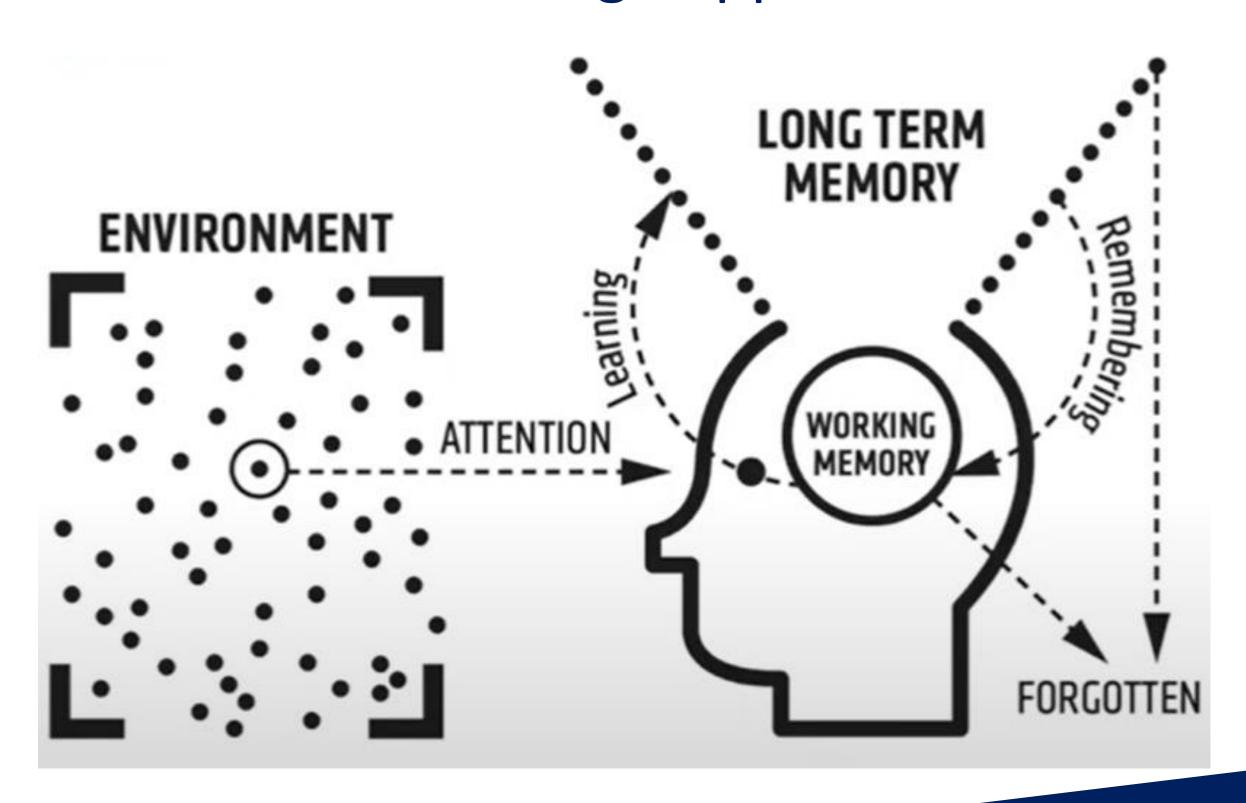
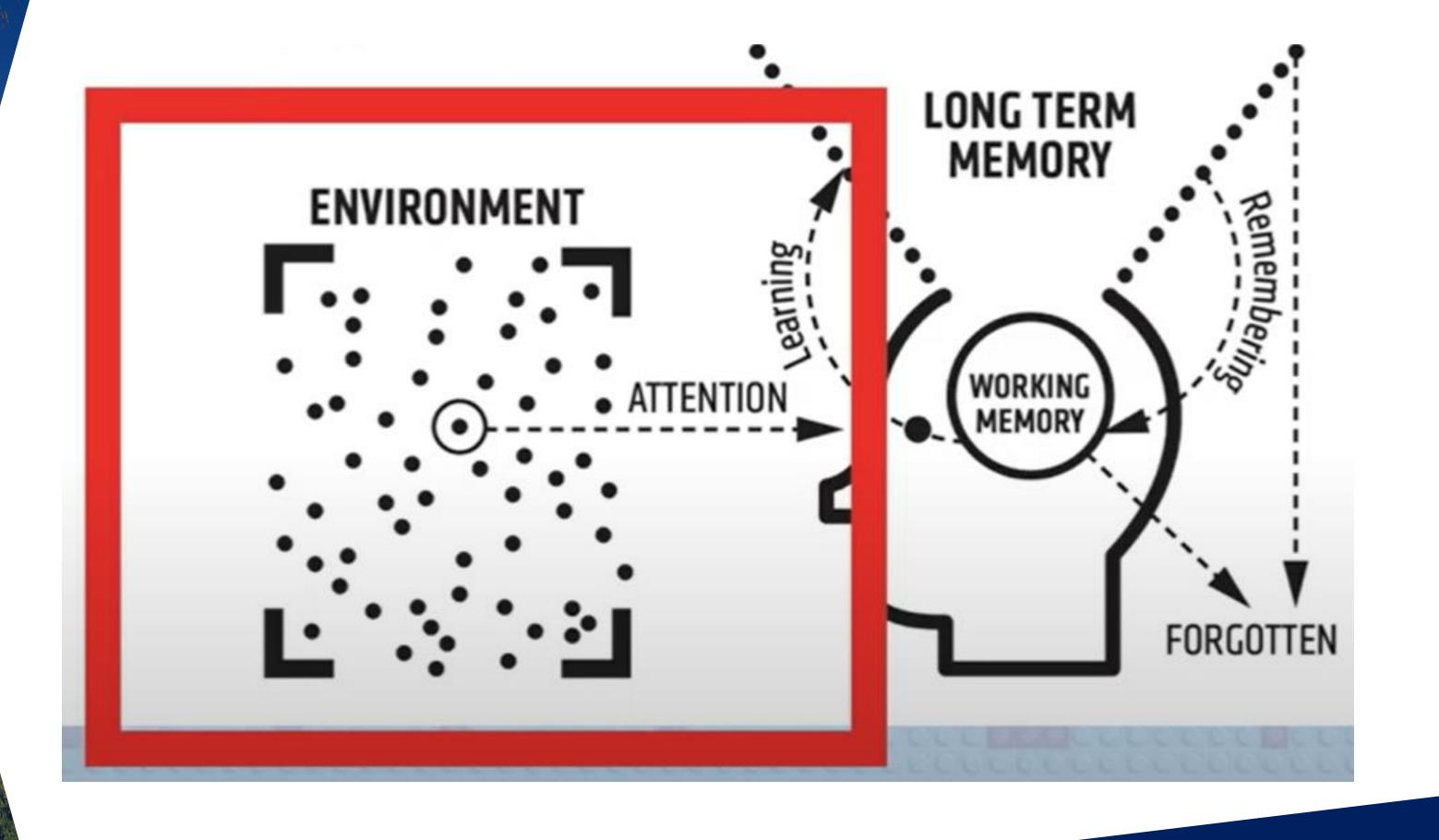


How learning happens





