RAWLINS
A CHURCH OF ENGLAND ACADEMY
Act Wisely And Make The Most Of Every Opportunity

Revision Guidance

Contents

- Essential information
- How memory works
- Effective revision techniques
- Motivation
- Managing exam stress

Essential Information

GCSEs Through Time

1951 - O Level replaces CSE

1988 - GCSEs replace O Level

2016 - Reformed GCSEs (less coursework)

2020 - GCSE exams replaced by CAGs (Centre Assessed Grades)

2021 - Government plan to continue with exams (contingency plans to be confirmed)

Old grades	New grades	
A*	9	
	8	
A	7	
B	6	
	5	STRONG PASS
C	4	STANDARD PASS
D	3	
E	2	
F		
G	1	PASS
U	U	FAIL

Year 11 Exam Season

- The GCSE exam season for Year 11 pupils usually runs for approximately 3 weeks before May half term and 3 weeks afterwards.

Normal Arrangement for Exams	1	2	3	May Half term	4	5	6

- Exams are scheduled by the Exam Boards for everyone in the country.
- They are set as either AM* or PM** exams.

*AM exams start at 9:00am. **Pupils need to be at school at 8:30am** to **go to the toilet**, organise their **equipment**, fill up their **clear drinks bottle**, hear some last minute top tips and drop their coats, bags, mobile phones and watches off, before heading into the exam room at 8:50am.

PM exams start at 1:00pm. **Pupils need to be getting ready in their lunch break from 12:30pm, then dropping off their things, before heading into the exam room at 12:50pm.

Exam Preparation

- You will have a large number of exams scheduled in the 6 week period. The exact number will depend on the subjects you have chosen, but there are many situations where pupils will have two (or sometimes three) exams on the same day

- This means that you won't have the opportunity to spend a few days preparing for each exam (cramming into short term memory). Revision therefore needs to be spread out and sustained over a long period of time gradually building up the information in your long term memory.

- In the final few weeks before the exams it is best to create a revision timetable, to map out the revision tasks for each subject (e.g. Biology 5x Past paper Exam Qs on Unit B7) and time for rest and relaxation activities (e.g. sports, walk dog, meet up with friends).

How Memory Works

COGNITIVE LOAD THEORY: KEY TERMS

by @inner_drive | www.innerdrive.co.uk

Cognitive Load

A person can only process so much information at once. Too much information can lead to cognitive overload, which hinders how much can be transferred from working memory to long-term memory.

Working Memory

This is where we hold and process new information. It has a small capacity. If information is not transferred to long-term memory from here, it will be forgotten.

Long-Term Memory

This is where we store the things we have learnt. It has a huge capacity, meaning we can remember things from a long time ago. Connecting information from our working memory to our long-term memory is how we learn new things.

The redundancy effect

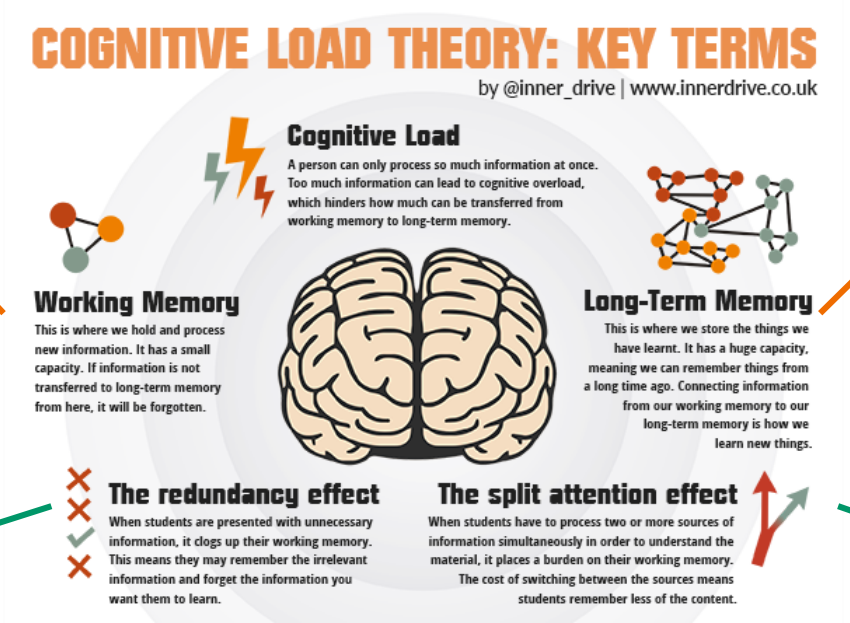
When students are presented with unnecessary information, it clogs up their working memory. This means they may remember the irrelevant information and forget the information you want them to learn.

The split attention effect

When students have to process two or more sources of information simultaneously in order to understand the material, it places a burden on their working memory. The cost of switching between the sources means students remember less of the content.

The limits to working memory (also known as short term memory) mean that you are not able to store enough (cram) in order to complete an exam.

This is why your teachers ask for a quiet, focused environment; we want people to focus on the important information, no distractions.



For exam success, material needs to be in long term memory. Retrieval practice helps to transfer material to your long term memory

This is why it is important to focus exclusively on study - not a mobile phone, or TV show, or music

How does memory work?

