Y8 Learning to Learn

While you're waiting for everyone to arrive, try to remember as many as the following numbers as possible. You'll be tested on them later!

1189994291110662460 1981

SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Parents and carers – does this look familiar?



SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

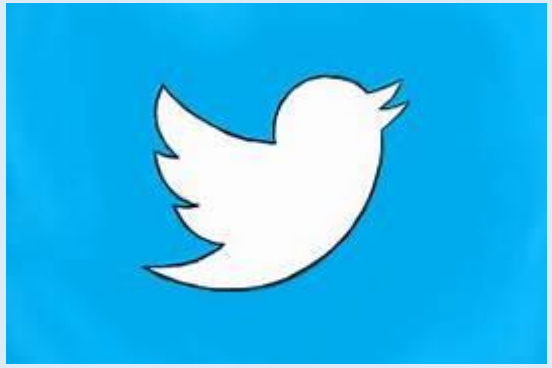
How about this?





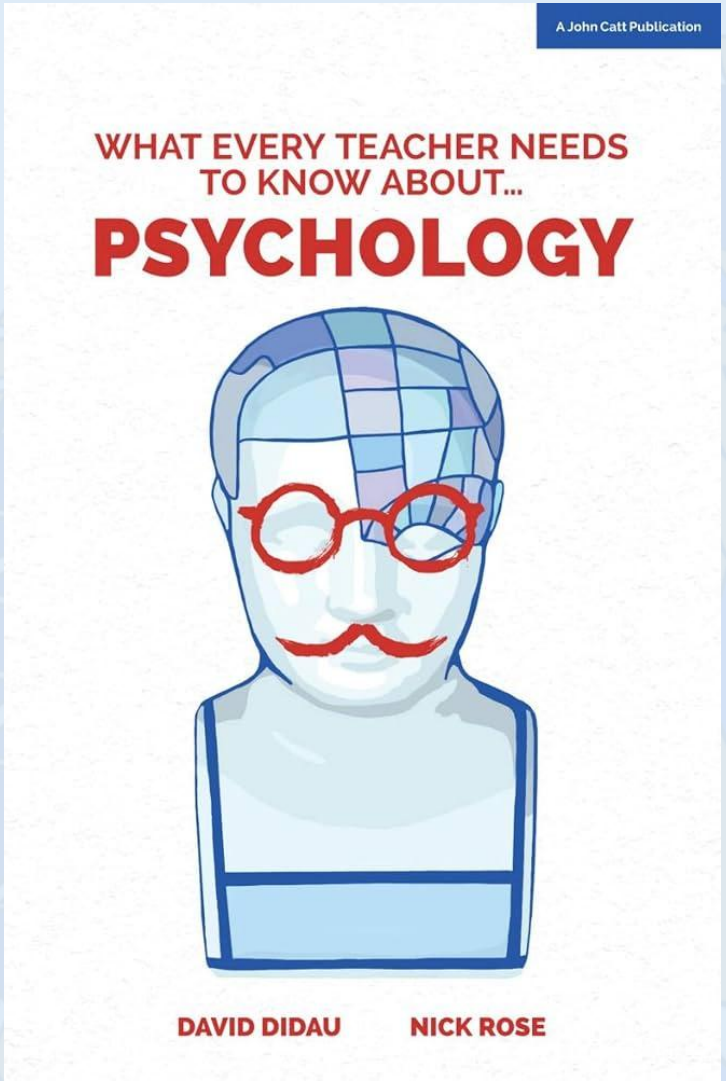
SPACED ***RETRIEVAL PRACTICE:*** *CUED* *RECALL,* *FREE* *RECALL,* *PRACTICE* *QUESTIONS*

What's changed?



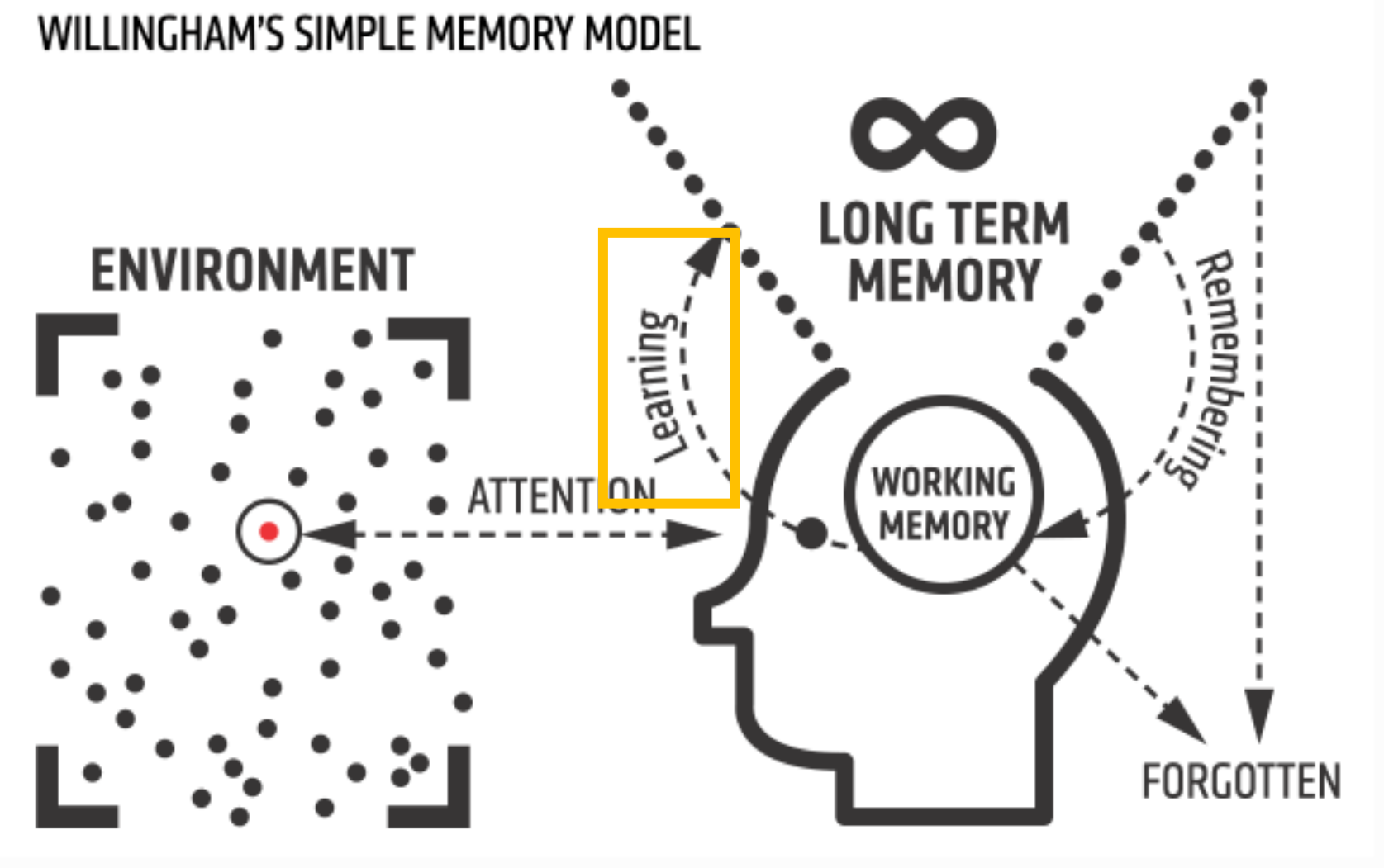






SPACED ***RETRIEVAL PRACTICE:*** *CUED* *RECALL,* *FREE* *RECALL,* *PRACTICE* *QUESTIONS*

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SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Y8 Learning to Learn

While you're waiting for everyone to arrive, try to remember as many as the following numbers as possible. You'll be tested on them later!

Can you remember the number?

Y8 Learning to Learn

While you're waiting for everyone to arrive, try to remember as many as the following numbers as possible. You'll be tested on them later!

1189994291110662460 1981

SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Y8 Learning to Learn

While you're waiting for everyone to arrive, try to remember as many as the following numbers as possible. You'll be tested on them later!