Tips for effective revision

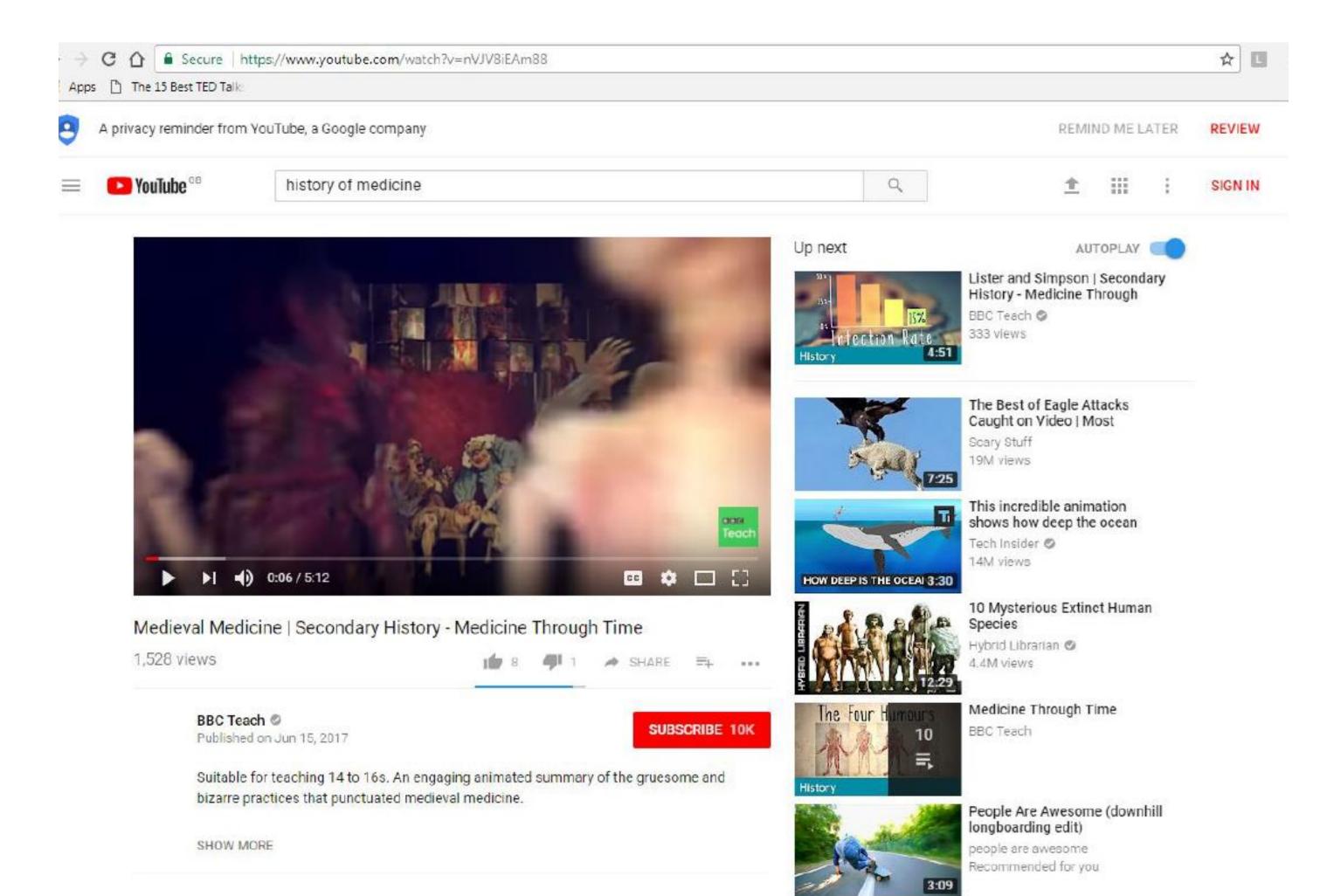
Limit distractions





A 2014 study (Thornton et al) found that just having a mobile phone nearby can lead to a 20% reduction in attention, concentration and performance.





