

# Revision support for parents

Helping students achieve success

Mrs C Duffy, Deputy Principal

# Our approach to successful revision



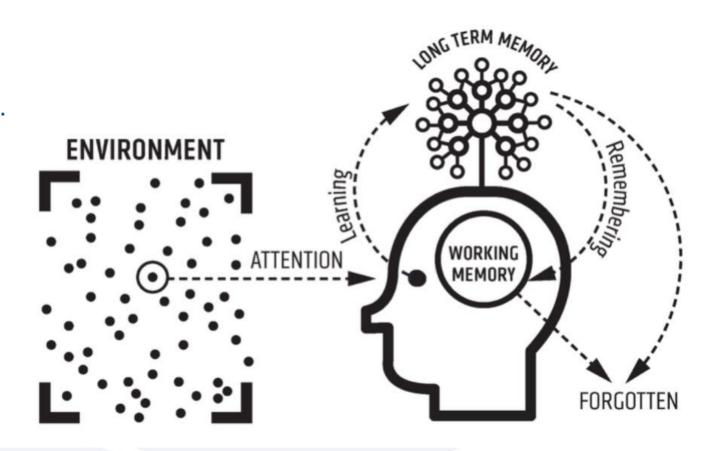
# The science of learning

Cognitive load theory – the working memory can only hold 3-5 new pieces of information at any one time.

Knowledge acquisition - relies on the transfer of information from working memory to long-term memory.

Schema building – connecting new information to information you already know.

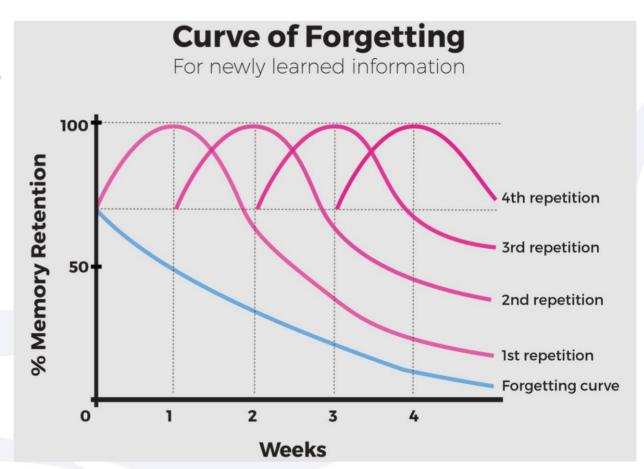
Retrieval – recalling information from your long-term memory. Interrupts the forgetting.





# Retrieval to stop forgetting

- Regular spaced review and revision is needed to stop the forgetting and embed knowledge in your long-term memory.
- This involves retrieval.
- In order for retrieval to work your memory needs to work hard to remember the information – just re-reading notes does not work!
- Testing, quizzing and summarising information into new formats (e.g. mind maps, dual coding) are all effective.
- Revision timetables should allow for spaced study with repetition.







# What does the science say?



### MOST effective at improving your long term memory



#### Retrieval practice

ANSWERING QUESTIONS, having to RECALL information.

#### **Spacing**

Doing little bits often, not all at once (don't cram!)

Ref. Dunlowsky et al, 2013

### **Avoid distractions**

You WILL concentrate better without distractions. Simply being able to SEE a mobile phone, even if it is not yours, reduces attention, concentration and performance by 20%. *Ref. Thornton et al, 2014* 



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#### Sleep

A good night's sleep before studying allows your memory to consolidate information more effectively.

\*\*Ref. Walker and van der Helm. 2009\*\*

#### **Summary notes**

Students who make their own summary notes at the end of lessons and topics did 10 - 17% better in assessments than those who did not.



Ref. Peper and Mayer, 1986

### **LEAST** effective at improving your long term memory

### **Highlighting notes**

Looks pretty, but effect is negligible.

### Rereading notes or book

Helpful in early stages, but MUST be followed by answering questions or quizzing to embed the knowledge.

Ref. Dunlowsky et al, 2013



### Listening to music whilst studying

Studying in silence can improve exam performance by up to 60% more than when listening to music with lyrics.

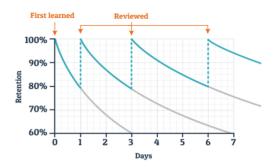
Ref. Perham and Currie, 2014

#### Regular review and

<u>revision</u> is needed to embed knowledge in your long term memory.

Ref. Murre and Dros, 2015

#### Typical Forgetting Curve for Newly Learned Information





# Wellbeing

The exam period can be a busy and stressful time for students so it is important that they look after their mental and physical health.

Eat - don't skip meals or drinks as it will reduce concentration.

**Sleep** – tiredness has a very negative impact on concentration, performance and memory.

**Exercise** – building activity into your revision can help improve concentration and make you sleep better.

**Relax** – make time to switch off and do something enjoyable.

### WHEN REVISING – DOs AND DON'Ts

Do create a clutter and distraction free area for you to study in.