1189994291110662460 1981

SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

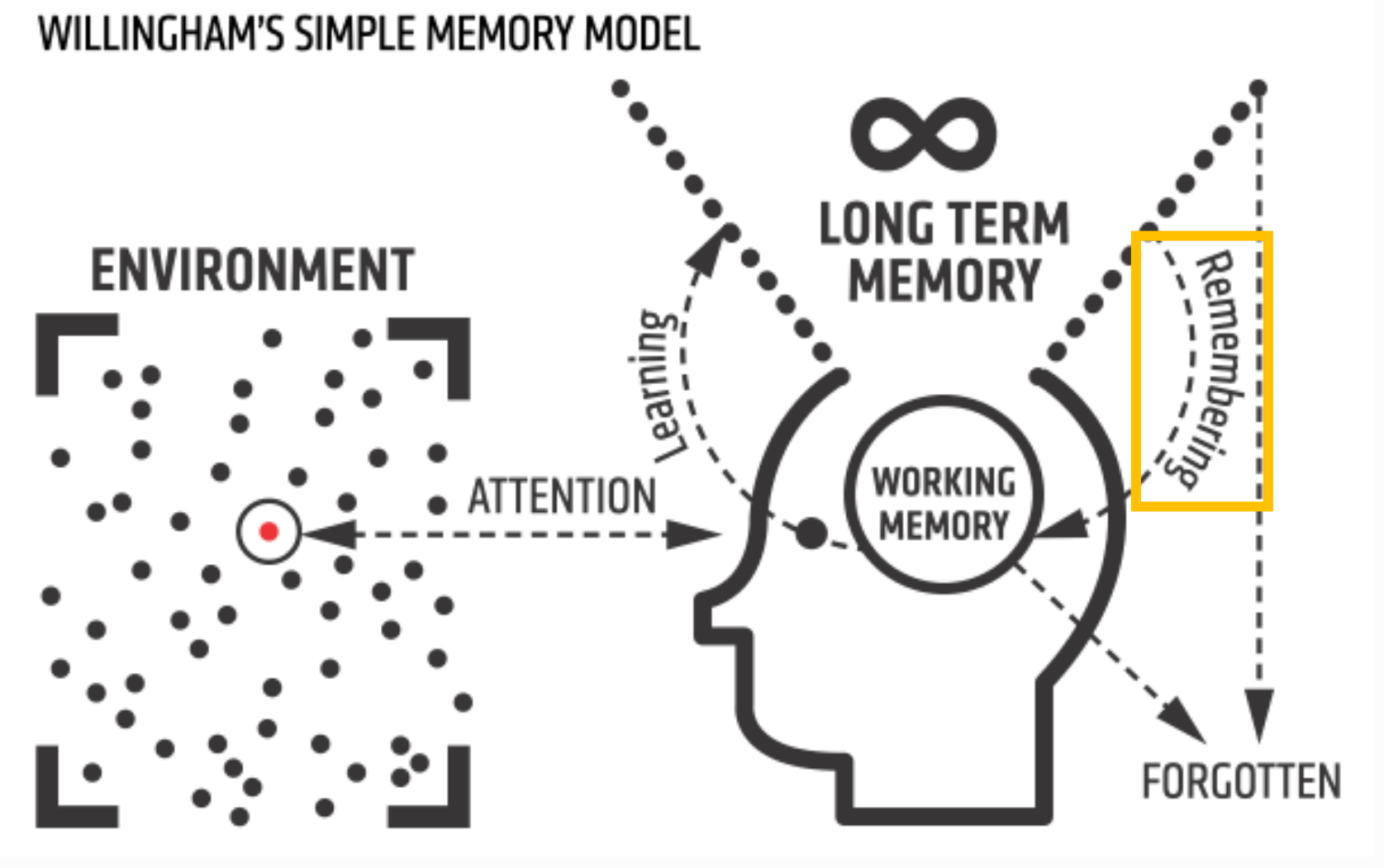
Y8 Learning to Learn

Would you be able to remember this tomorrow?
Next week? Next month? Next year?

1189994291110662460 1981

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SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Henry L. Roediger, III, and Jeffrey D. Karpicke

Washington University in St. Louis

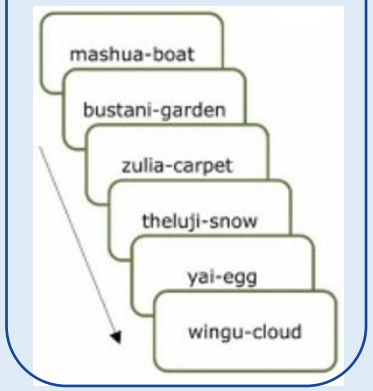
& students!

The traditional perspective of educators is to view tests and examinations as assessment devices to measure what a student knows. Although this is certainly one function of testing, we argue in this article that testing not only measures knowledge, but also changes it, often greatly improving retention of the tested knowledge. Taking a test on material can have a greater positive effect on future retention of that material than spending an equivalent amount of time restudying the material, even when performance on the test is far from perfect and no feedback is given on missed information. This phenomenon of improved performance from taking a test is known as the *testing effect*, and

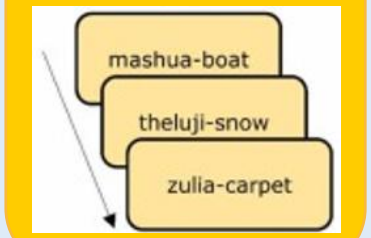
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The Testing Effect

Initial Study
(7 mins)



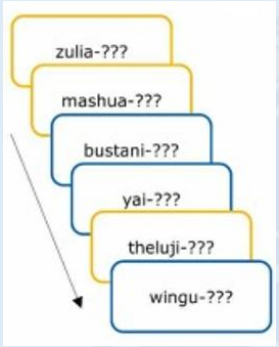
More Study
(7 mins)



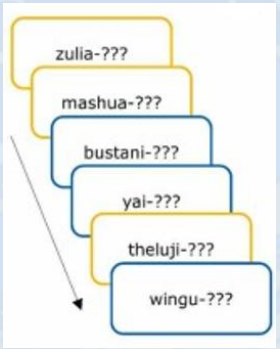
Practice Test
(7 mins)



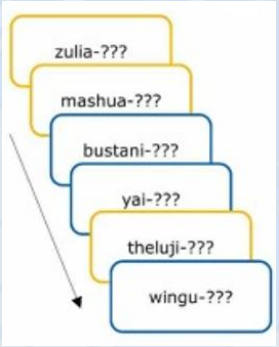
Actual Test 1
(5 mins later)



Actual Test 2
(2 days later)



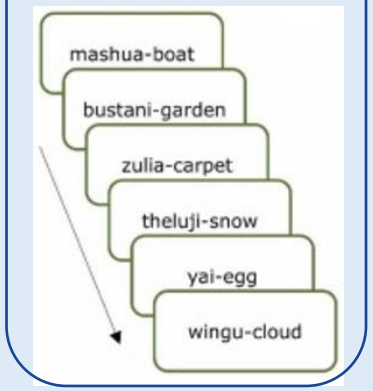
Actual Test 3
(1 week later)



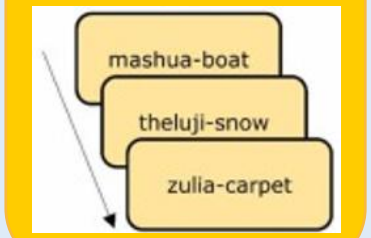
*SPACED **RETRIEVAL PRACTICE:** CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

The Testing Effect

Initial Study
(7 mins)



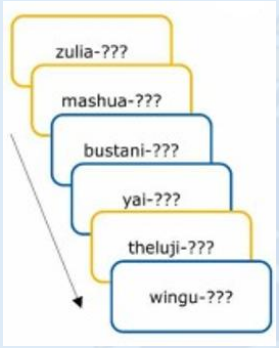
More Study
(7 mins)



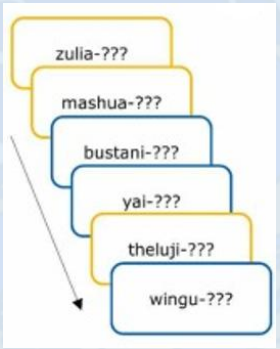
Practice Test
(7 mins)



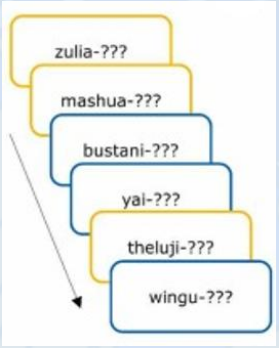
Actual Test 1
(5 mins later)

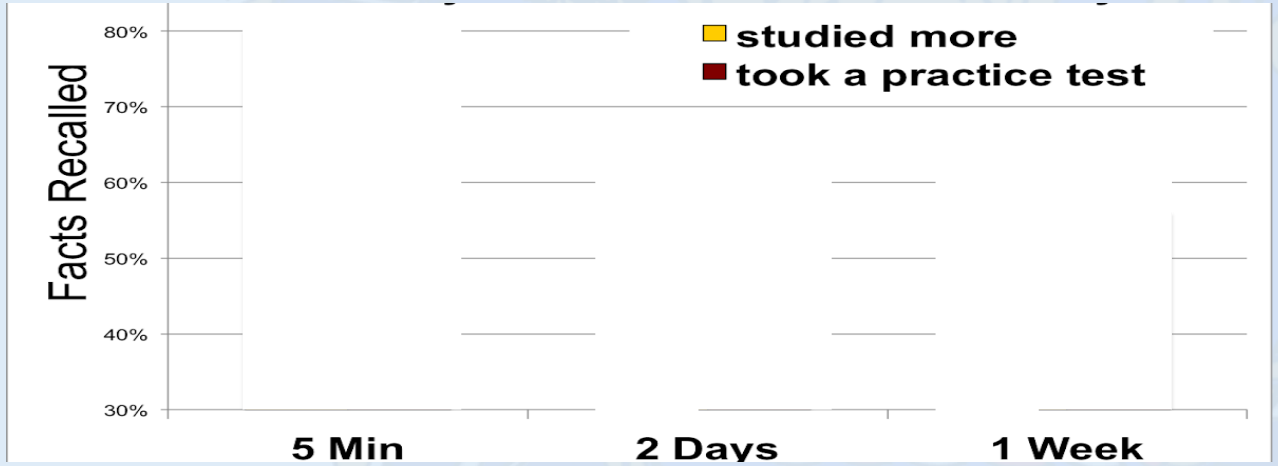


Actual Test 2
(2 days later)