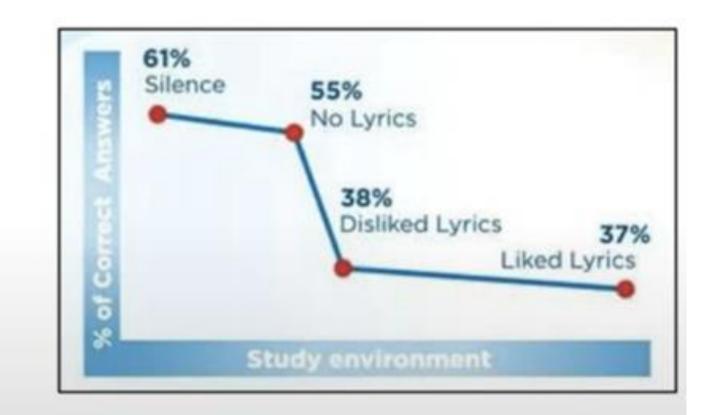
Tips for effective revision

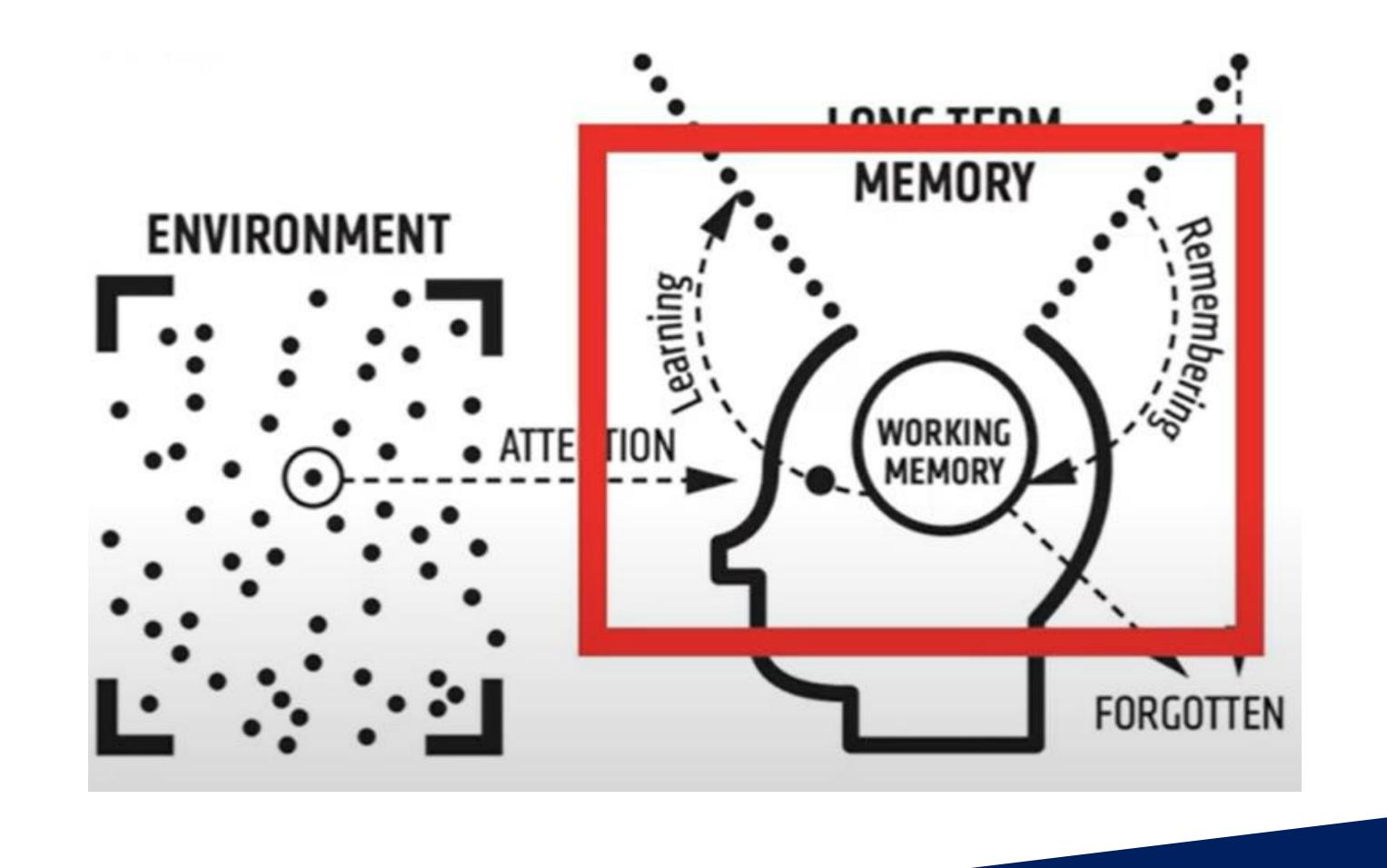
A 2014 study (Perham and Currie) compared 4 study groups:

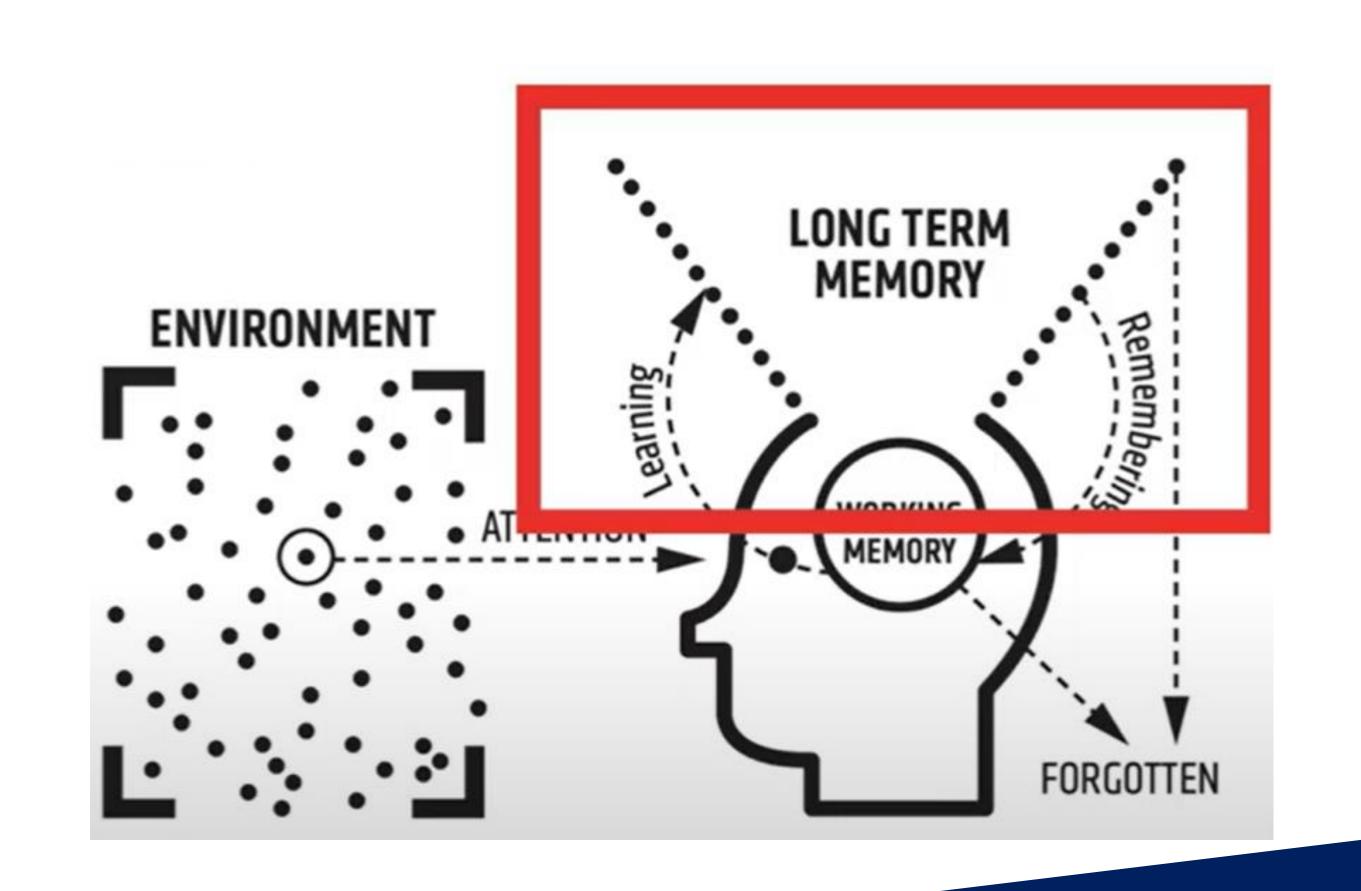
- revised in silence
- 2. Revised to songs they liked
- Revised to songs they didn't like
- Revised to music without lyrics.