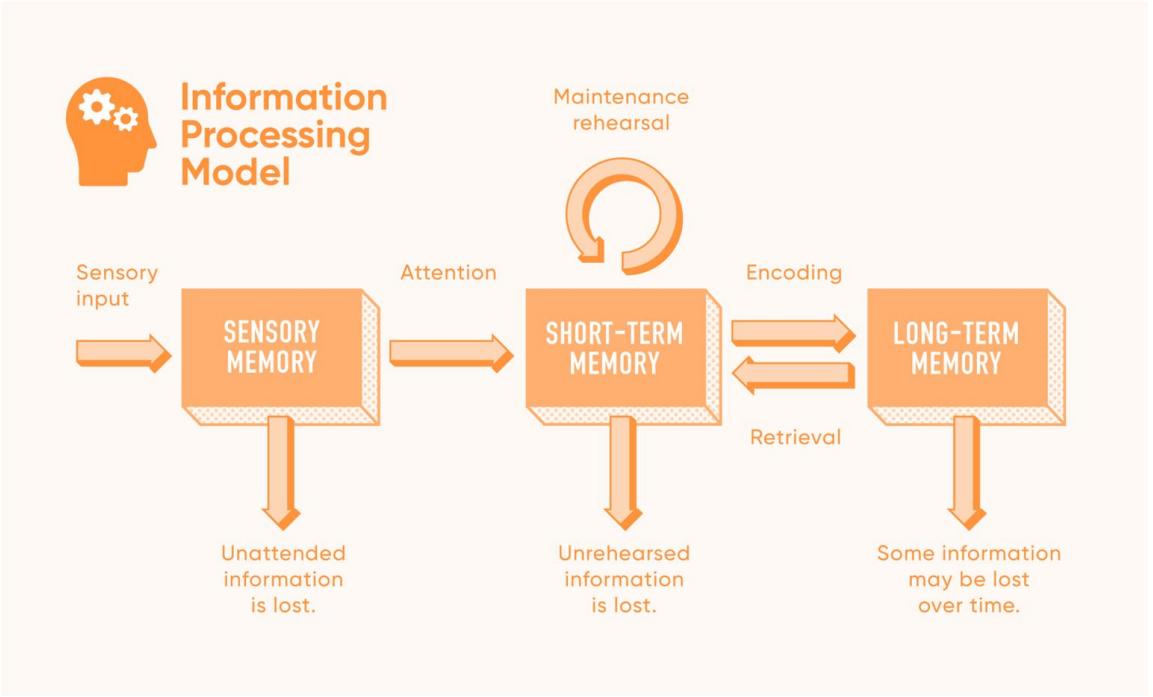
Sensory input = seeing and hearing new information (e.g. teacher explaining)

Attention = focusing attention on the teacher explanation

Rehearsal = practising the new information (e.g. answering questions)

Encoding = storing the image as image, sound or semantic (meaning)

Retrieval = using flash cards or completing past paper questions to recall information from memory



Short Term/Working Memory

You may have tried this in your PSHCE lessons...

Try your best to remember these words.

Read these words:

- Nine
- Swap
- Ring
- Bird
- Clock
- Army
- Bank
- Fire
- Apple
- Table

Cover the words over.

1. What was the 4th word?

2. What was the 8th word?

3. - Now, keeping the words covered, write down as many words as you can remember

Testing yourself is a much better way of remembering things, than just reading the words

Short Term/Working Memory

How did you get to the fourth word? What about the eighth word?

Short term memory is stored and retrieved sequentially - when trying to find the fourth word, the brain begins at the first word and goes through them to find the fourth word.

Short term memory also has a capacity limit of around 7 items. How many words could you remember from the list?

Try this: https://www.youtube.com/watch?v=l6TrsYI1Grk (pause after each set of numbers)

Apply this to your situation:
You will receive a provisional exam timetable.
Looking at the provisional exam timetable -

- How many exams do you have in close proximity?
- Are there any days you will have two exams on one day?

What challenges might this place on your memory?

What problems would you have if you only relied on your short term memory?

So what's the solution?

Short term memory is limited (can you remember the fifth number sequence...?)

It can hold between 5 and 9 items at any one time, and if not actively rehearsed, it will lose the memories within seconds.

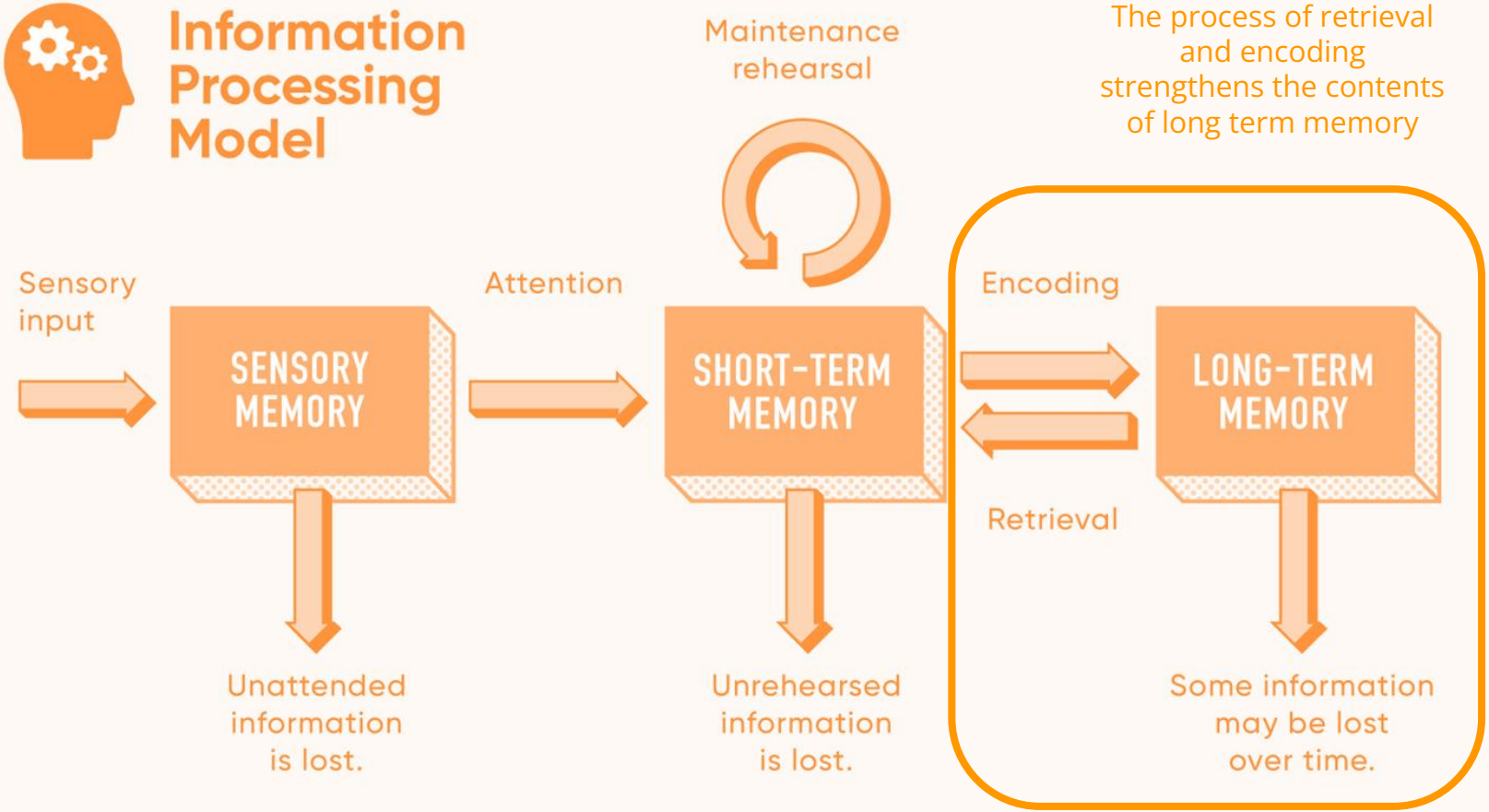
This is why, when we remember something longer (e.g. a phone number), we break it into chunks (e.g. 07675 819 454) - three chunks are easier than eleven numbers.