Actual Test 3
(1 week later)





SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

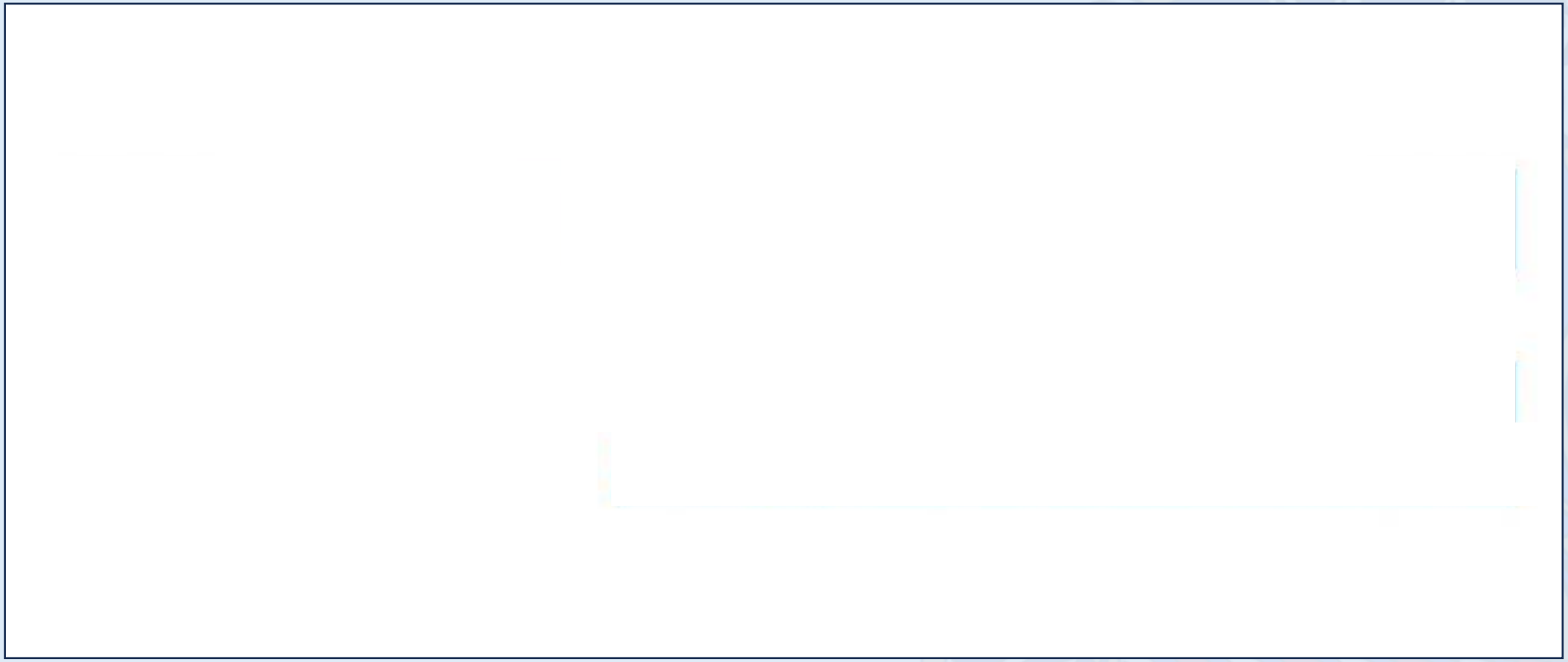
Henry L. Roediger, III, and Jeffrey D. Karpicke

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The Testing Effect



*The very act of **trying** to remember something strengthens your memory of it.*

*SPACED **RETRIEVAL PRACTICE:** CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Spaced versus Massed Practice



Spaced versus Massed Practice

Students were asked to study for 1 hour to learn a list of difficult word pairs (synonyms).
This was either in 1 block (massed practice) or spaced over 4 days.
When tested…