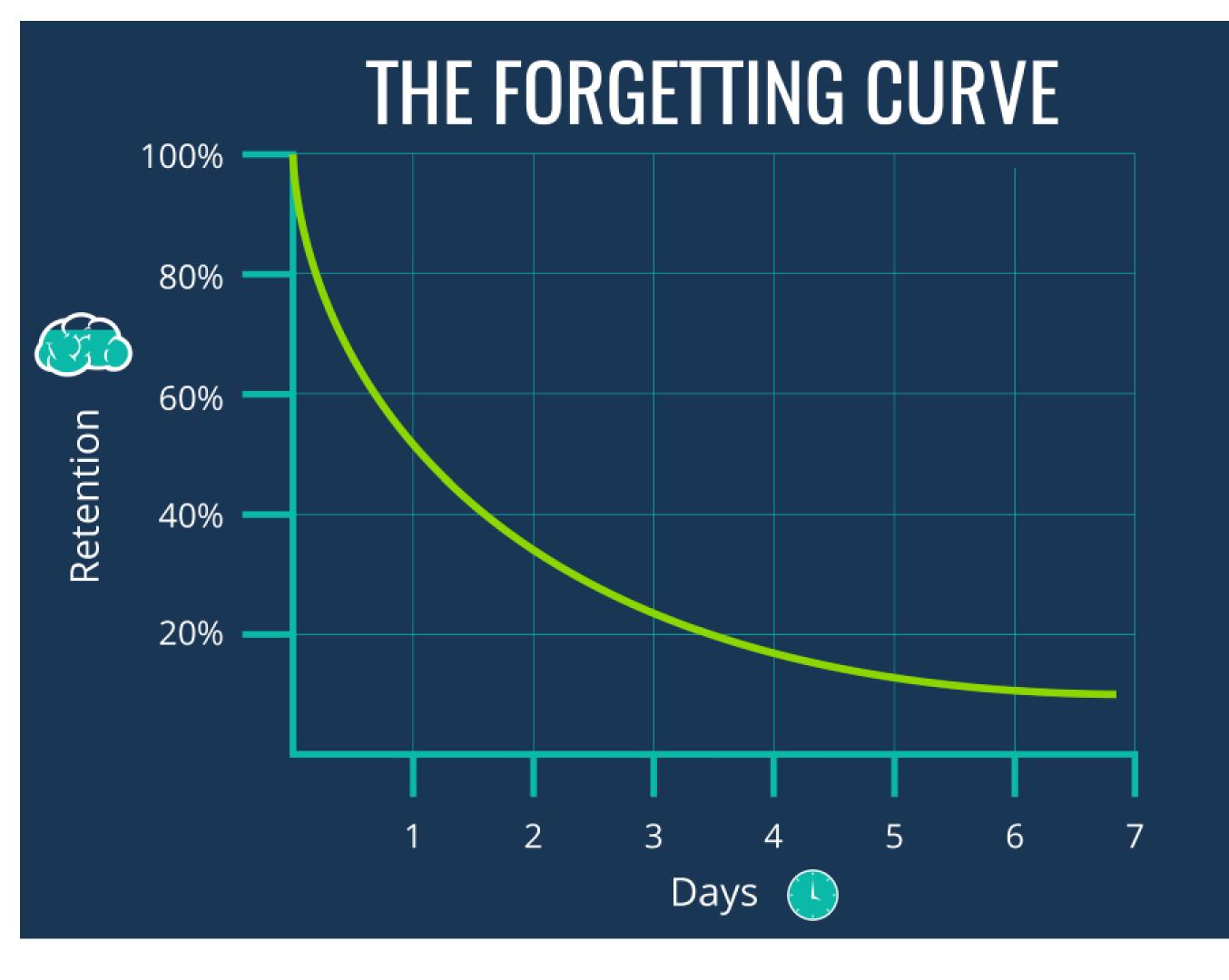
Despite what many students think, listening to your favourite songs is not the best way to revise; music takes up processing space in the brain, leaving less space to process revision materials.