The route to success in your GCSE exams is to transfer the information from short term to long term memory.

Long term memory is unlimited; there is no limit to the volume of information it can store, however to keep memories available and accessible, they need to be regularly recalled.

This is why you can easily remember the lyrics to a song you haven't heard for years (it was regularly recalled when you first heard it).

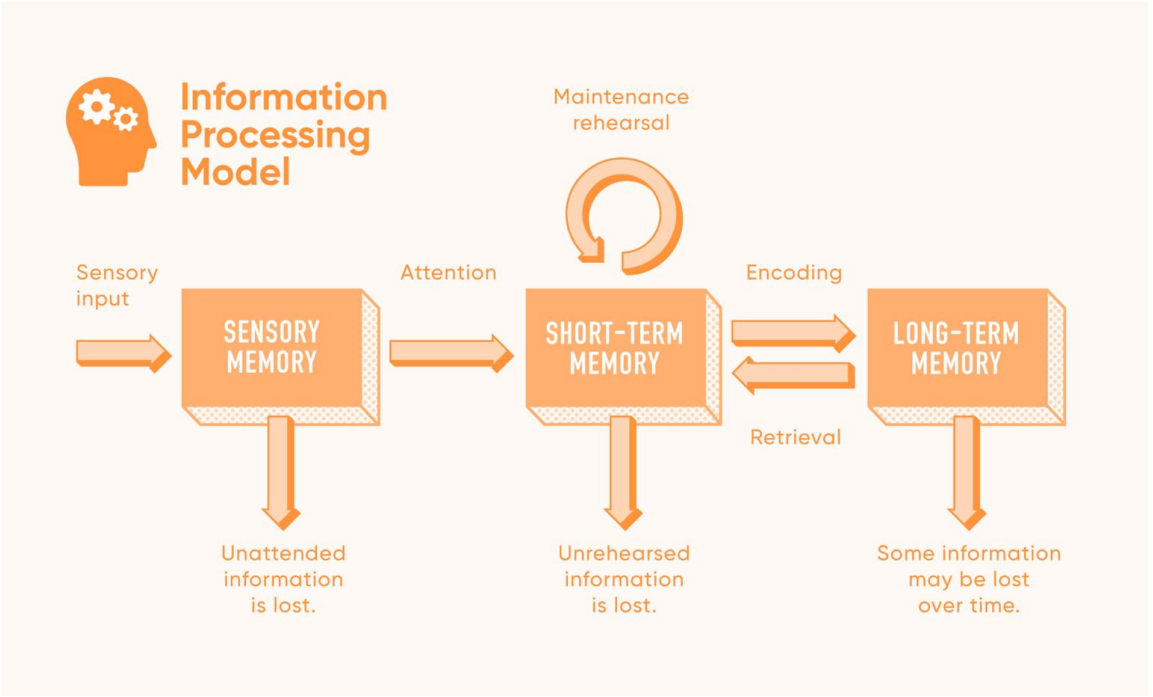
Information Processing Model



So...what does work?

To be successful in your GCSEs, you need to:

1. Focus your attention on getting the information from your teacher
2. Practise (rehearse) with the new information in class
3. 'Revise' at home using retrieval practice to retrieve and encode the information into long term memory



Effective Revision

The Research - what doesn't work well?

Mnemonics

Use of key terms/ acronyms to remember concepts

Highlighting

The use of highlighters or underlining while reading

Re-reading

Revisiting text that has already been read

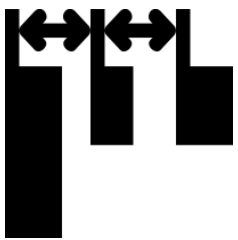
Summarising

Writing summaries of concepts or topics

The Research - what does work well?