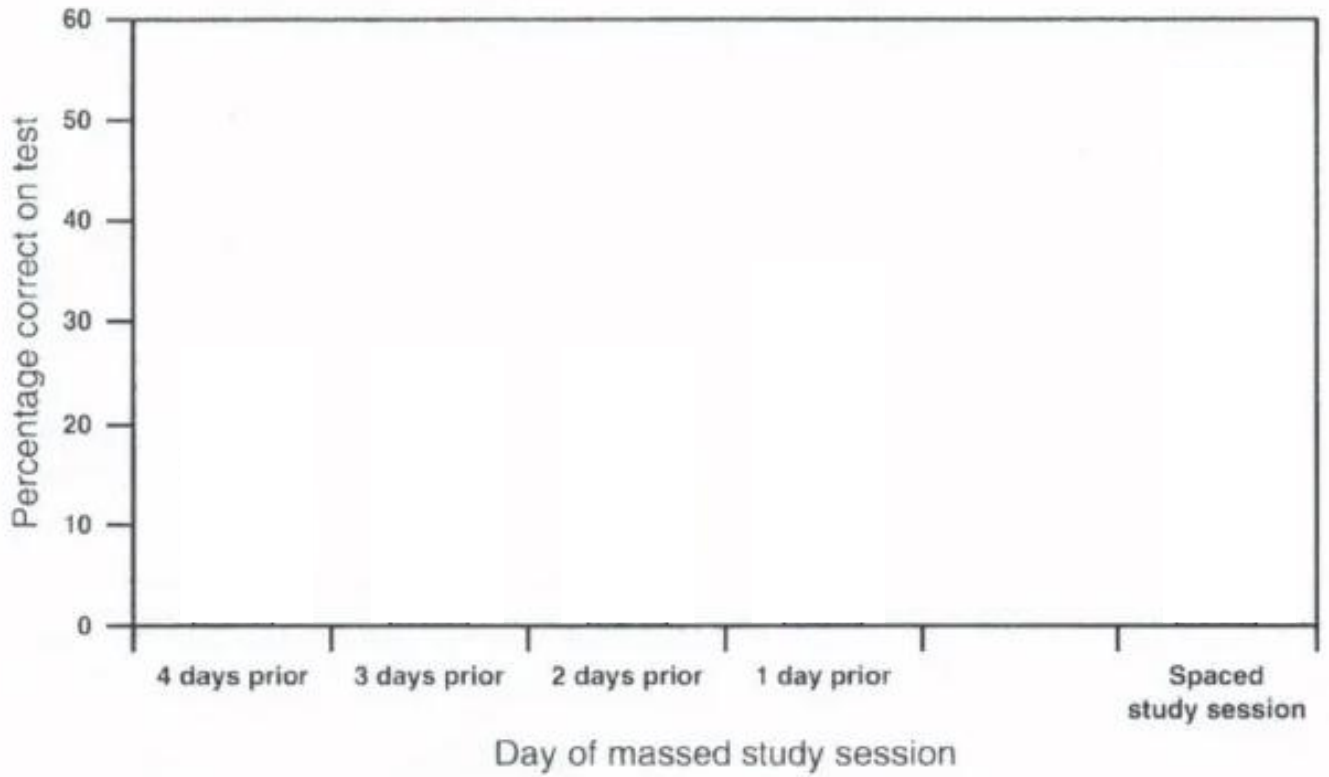


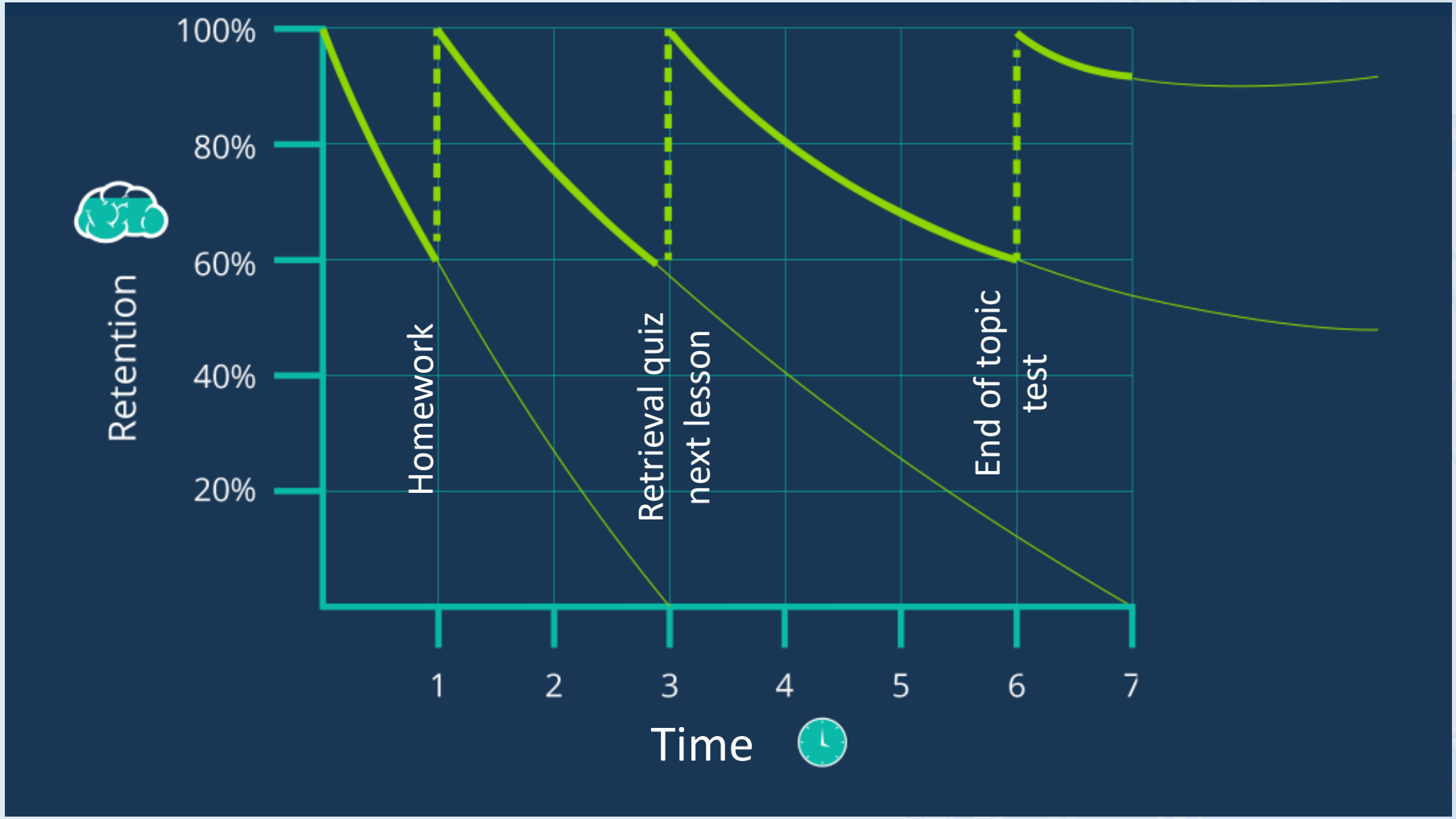
FIGURE 8.4 Percentage correct on the final test for the massed and spaced study sessions (adapted from Kornell, 2009).

So… when and how often you test is important too



SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

(Almost) forgetting is an important part of learning!



SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Putting this all together, we (finally!) come to our whole school revision strategy…

The **best bet** for **effective** and **efficient** revision is

SPACED RETRIEVAL PRACTICE

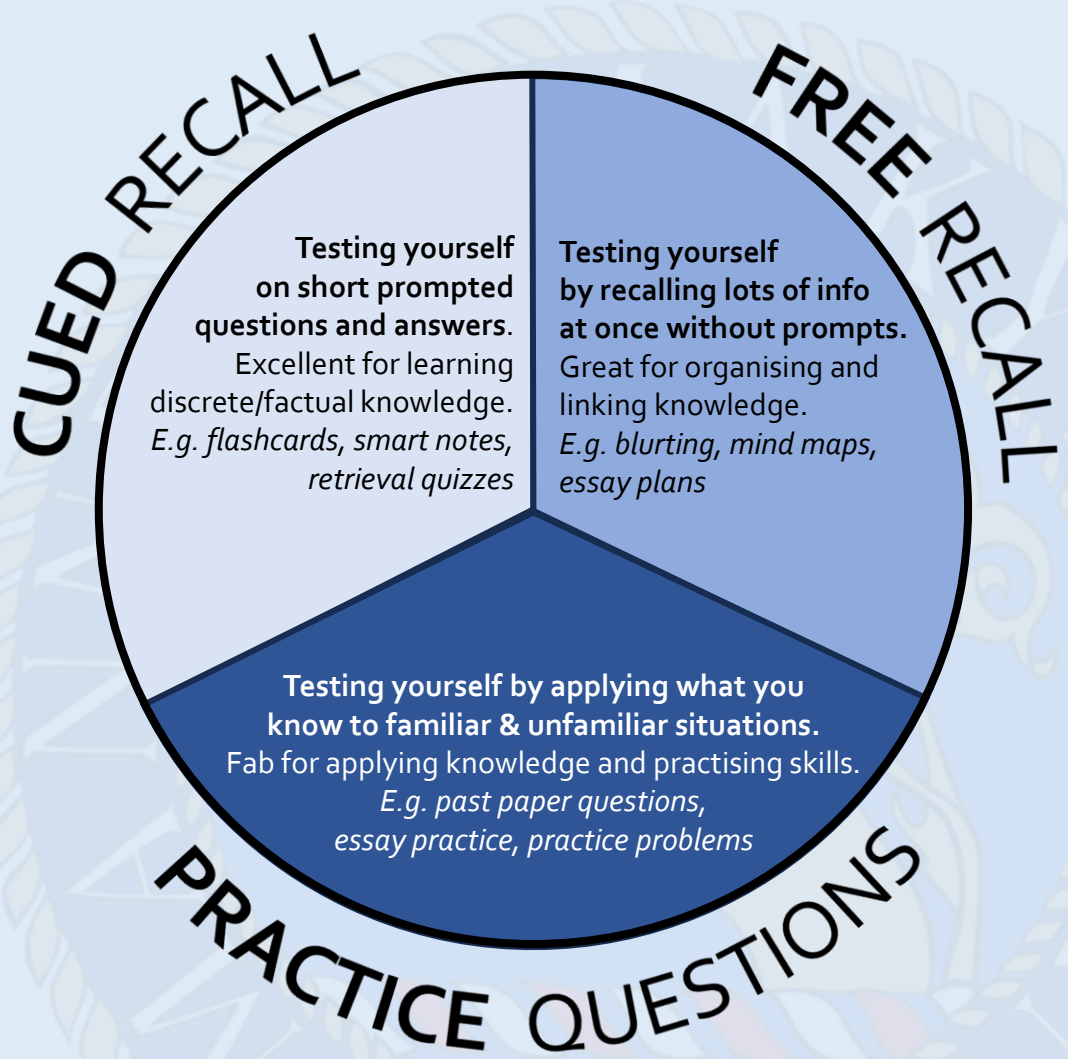
Repeating the testing, spread out over time with increasing delays between.

Pulling knowledge out of your memory by testing yourself.

This doesn't just check what you know – the very act of trying to remember helps you learn the knowledge.

SPACED RETRIEVAL PRACTICE: *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Learning to Learn: Effective Revision at UGS

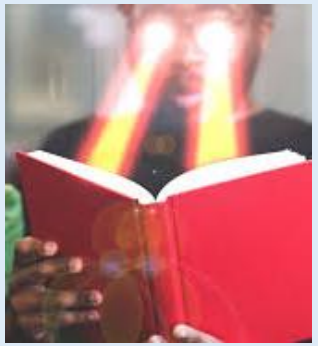


SPACED RETRIEVAL PRACTICE: *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Learning to Learn: Effective Revision at UGS

Time is not an infinite resource;

other techniques can work but will take longer.



