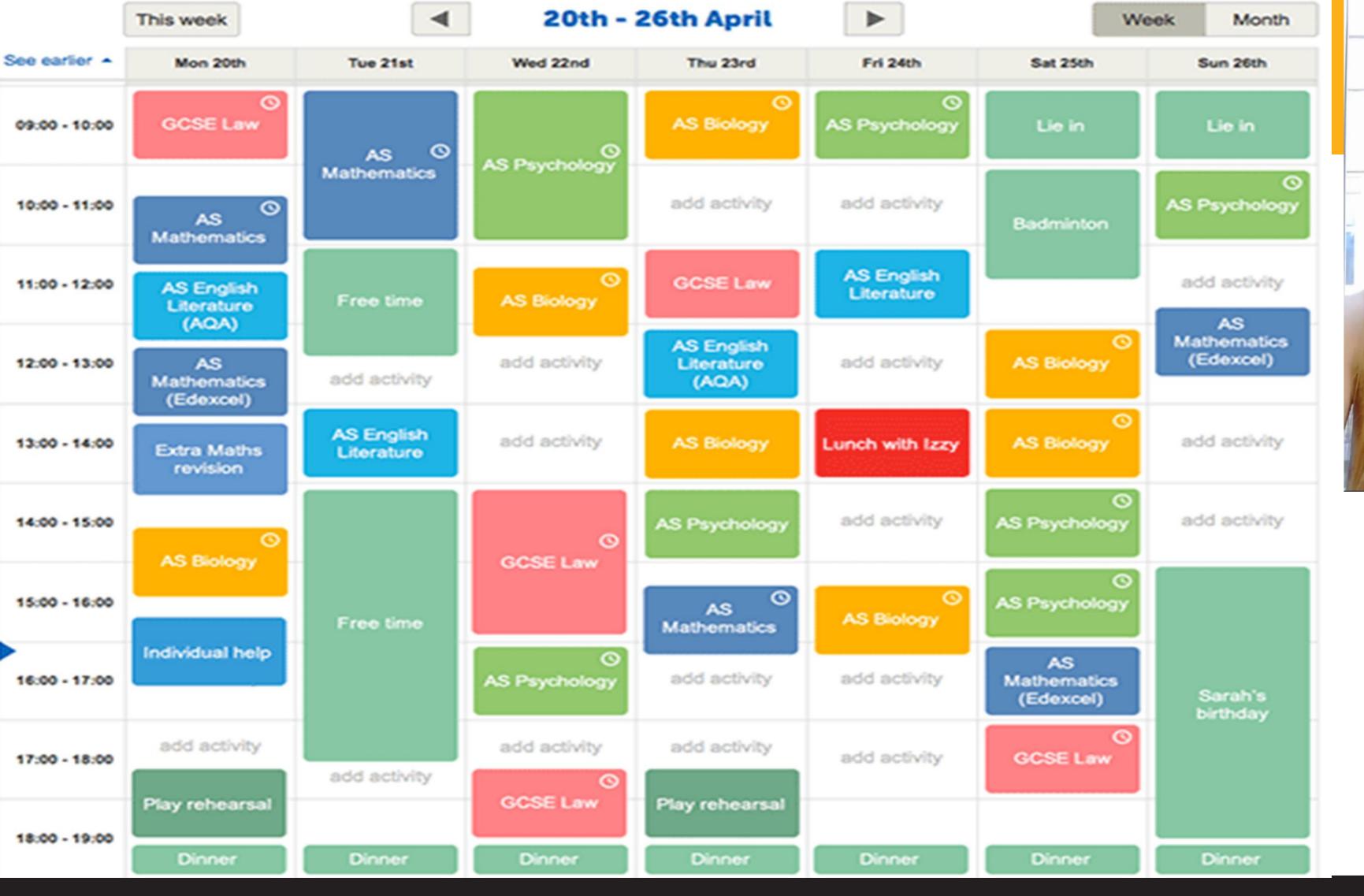




Key tips for creating an effective revision timetable:

- Start with the specification use the exam board websites
- 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 build in testing time too
- Approach subjects in different ways
- Use colour coding
- Consider where you are going to revise; can it be in different places for different subjects?
- Print it off, ideally in a bigger size so that you can add notes to it
- Be flexible; it should be a working document







Abbie's advice



Supporting your child in managing their time

Start to plan two different revision timetables, without blocking in subjects, but considering other commitments and family time/relaxation time.

Plan one for the summer and one for the start of the next academic year.



Key points

The earlier revision is started, the better. The summer holidays are the ideal time to get a head start.

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

Consider changing simple things like using different coloured pens or different spaces to work

Create effective resources now that can be used again



Revision tips from Caitlin, a year 12 student





Finally...so what can do you to help your child?

- Plan with them and share their revision timetable for home commitments; make it a working document
- Ask them about the revision strategies they use and why;
 check how effective and varied they are
- Provide a quiet space in which to work
- Stationery and revision guides check the spec!
- Access to exam board materials
- Test them flashcards, revision questions
- Ask them to explain tricky concepts to you
- Eating and sleeping well
- Rest breaks and other activities for stress management



Resources

Please fill out the evaluation and leave it on the table.

Please take a revision starter pack and a booklet on your way out which has some materials to help your child to get started with their revision.

https://www.youtube.com/watch?v=CPxSzxylRCI (How to Study Effectively for School or College - Top 6 Science-Based Study Skills)

Exam boards; students know which ones for which subject – AQA, EdExcel and OCR



Remembering complex materials/requirements

Mnemonics

What is a mnemonic?

- a system such as a pattern of letters, ideas, or associations which assists in remembering something.



Two different types of mnemonic

Remember, each time you recall your mnemonic, make sure that you recall what everything stands for and how that relates to your studies; it is not enough to just know the acronym or rhyme.

Rhyming - for example:

In fourteen hundred and ninety-two Columbus sailed the Ocean Blue.

OR

Thirty days hath September,
April, June, and November;
All the rest have thirty-one,
Save February, with twenty-eight days clear,
And twenty-nine each leap year.

Particularly useful for remembering how to answer longer mark answers