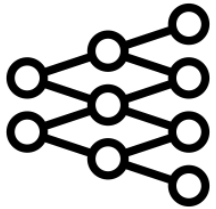
Retrieval practice

Self-testing, using flashcards or practice exam questions



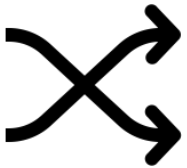
Spaced (distributed) practice

Spreading study out over a period of months



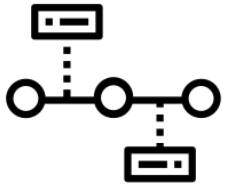
Elaboration

Thinking about the ‘why’ behind your answer - explaining your response



Interleaving

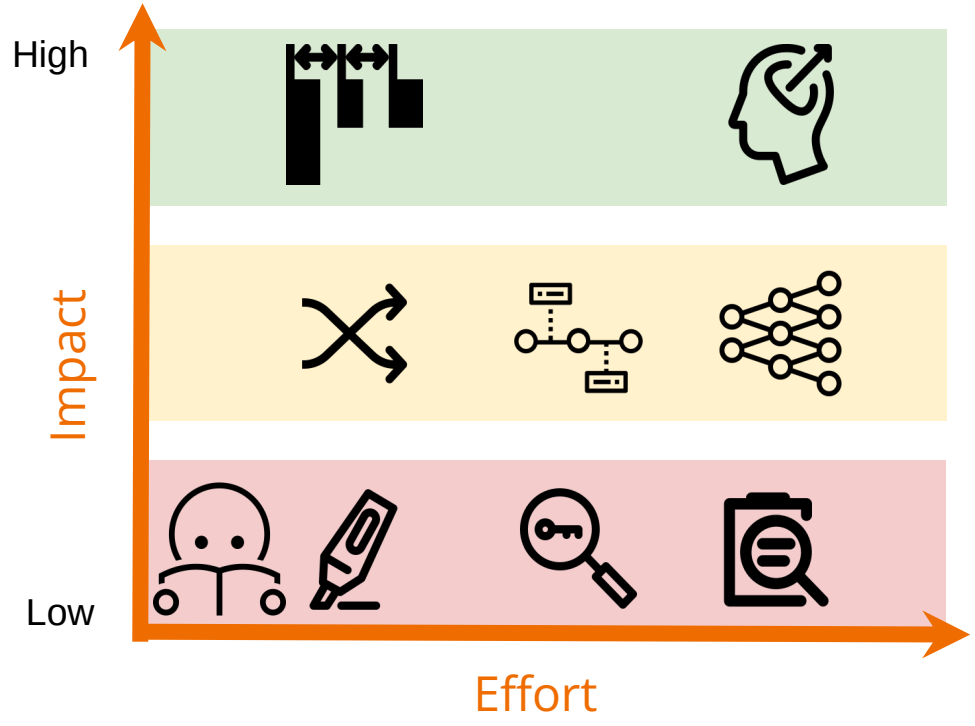
Developing a schedule that mixes different kinds of problems



Dual coding

Using text and images together to aid understanding (e.g. timeline)

The Research



Retrieval Practice

Recreating something you've learned in the past from memory

Thinking hard to retrieve something you learned a while ago

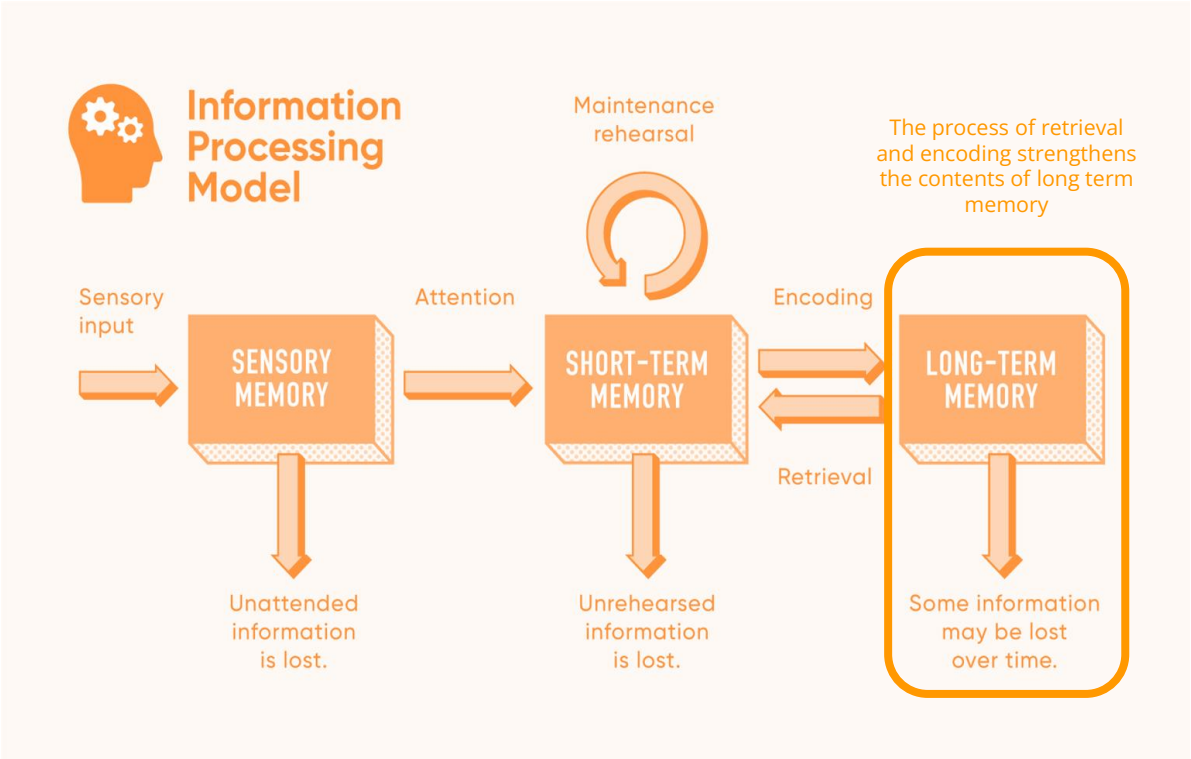
Increases ability to retrieve information in exams

Revision should involve practising output, not input

The act of retrieving information from memory, practising with it and then transferring it back to long term works to **strengthen** the memory.

This is why revision should be about getting information **out** rather than putting more information **in**.

(Unless you haven't learned the information in the first place... in which case you need to complete all three stages of memory coding)



So...what is retrieval practice and how do we do it?

Retrieval Practice (the Testing Effect)

https://www.youtube.com/watch?v=rFIK5gutHKM

Recognition vs Recall

Recognition only requires you to identify the correct answer.

It is a 1 step process - recognise the answer from the list.

Recognition is a fairly simple task - all you have to do is look at something and generate the feeling of familiarity.

In your exam you don't get marks for things being familiar, you get marks for recalling relevant information and using it to answer the question.

Recall requires you to retrieve information from memory - a skill you will need in every exam.

It is a 2 step process - you have to generate a mental list and recognise the correct answer from the list.

While recognition *(highlighting key points, doing a multiple choice quiz etc)* feels more familiar and comfortable, it doesn't do a lot to help with your memory.