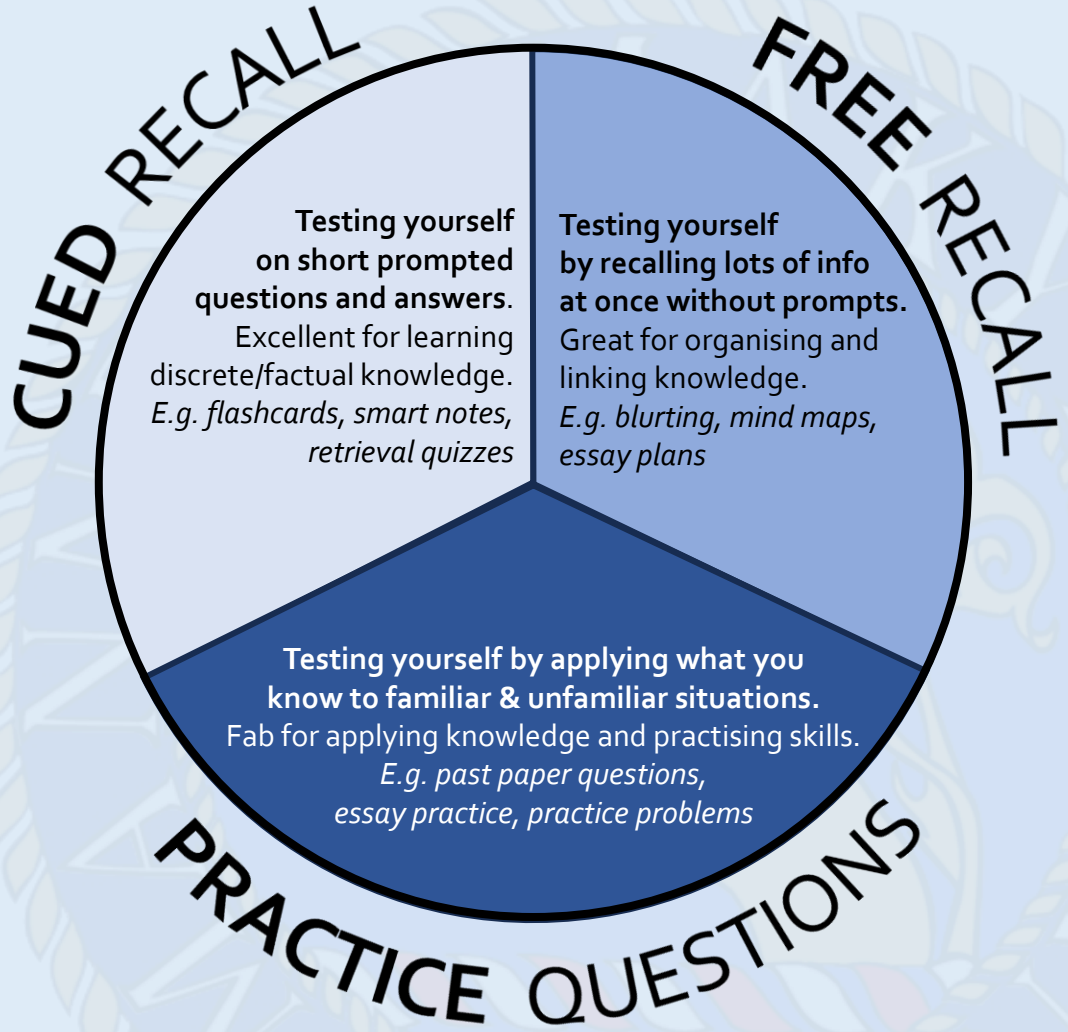






Challenge is your friend –

if revision feels easy, it's probably not effective!

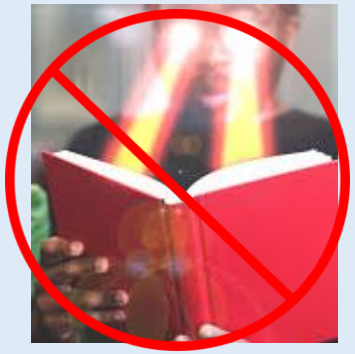


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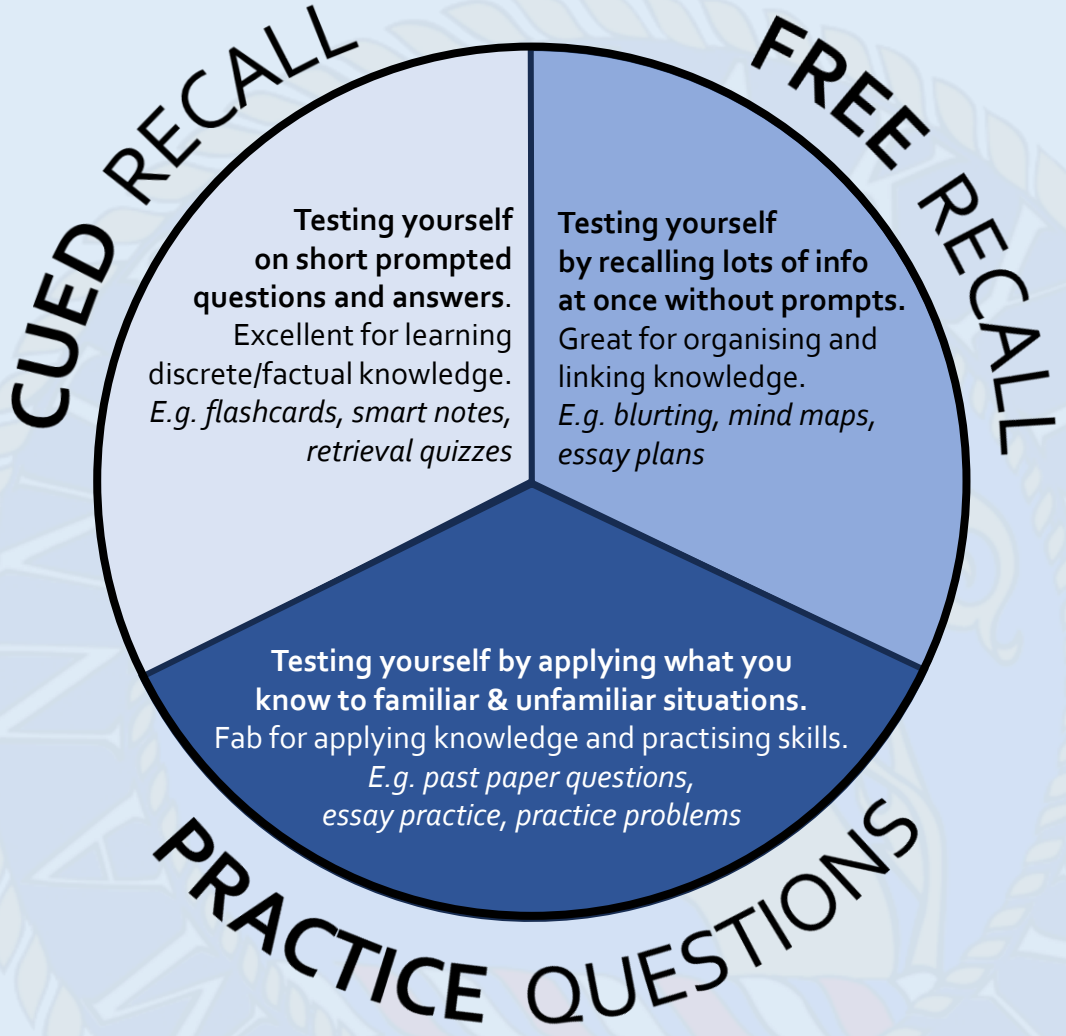






Challenge is your friend –

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Learning to Learn: Effective Revision at UGS