Do get into a regular routine, revise in short chunks of 30 minutes and take breaks.

Do put away your mobile phone or turn off notifications.

**Don't** revise late at night or when you are tired.

Don't revise for long periods of time with no break.

Don't listen to music with lyrics when revising as it will distract you.



# Creating an effective revision timetable

**Subject audit** – to see which areas may need more focus:

- 1. List all of your subjects.
- 2. Rank your subjects from number 1-9 (1 being your strongest subject).
- 3. Then re-write your list in the order of the subjects you have numbered.
- 4. The subjects nearer the bottom of your list need more time allocating to them on your revision timetable.

You can do this with topics too, RAG rating each one (green very confident, amber ok, red a concern) and then start with the red topics.

### Writing a revision timetable

- 1. Create a timetable running from now until your final exam.
- 2. Add in any extra-curricular or job commitments you have.
- 3. Write in the subjects you are going to cover and when in 30-40 minute sessions. Be specific about which topics you will study each time. Subjects with more content to learn or that you are less confident in may require more time allocated to them.
- 4. Look at when your exams are and ensure you include time the day before to do a last minute recap.
- 5. Not every space needs to be filled leave yourself time to relax.

Use interleaving throughout, revising more than one topic each session.



# **Example of a revision timetable**

Example Revision Timetable - Term Time

		Wadaadaa 16ab	Thursday 17th	Eric
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Time	Monday 14th	Tuesday 15th	Wednesday 16th	Thursday 17th	Friday 18th	Saturday 19th	Sunday 20th
Morning	School	School	School	School	Sodo	95 mins Bio Unit 1	- Maths - English Lit
Afternoon	School	School	School	School	School	Stall	Homework Homework
	Homework	Homework	Honework	Hanework	Nonew o N	Short	Cos
Evening	Homework Chemisty W1	Evimmily		Homework Physics us	Homewalk		
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# **Example of a revision timetable**

Example Revision Time table - During Study Programme

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Time	Monday 6th	Tuesday 7th	Wednesday 8th	Thursday 9th	Friday 10th	Saturday 11th	Sunday 12 <sup>th</sup>
Morning	History B – 2hrs (112)	English Lang – Unit 1 F & H 2hrs 15 mins	German – Unit 1& 3 Listening & Reading F	Maths B – Paper 2 F 1hr 30 mins (44)	Biology - Unit 2 F & H 1hr (171)		
	Secreephy	(172)	70 mins (4)  German – Unit 1 & 3 Listening & Reading H 90 mins (8)	Maths B – Paper 4 H 1hr 45 mins (128)	Biology – Unit 3 H 1hr (123)		
	Math						
Afternoon	Gylish	Malhs	Geography B – Geographical Key Themes F & H 1hr 45 mins (66)	Biology	Business Studies - Unit 2 1hr (31)		
	Queiness	Biology		Business	Music – Listening 1hr 30 mins (11)		
				Bioloss			
Evening	English	Geography	marks Maths	Business			
		- C		· Biology			
	English	Irolat?		0.3	-		



### Deliberate spaced practice

- Start early and set aside a little bit of revision time everyday.
- Each day review new information but also study older information so it stays fresh in your memory.
- Divide your revision into short manageable chunks of time (30 minutes).
- Research suggests there is an 'optimal gap' between revision sessions so you can retain the information:

Time to the test	Revision gap		
1 week	1-2 days		
1 month	1 week		
3 months	2 weeks		
6 months	3 weeks		
1 year	1 month		



# Quizzing

- **1. Identify knowledge** what you wish to cover.
- 2. Review and create spend 5-10 minutes reviewing content (use notes/knowledge organiser/revision guide) then create 10 quiz questions or use an online resource.
- **3. Cover and answer** answer the questions from memory
- **4. Self mark and reflect** go over the answers and mark in green pen.
- **5. Next time** revisit the areas where there were gaps in knowledge.

### **Tips**

Write your own questions and get someone to test you.

Alternatively there are lots of online resources which can produce quizzes on topics for you e.g. <u>Educake</u>, <u>BBC Bitesize</u>, Seneca.

Don't just answer in your head – write your answers down.



### Flash cards

Creating your own cards is better than buying them as it helps you retrieve knowledge.

Try adding pictures to make them more memorable.

Use colour coding to organise different topics.

Try recalling the information out loud or writing it down before checking the card (research shows that just answering it in your head is not very effective for remembering).

Use your flash cards in both directions.

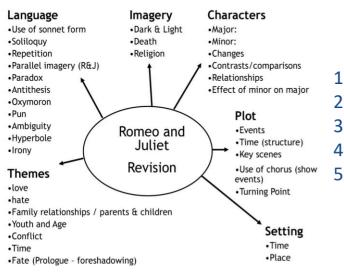
Get friends and family to test you with the cards.