Recall *(gap fill, creating mind map, answering practice exam questions)* **is far more effective.**

Retrieval and Recall

Retrieval practice involves three steps:

1. Recalling information from memory
2. Selecting the relevant information
3. Doing something with that information.

Examples include:

- Flash cards
- Past paper questions
- Practice questions from textbooks
- Creating a mind map or graphic organiser (e.g. timeline)
- Interactive platforms e.g. Seneca Learning

http://www.youtube.com/watch?v=C20EvKtdJwQ

Spaced Practice

The opposite of cramming

Spacing out study episodes over time so you learn for the long term, rather than forgetting

Spaced Practice

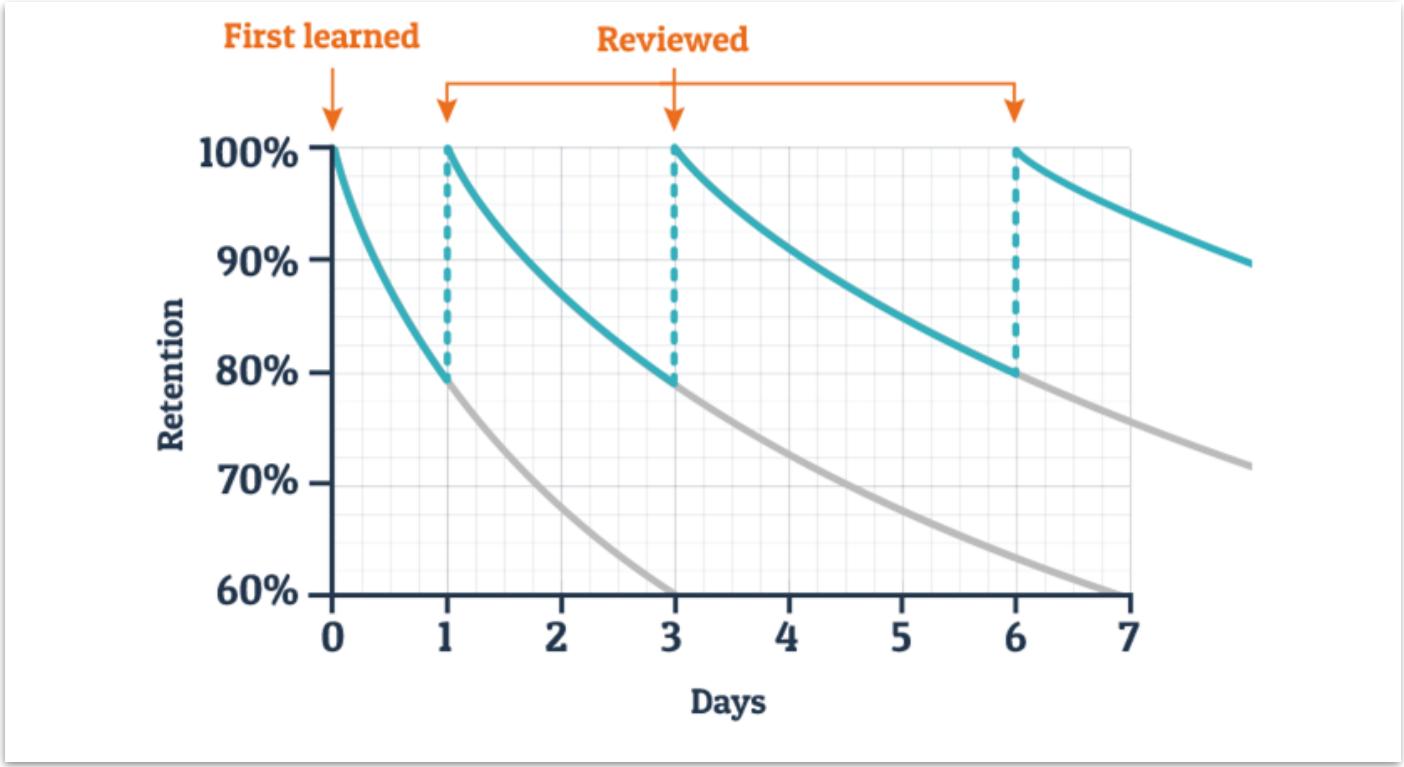
Another solid piece of revision advice is to space your practice out, rather than cramming it all together.

If you organise five hours of study into one hour a day, you'll remember more than if you study for five hours on one day. Yet time and time again we don't do this – and the cause isn't just being disorganised.

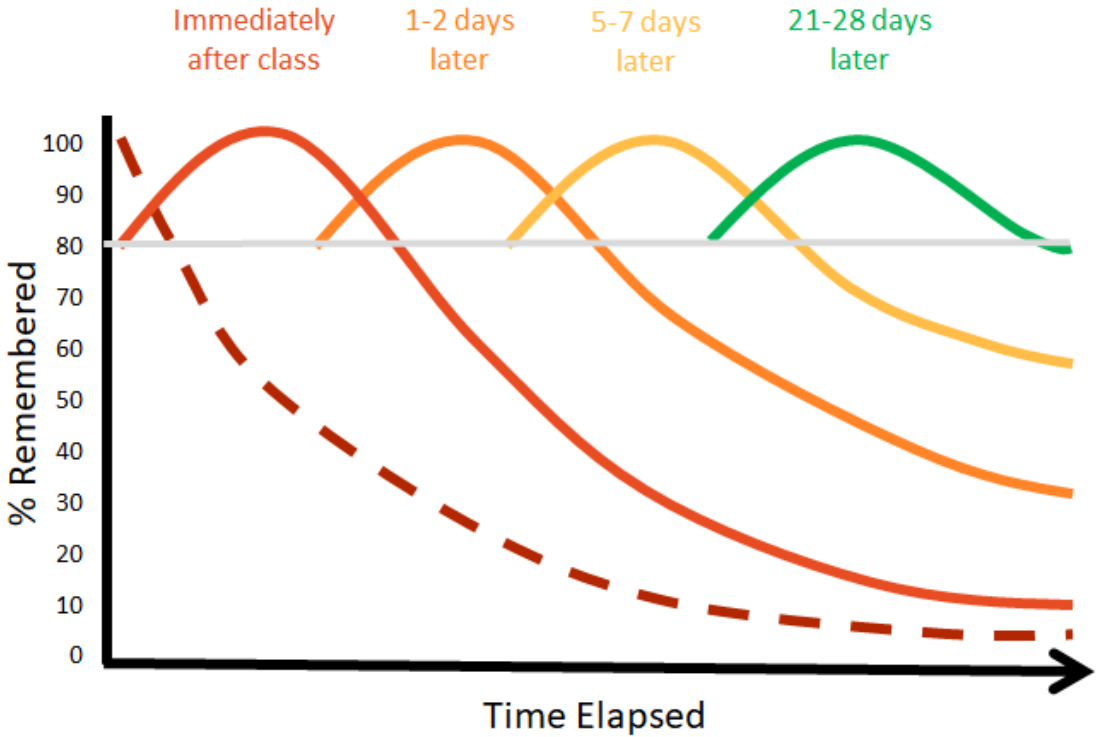
Cramming all your study together feels good. You finish the study session, thinking "I know this". The problem is that although you're currently holding it in short term memory therefore the memories are more fragile and will fade away.