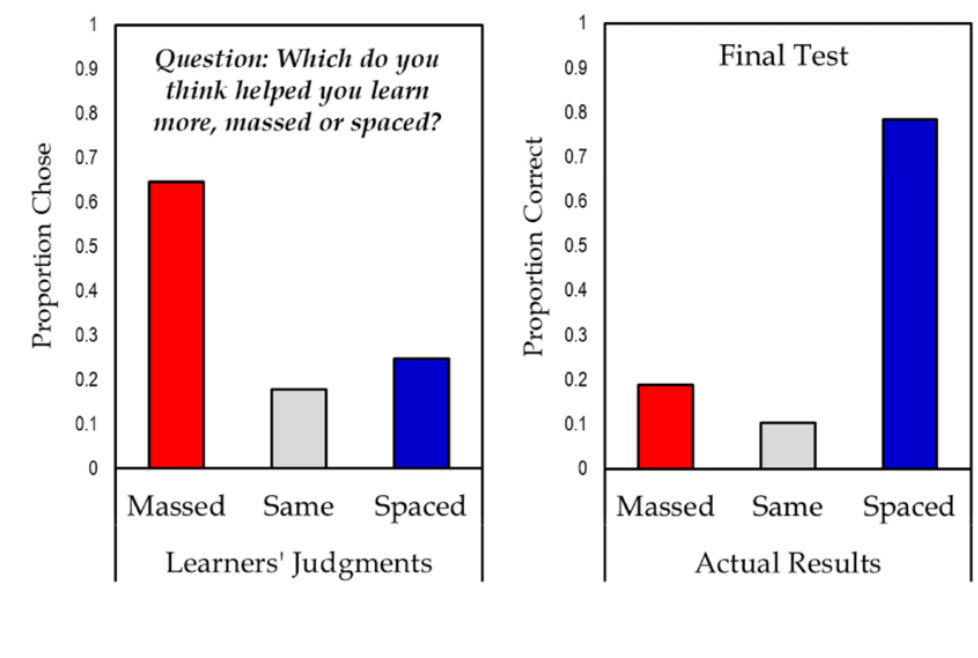


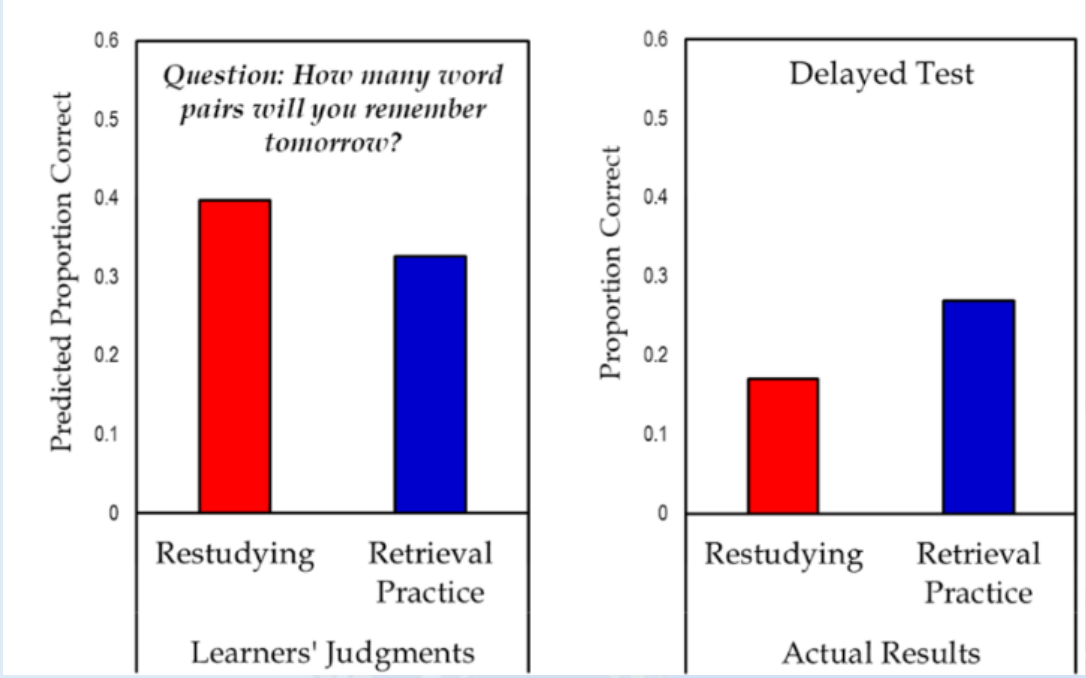
SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Exam Series: Retrieval Practice

So why do students resist using this?

SPACED RETRIEVAL PRACTICE





SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

Learning to Learn: Effective Revision at UGS

The **best bet** for **effective** and **efficient** revision is

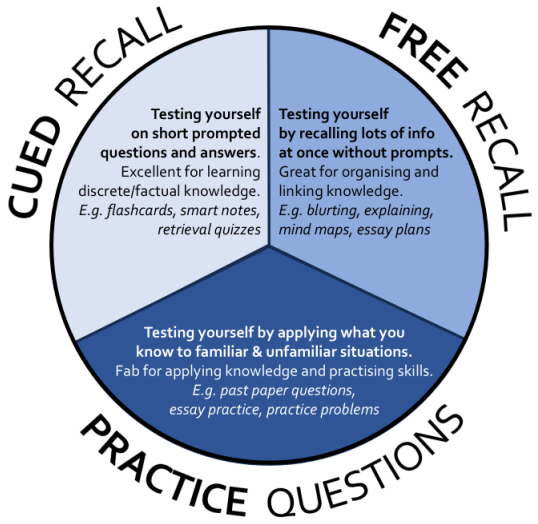
SPACED RETRIEVAL PRACTICE

Repeating the testing over time, with increasing gaps between retesting.

Pulling knowledge out of your memory by testing yourself.

There are three main types of retrieval practice

Each subject will require a different balance of them to be used, depending on the knowledge and skills to be learned and applied.



Challenge is your friend – if revision feels easy, it's probably not effective!

Time is not an infinite resource; other techniques can work but will take longer.

This approach has been developed based on the work and advice of study expert, speaker and coach William Wadsworth (https://examstudyexpert.com)

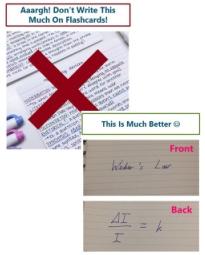
EXAM STUDY EXPERT

to **effectively** and **efficiently** use

CUED RECALL

*onding to **specific prompts/questions** that require quite **short**, g it perfect for learning **large quantities** of **factual knowledge**. ther **accurate** (correct) **or not** (incorrect or incomplete). r recommended '**best bet**' methods are...*

mportant than making them!
portant , but content really is.
the smallest amount of information on
ither than a question.
n order, but flag which cards you didn't
o test again sooner – fold the corner



cards using apps such as Quizlet and Anki.

Smart Notes

- Split your page vertically, about a quarter of the way in.
- Write your notes on the right hand side, then add in questions that your notes answer on the left.
- Test yourself by covering the answers and writing them from memory. Don't forget to check and correct your answers!
- *To make notes that have already been written smarter, cover over important areas with a post-it note and write a prompt/question on there – then it's a lift the flap quiz!*

Quizzing

l quiz of the key content you need to know, with the answers elsewhere. the answers out, or ask a family member of friend to quiz you.

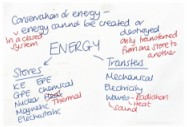
- *You could even record question and answer pairs as a voice recording – leave a decent pause between the question and the answer so you can try to say the answer before you hear it!*

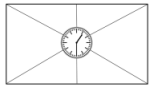
How to **effectively** and **efficiently** use

FREE RECALL

*answering **wide**, **open-ended** questions/prompts, and recalling a **large** edge all at once. It's fantastic for **linking** and **organising** knowledge. led '**best bet**' methods (ranging from least to most structured) are...*

hing you can about a topic on a blank piece
nory – don't worry about presentation!
extbook etc., correct anything you got wrong
g you missed in a different colour pen, so it's
ou knew well and what you missed later.
aption of this is a revision clock – split your page into d write the title of a sub-topic at the top of each. tch to keep you on track as you blurt for each section.





Explain It

to logically and clearly explain a whole topic from scratch to a peer, parent/carer ven just yourself (recording this on a voice note adds extra pressure here!). easy to identify areas you aren't as strong on, as you'll find them harder to explain te these down to work on in the future.

rieval

ive use of mind maps as a free recall activity,
rt off with a model version.
ourself using your notes/other resources,
a ready made one.
to replicate the mind map from memory.
sion to check how well you've done – make any
litions in a different colour pen.



Unsupported Essay Planning

From memory, bullet point/mind map a plan to answer an extended response question. Make sure it is in a logical order, with only relevant knowledge included.

- Then, use a textbook/other resources to check for any key points you may have missed. Add these and any other edits in a different colour pen.

How to **effectively** and **efficiently** use

PRACTICE QUESTIONS

*tice questions as part of your revision allows you to both **retrieve** and then **apply** e to both **familiar** and **unfamiliar** situations - it is the final 'step' of the process. antly, they also allow you to **practice** the **skills** that are required in a subject.*



In most subjects, practice questions should generally be used after you have used cued and free recall to securely learn the core content – using them too early can reduce their effectiveness.

lo I find practice questions?

t common place is from past exam papers, but you can find further s in places such as textbooks, revision guides and revision websites.

Should I complete whole papers or individual questions?

- This depends – if you want to work on an individual area, then completing questions topic by topic is valuable. It can show patterns in the questions asked/marks awarded.
- However, for both GCSEs and A-Levels, it is vital that you practice completing whole papers well in advance of your exams, to build up your stamina!

l I get the most out of using practice questions?

nswer the questions from memory in timed conditions.
e pencil to show what you can add using your notes/extra time.
orrect your work in a coloured pen – it's good to leave this final step until day, as this makes you more objective when applying the mark scheme.

rammar would like to thank William Wadsworth (https://examstudyexpert.com) for contributing his ideas and graphics to this guide and whole school approach. William's podcast & YouTube channel are resources for advanced students and their parents interested in exploring the world of effective revision strategy in more detail, including interviews with leading cognitive psychologists whose research underpins the principles in this guide. William is also the author of "Outsmart Your Studies" and "Outsmart Your Exams" which provide more in-depth guides for students on effective revision technique and day-of-exam strategies respectively.