Use the Leitner system to recall knowledge over different time intervals:

#### **Introducing the Leitner System** When you review If you answer a card All flash cards start. If you give the cards in incorrectlu in anu pile off in pile 1. wrong answer pile 2, if you **get it** it moves back to pile 1 As you review the the card staus in right for you to go over pile 1. cards. uou move the card again. each card you to pile 3 answer and so on until all correctlu goes into cards are pile 2. in pile 4.



# Mind maps



- 1. Identify knowledge
- 2. Identify sub topics
- 3. Branch off
- 4. Use image and colour
  - Put it somewhere visible

In subjects where you have to write an essay or long written response, take a question and map out your answer without writing a full response.

Check your response against the exam mark scheme.

Do this for a number of questions then choose one and complete a full response.

**Brain dumps** are similar to mind maps but you only refer to your notes at certain points:

- 1. Read through your notes or revision guide/knowledge organiser on a topic and then put them away.
- 2. Write down everything you can remember on the topic in a set period of time e.g. 15 minutes, without looking back at your notes.
- 3. Look back over your notes to see what information you have missed.
- 4. Put your notes away again and attempt to fill the gaps using a different colour pen.
- 5. Finally check your notes a third time and add in the missing information.
- 6. Each time you should find you can remember more.



# **Dual coding**

Combining words and images provides you with two ways to understand and remember information and helps move knowledge from your working memory to your long-term memory.

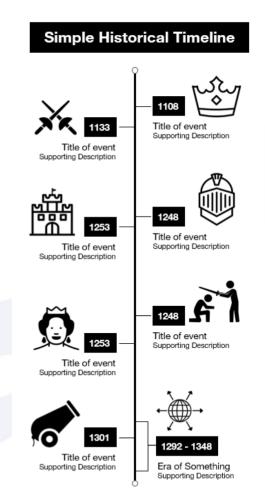
### **Tips**

Take information that you are trying to learn and draw visuals to go with it.

Use existing visuals and add words to explain them in more detail.

Try to come up with different ways to represent the information e.g. infographics, timelines, cartoons, diagrams, symbols.

Work your way up to drawing or writing what you know from memory.





# Thinking skills

**REDUCE** – summarise into short notes

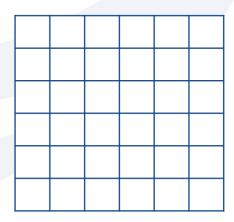
**CONNECT** – link to other areas you have learnt

**TRANSFORM** – turn information into mind maps, diagrams, quizzes etc.

### THINKING AND LINKING GRIDS

These force you to think deeply about an area of a subject you have studied.

- 1. Create a 6x6 grid and fill each square with a single word linked to key ideas, themes, facts etc.
- 2. Roll 2 dices to get your coordinates of each box.
- 3. Write both words down and spend time thinking how they link to the main topic.
- 4. Talking for a minute on each area works well here.





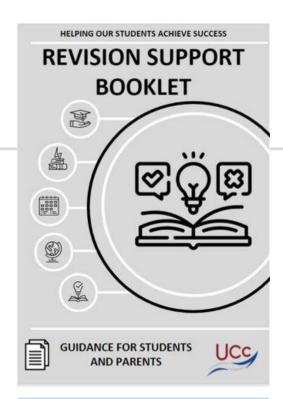
# Student support in school

### **TEACHING REVISION SKILLS**

- After the first half-term of year 11 students are given a revision support booklet which explains a variety of revision strategies along with wellbeing tips.
- This helps prepare them for their Pre-Public Exams in January.
- This is supported by a six-week revision programme delivered by form tutors during form time which focuses on:
  - writing a revision timetable
  - auditing their strengths and areas for development
  - learning how to use a variety of revision strategies well
  - useful revision websites and resources

### YEAR 11 STUDY PROGRAMME

- During the exam period year 11 receive further support through our study programme of revision sessions.
- Information on this will be provided in the Spring term.



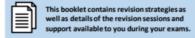
HELPING OUR STUDENTS ACHIEVE SUCCESS

# YR11 STUDY PROGRAMME



Name:

Form:





# Final tips

- Help your child to make studying a habit making learning at home a normal, routine part of life is vital.
  - One way to do this is to assume that there is always something to study. Rather than ask 'Have you got any revision to do?' say 'What revision are you doing this week; let's take a look'.
- Encourage your child to revise where you can see them this allows you to offer supportive checking in and they will be less likely to be distracted by their phone.
- Become familiar with what your child is learning see the <u>curriculum maps</u> on the school website and exam specifications.
- Help your child by quizzing them on topics, for example using flash cards with them or reading a set passage and asking them questions on it, then discuss the areas they got wrong. TEST-CHECK-EVALUATE-REPEAT
- Supervise practice tests, helping your child with timings etc.
- Encourage your child to trial different ways of revising to find what works best for them in different subjects.
- Encourage your child to put their phone away whilst revising.
- Remind them to take frequent breaks preferably outside or away from screens.



Thank you for your time.
Further information and revision support can be found in the student area of the college website.