Spacing your practice out doesn't feel as satisfying, but it results in memories that are more likely to be useful when exam day comes around.

Ebbinghaus' Forgetting Curve



Beating the Forgetting Curve



The original forgetting curve is shown in the dotted line - look how much less is lost after each recall session.

Each ‘recall’ session (immediately after class; 1-2 days, 5-7 days, 21-28 days) could be completed by self testing, using flashcards, creating a mind map of knowledge or completing the relevant section on Seneca Learning.

Cognitive Load Theory

https://www.youtube.com/watch?v=h-dkuiKLlUA

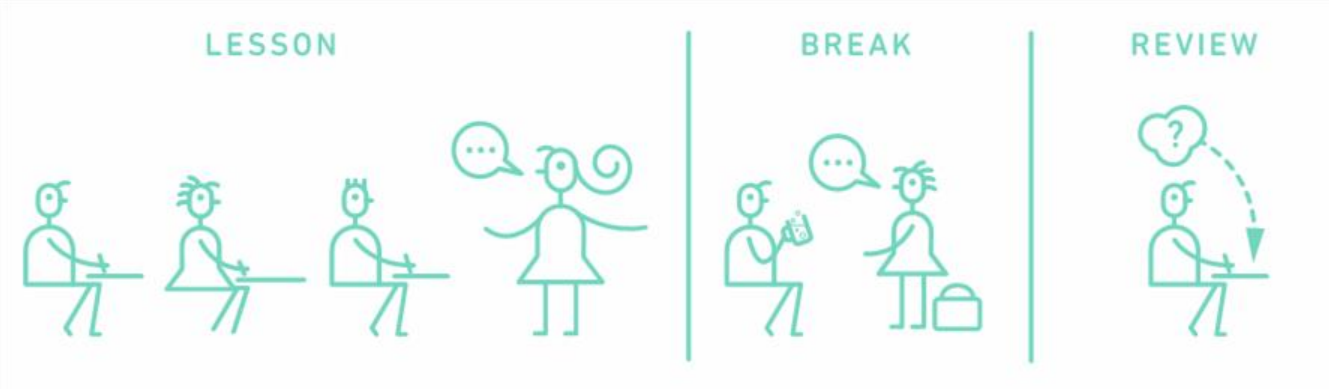
Cognitive Load Theory describes how much the brain can store before it becomes overwhelmed with information. This video gives a brief (30 second) overview.

What is the link between Cognitive Load Theory and spaced practice?

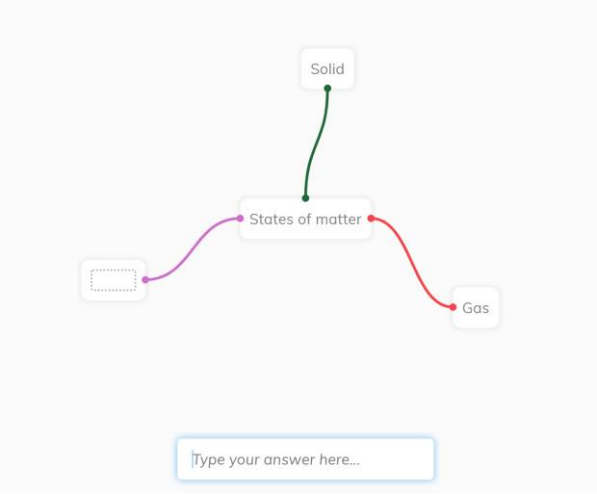
How would cramming impact on your cognitive load?

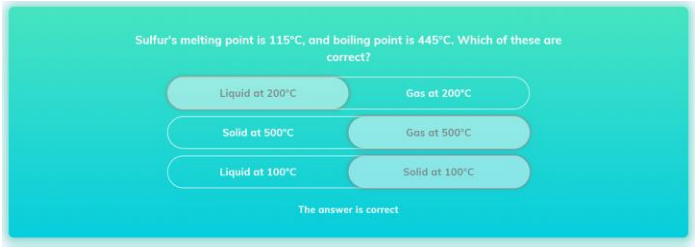
Spaced Practice - Methods

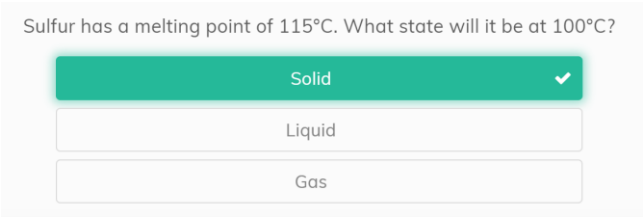
- Set aside time each day, even if your exams are months away
- Attend lessons, leave a gap of a few days, then review information
- It may feel difficult, and you may forget some information, but this is a good thing as it forces you to retrieve from memory