SPACED RETRIEVAL PRACTICE: CUED RECALL, FREE RECALL, PRACTICE QUESTIONS

How to **effectively** and **efficiently** use

CUED RECALL

*Cued recall involves responding to **specific prompts/questions** that require quite **short**, **definite** answers, making it perfect for learning **large quantities** of **factual knowledge**.*

*Your answer is either **accurate** (correct) **or not** (incorrect or incomplete).*

*Our recommended '**best bet**' methods are...*

Flashcards



Smart Notes



Quizzing



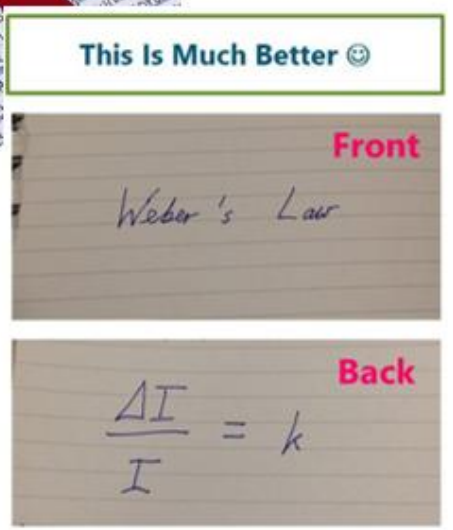
How to **effectively** and **efficiently** use

CUED RECALL

Flashcards

- Using flashcards is more important than making them!
- Presentation isn't very important , but content really is.
- The best flash cards have the smallest amount of information on them and use a prompt rather than a question.
- It's good to test yourself in order, but flag which cards you didn't get quite right and need to test again sooner – fold the corner over or add a paperclip.
- *You can make online flashcards using apps such as Quizlet and Anki.*





Learning to Learn: Effective Revision at UGS

Literary Devices

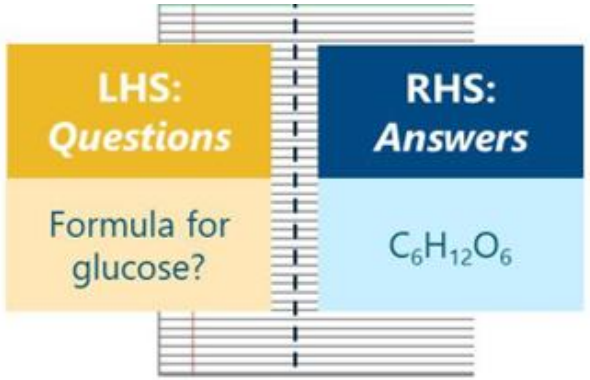
A writer can use a range of literary devices to create meaning and shape the reader's response. A metaphor is a comparison made without using *like* or *as*, such as "His home was his castle", which presents the home as a secure and safe place. A simile also compares two things but uses *like* or *as* to make the image more vivid, as in "She had a smile like the sunrise", which suggests that her smile is bright and hopeful. Personification gives human qualities to non-human things, animals or ideas. For example, "The wind screamed through the trees" makes the wind seem human and helps create an uneasy atmosphere.

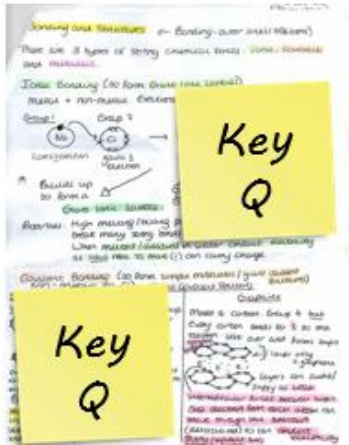
Metaphor	**A comparison made without using 'like' or 'as'** ***E.g. His home was his castle***

SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

How to **effectively** and **efficiently** use

CUED RECALL





Smart Notes

- Split your page vertically, about a quarter of the way in.
- Write your notes on the right-hand side, then add in questions that your notes answer on the left.
- Test yourself by covering the answers and writing them from memory. Don't forget to check and correct your answers!
- *To make notes that have already been written smarter, cover over important areas with a post-it note and write a prompt/question on there – then it's a lift the flap quiz!*

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Topic	Digestion
Questions	**Notes/Answers**
What is the function of the digestive system? **What organs are in the digestive system?** **What do they do?**	*To break down large food molecules into ones that our cells can absorb*

Learning to Learn: Effective Revision at UGS

Topic	Digestion
Questions	**Notes/Answers**
What is the function of the digestive system? **What organs are in the digestive system?** **What do they do?**	The digestive system is an organ system, as it is made up of organs working together to perform a certain function. The food you eat is large and insoluble and needs to be broken down in order for it to be in a form that can be absorbed by cells. insoluble To break down large food molecules into ones that our cells can absorb

SPACED RETRIEVAL PRACTICE: CUE

How to **effectively** and **efficiently** use

CUED RECALL

Quizzing

- Make yourself a retrieval quiz of the key content you need to know, with the answers elsewhere.
- Test yourself by writing the answers out or ask a family member of friend to quiz you.
- *You could even record question and answer pairs as a voice recording – leave a decent pause between the question and the answer so you can try to say the answer before you hear it!*

BBC BITESIZE

Educake

SENECA

anki

How to **effectively** and **efficiently** use

FREE RECALL

*Free recall involves answering **wide**, **open-ended** questions/prompts, and recalling a **large volume** of knowledge all at once. It's fantastic for **linking** and **organising** knowledge.*

*Our recommended '**best bet**' methods (ranging from least to most structured) are...*

Unstructured → Structured

Blurting

Revision Clock

Explain It

Mind Map Retrieval

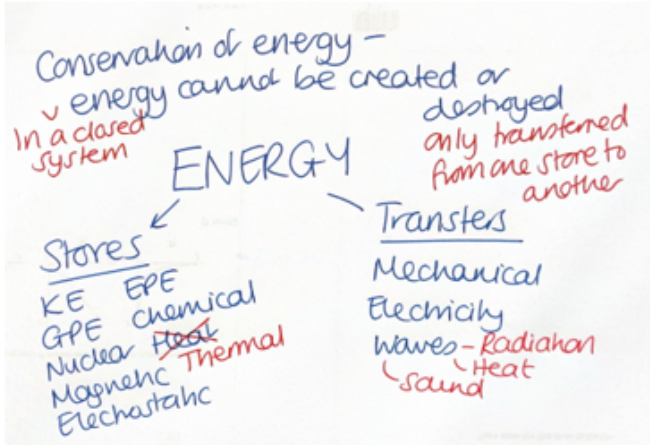
Unsupported Essay Planning

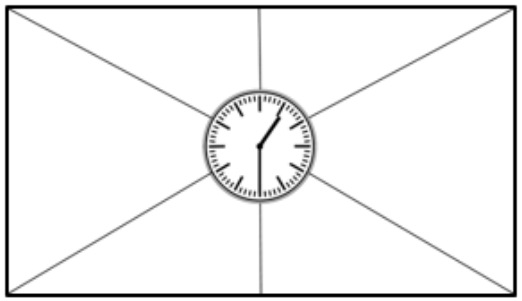
How to **effectively** and **efficiently** use

FREE RECALL

Blurting

- Write down everything you can about a topic on a blank piece of paper from memory – don't worry about presentation!
- Using your notes/textbook etc., correct anything you got wrong and add in anything you missed in a different colour pen, so it's easy to see what you knew well and what you missed later.
- *A more structed adaption of this is a revision clock – split your page into sections radially and write the title of a sub-topic at the top of each. Then, use a stopwatch to keep you on track as you blurt for each section.*





How to **effectively** and **efficiently** use

FREE RECALL

Explain It



- Try to logically and clearly explain a whole topic from scratch to a peer, parent/carer or even just yourself (recording this on a voice note adds extra pressure here!).
- It's easy to identify areas you aren't as strong on, as you'll find them harder to explain - note these down work on in the future.

How to **effectively** and **efficiently** use

PRACTICE QUESTIONS

*Using practice questions as part of your revision allows you to both **retrieve** and then **apply** knowledge to both **familiar** and **unfamiliar** situations - it is the final 'step' of the process. Importantly, they also allow you to **practice** the **skills** that are required in a subject.*



How to **effectively** and **efficiently** use

PRACTICE QUESTIONS

Where do I find practice questions?

- For key stages 4 and 5, the most common place is from past exam papers, which can be found on exam board websites.
- However, don't forget that you can also find further practice questions in other places, such as textbooks, revision guides and revision websites.
- Indeed, for key stage 3, these will be the main source, as past papers won't be applicable yet!



How to **effectively** and **efficiently** use

PRACTICE QUESTIONS

How can I get the most out of using practice questions?

- Firstly, answer the questions from memory in timed conditions.
- Then, allow yourself the chance to look at your notes/extra time to add to your answers in pencil, so you know what parts you could do with/without these aids.
- Finally, mark and correct your work in a coloured pen.
- *It's good to leave this final step until the next day, as some space makes you more objective when applying the mark scheme.*



Learning to Learn: Effective Revision at UGS

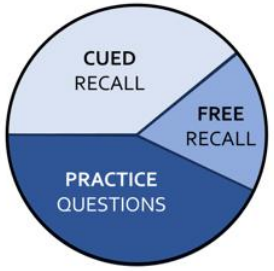
Each **subject** will require a **different balance** of them to be used, depending on the knowledge and skills to be learned and applied.