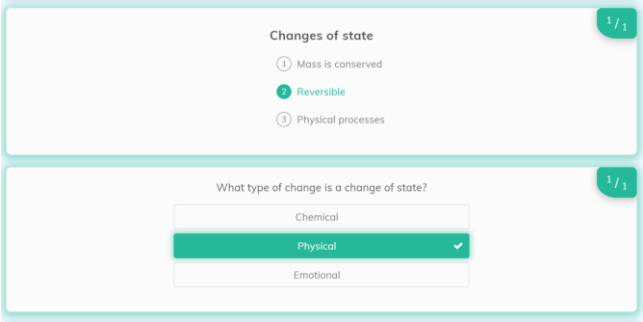


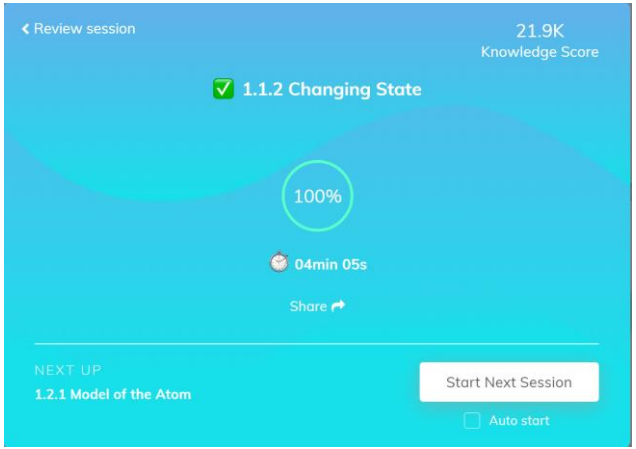
Resource: Seneca Learning

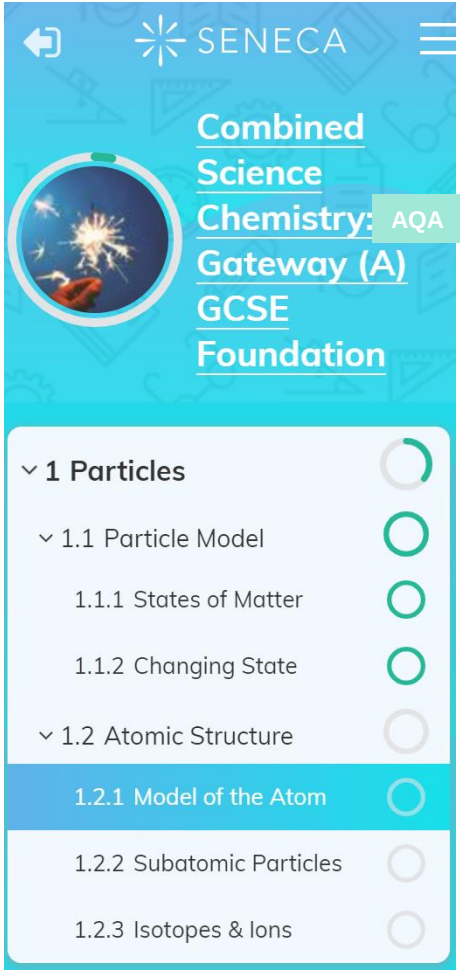












Online Learning Tools - can help you fill gaps

Free to all

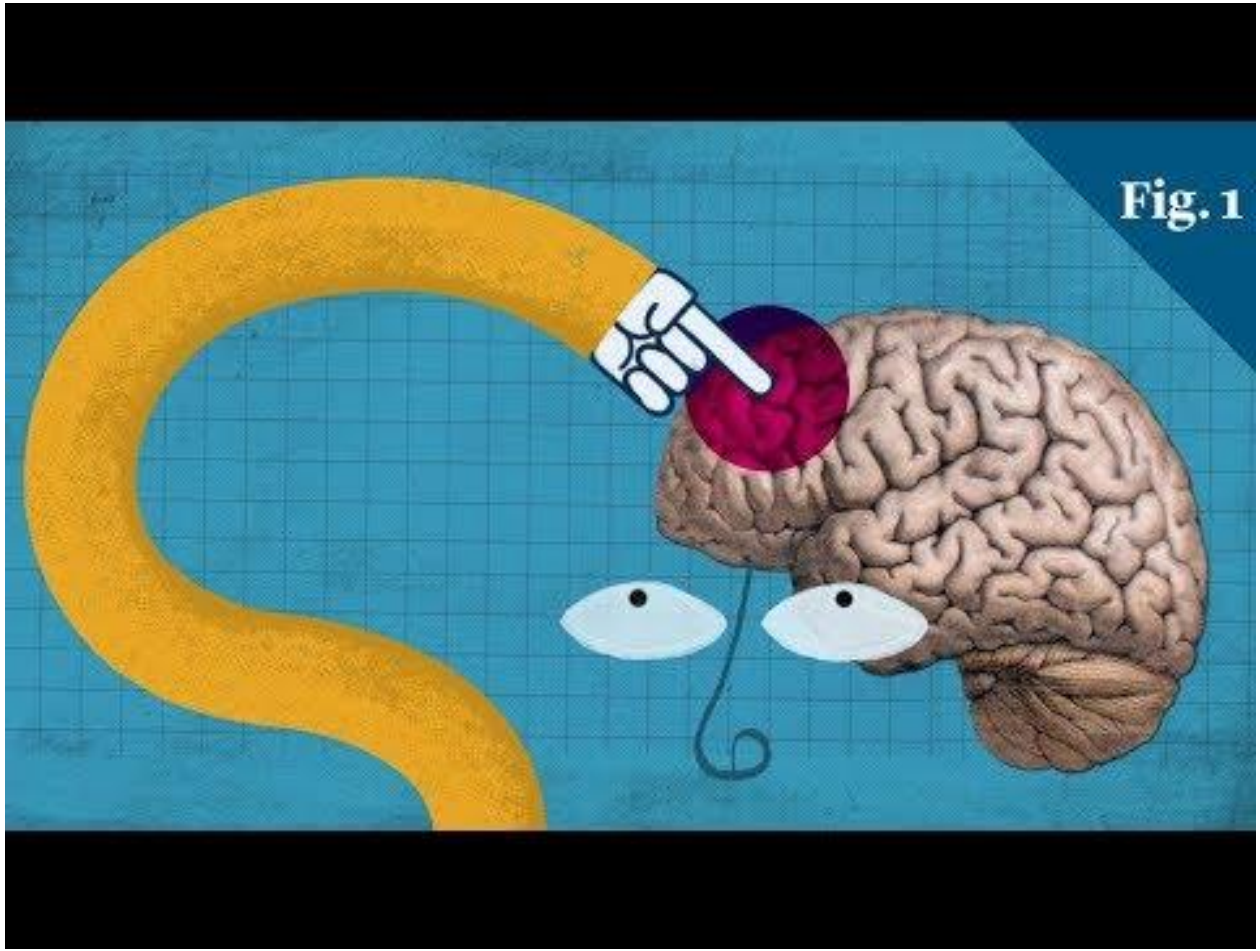
https://app.senecalearning.com/courses (Sign up youself)