The **best bet** for **effective** and **efficient** revision is

SPACED RETRIEVAL PRACTICE

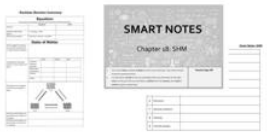
PHYSICS

What is the recommended balance of techniques?



Start off with lots of cued recall

- Flashcards are great for learning all the definitions, equations and facts you need to know .
- At both GCSE and A-Level, we provide a smart note structure for you to fill in for each topic – make sure to use these once you have filled them in!



Free recall is great for seeing what you really know off by heart

- Blurt everything you can remember from a topic before checking back with your notes or another source – if you can remember it without prompting, you really know it well.

Past paper questions are the key to success – but only after learning the facts!

- Completing as many practice questions and past papers as possible is very important, BUT make sure you haven't skipped the learning part – cued recall needs to come first to make practice questions as valuable as possible!
- When you do complete past paper questions, make sure to try them without your notes first. Then, see what you can add in extra with your notes – use a different colour – before marking and fully correcting your attempts using a mark scheme.

Recommended Resources

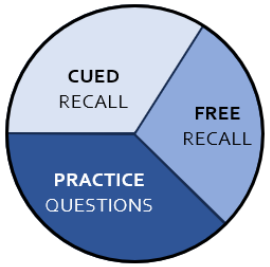
- *Physics & Maths Tutor has loads of practice questions, but also has ready made flashcards too.*
- *For GCSE, Educake is a great quizzing resource, whilst for A-level, UpLearn builds in retrieval practice as you use it.*
- *The Physics Student SharePoint also has **lots** of extra resources, and don't forget you also have access to the online textbook through Kerboodle*

The **best bet** for **effective** and **efficient** revision is

SPACED RETRIEVAL PRACTICE

KS3 ENGLISH

What is the recommended balance of techniques?



Start off with cued recall

- Use this to solidify your knowledge of the relevant context (this will depend on your year group).
- Flashcards are great for revising key language techniques and their meanings
- Knowledge organisers are also provided on SharePoint – cover over the content and see what you can rewrite from memory using the prompts!



Next move onto free recall

- Use this to revise and recall the context information you have learned,
- It also allows you to practise applying language techniques such as writing an extended metaphor.



Finally, practice!

- Use these to practise your creative writing skills; you could use images of your choice and write a piece of description.
- To practise analysis, you should look back at the poems you have already studied and have a go at analysing the text. You should use the resources from lessons to help you do this.



What else do students need to do to succeed in English?

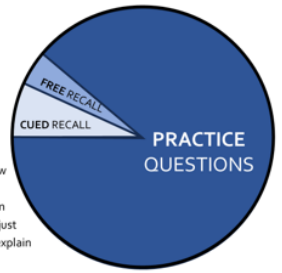
READ, READ, READ!

The **best bet** for **effective** and **efficient** revision is

SPACED RETRIEVAL PRACTICE

KS3/4 MATHS

What is the recommended balance of techniques?



Maths does need a little bit of recall!

- Use flashcards and online quizzes (e.g. on Corbett Maths or DFM) to make sure you know your stuff, or cover over your notes and test yourself rather than just reading through them
- It's important though to understand, and not just memorise – for example, make sure you can explain why method works, not just how to do it.



Practice questions are the main focus

- Use exam style questions - practise under timed conditions and check your answers with mark schemes to identify gaps to prioritise.
- Always show full workings - even if your final answer is wrong, you can still gain marks for correct steps, and you'll be able to figure out where things went wrong when you are self-assessing.
- You should also use DFM and other resources to find the most relevant questions for you in a topic - key skill numbers from pre-tests, topic lists etc. tell you exactly what to work on, with QR links.
- This will ensure you target weak areas and spend extra time on the topics you find hardest, rather than just repeating the ones you're comfortable with.

Recommended Resources

- *Dr Frost Maths*
- *Corbettmaths – Videos, worksheets, 5-a-day and much more*
- *Maths Genie - Free Online GCSE and A Level Maths Revision*
- *1st Class Maths - Free online GCSE Maths Revision*
- *onmaths | Maths revision and support*
- *Physics & Maths Tutor*
- *PixiMaths | Free Maths Teaching Resources | Homepage | Oakham*
- *Bicen Maths | Home*

Other hints & tips

- *Create a timetable and stick to it - short, focused sessions work best. Then, stay consistent - little and often is better than last-minute cramming!*

The **best bet** for **effective** and **efficient** revision is

SPACED RETRIEVAL PRACTICE

ART & TEXTILES

What is the recommended balance of techniques?



Art & Textiles are skills-based subjects, with no written exam. Therefore, practice is key, to ensure you are developing as an artist/designer. The main areas to focus on are:

Investigating and Analysing (AO_1)

- Researching Artists/Textile Designers: studying the work, themes, materials and techniques of historical and contemporary artists/designers
- Critical Analysis: explaining why you like an artist/designer's work and how it connects to your own ideas.



Refining and Experimenting (AO_2)

- Material Testing: experimenting with a wide range of media—such as acrylics, watercolours, printmaking, digital design, or clay for Art, and embroidery, applique, batik, tie-dye, fabric painting, printing, weaving, knitting, or mixed media for Textiles.
- Refining Ideas: learning how to adapt, improve, and change your ideas as your project progresses.

Recording Observations (AO_3)

- Drawing Skills: using observational drawing in various forms, such as developmental sketches, cross-contour drawing, or precise renderings for Art, or fabric studies, pattern designs, colour experiments, and sample pieces for Textiles, to record and explore ideas.
- Written Annotation: keeping concise notes that explain your thought process, reflections, and the next steps in your project.



Presenting a Personal Response (AO_4)

- Realizing Intentions: bringing all your research, experiments, and recordings together into a coherent, meaningful final piece



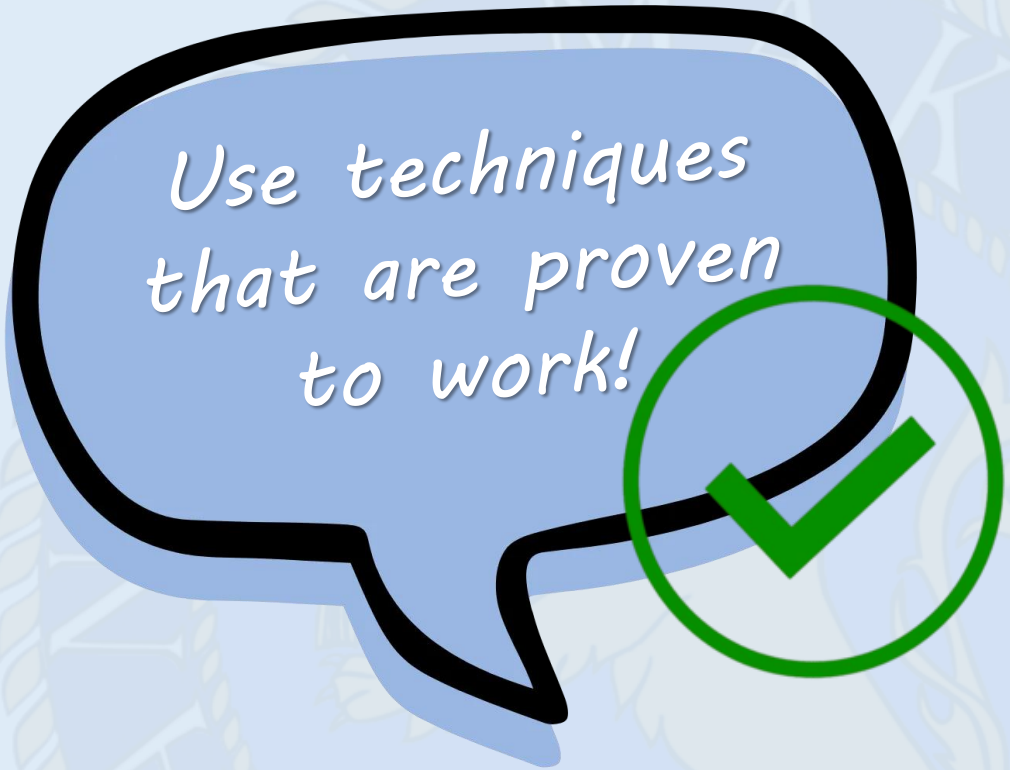
What else do students need to do to succeed in Art & Textiles?

- *Look at past examples of student work and projects*
- *Respond to stimuli – visit galleries and exhibitions for inspiration!*

SPACED RETRIEVAL PRACTICE: *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

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SPACED ***RETRIEVAL PRACTICE:*** *CUED RECALL, FREE RECALL, PRACTICE QUESTIONS*

What questions do you have?

And pick up a handout on the way out!