Paid for by School

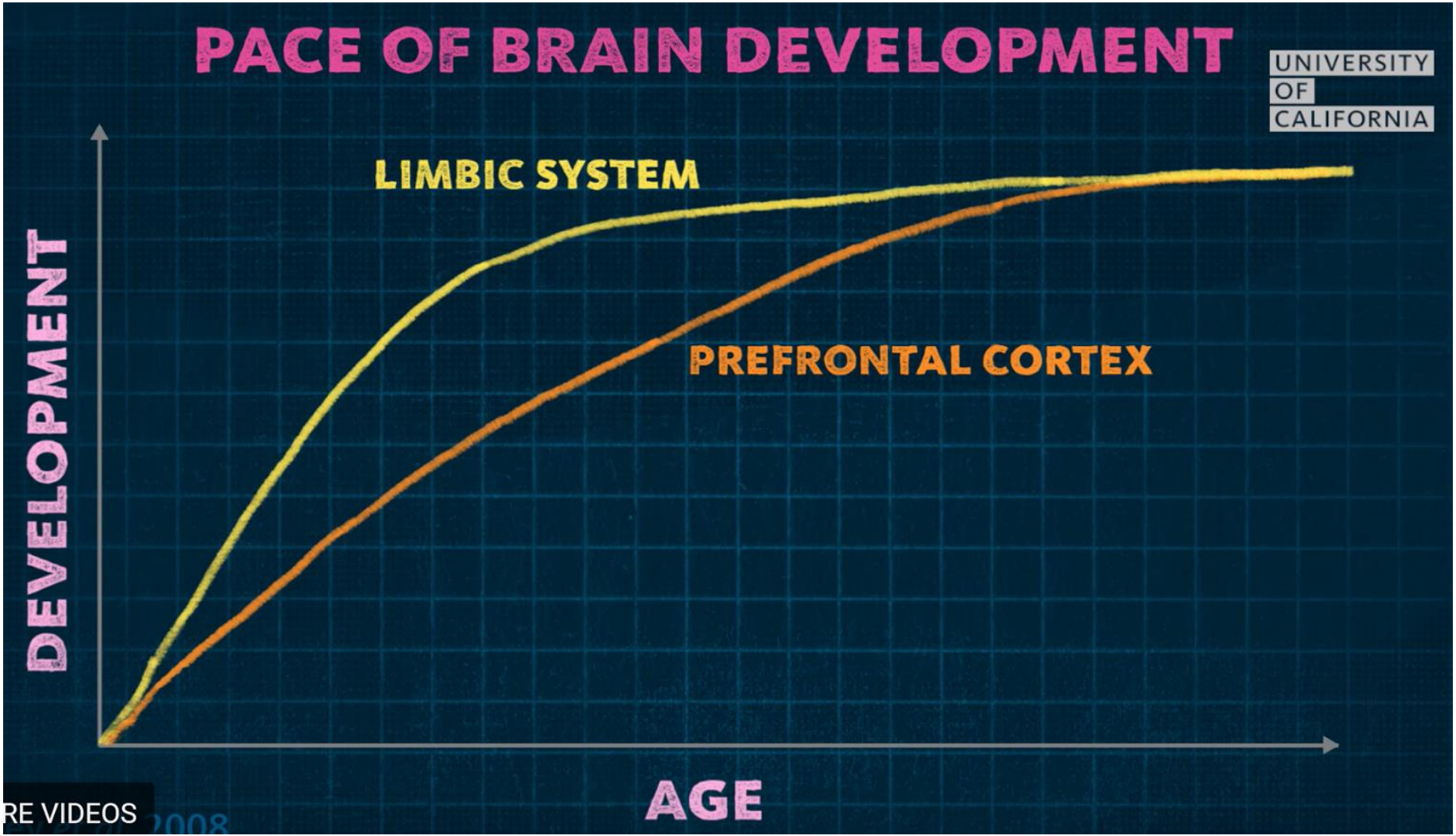
www.educake.co.uk (Use your school login)

www.sparxmaths.uk (Use your school login)

Motivation

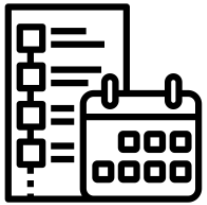


http://www.youtube.com/watch?v=P629TojpvDU


PACE OF BRAIN DEVELOPMENT
UNIVERSITY OF CALIFORNIA
LIMBIC SYSTEM
PREFRONTAL CORTEX
DEVELOPMENT
AGE

RE VIDEOS

How to help you revise (Make sure your family know this too, they can help!!)



Plan ahead

Learn what works

Stay positive

Nutrition

Reward effort over achievement

Productive workspace

Pool skills

Take a break

Revision Planner (Download the School Planner or make your own)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6am							
7am							
8am							
9am							
10am							
11am							
12pm							
1pm							
2pm							
3pm							
4pm							
5pm							
6pm							
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8pm							
9pm							
10pm							

Wellbeing

http://www.youtube.com/watch?v=7AgswlakjRw

- Have you ever experienced test worry or exam stress?
- Or have you seen this in people close to you?
- What does stress feel like?
- Is stress ever helpful?
- What do you do when you feel stressed?
- What coping mechanisms help you?

How to deal with exam stress

Explore this website:
https://www.bbc.co.uk/bitesize/articles/zsvcqhv

Causes of Stress

- Pressure from outside about importance of exams
- Uncertainty about the exam questions
- Unfamiliar surroundings and people overseeing the exams
- Concern about what others will say if they don’t do well
- Lack of confidence about revision techniques and whether they’re revising effectively
- Feeling that teachers and other adults don’t understand stress.

Helping a Friend

- Listen to how they are feeling
- Reassure them that this stressful period is only temporary
- Help them to take some time out to have fun
- Let them know that you’re there for them if they need to talk

It’s okay not to be okay

Sleep issues

Difficulty concentrating

Negative behaviour changes

Increased irritability

Quick wins

Alter the routine

Alter the environment

Change what you are doing

Useful links:

- https://www.childline.org.uk/info-advice/school-college-and-work/school-college/exam-stress/ (Childline)
- https://www.cwmt.org.uk/ (Charlie Waller Memorial Trust)
- https://youngminds.org.uk/find-help/feelings-and-symptoms/exam-stress/ (Young Minds)
- https://www.kooth.com/ (Kooth - free online counselling for young people)