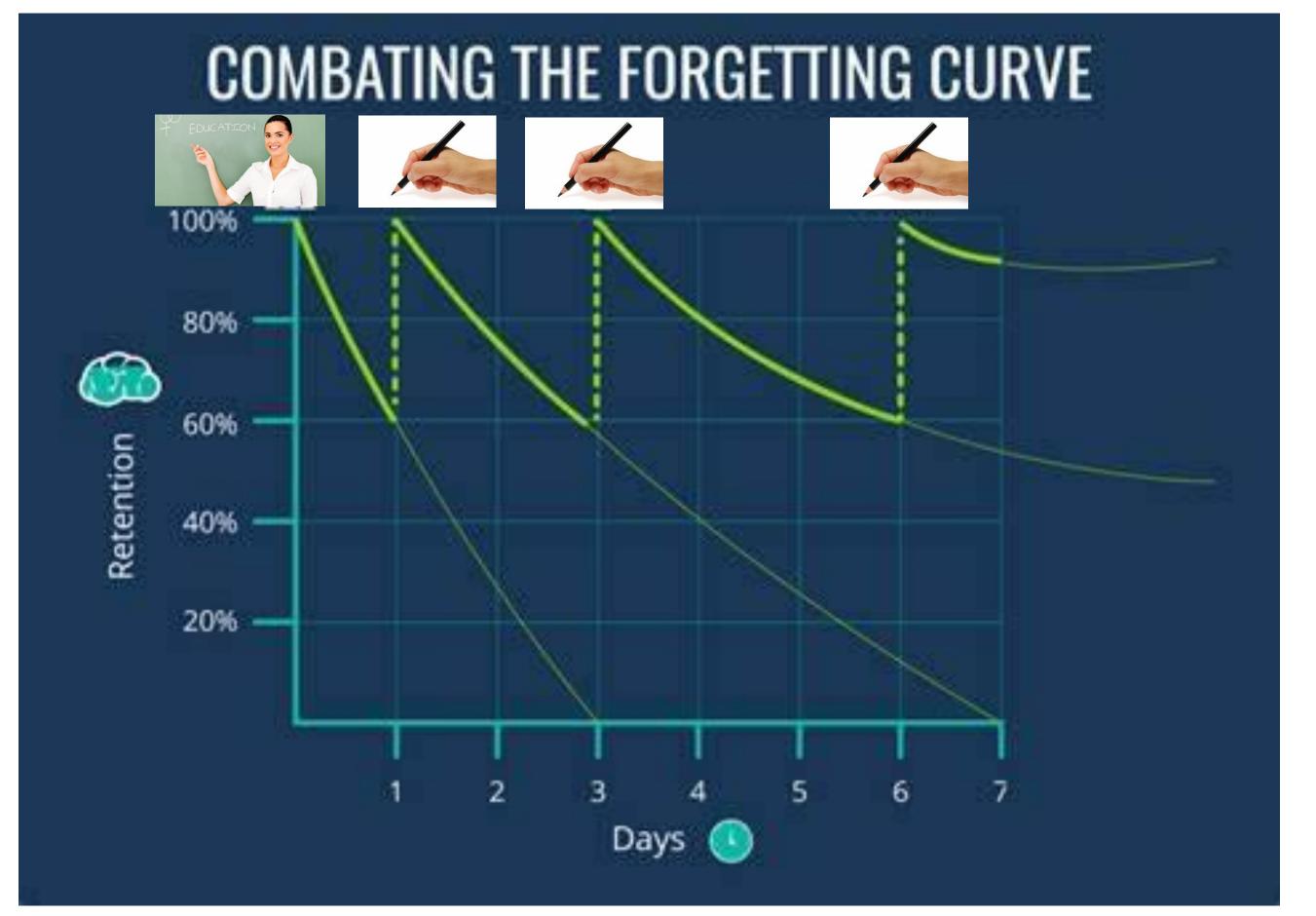








Scientists have studied how we learn and have found that, no matter how clever we are, over time, everyone will start forgetting information they have learnt.

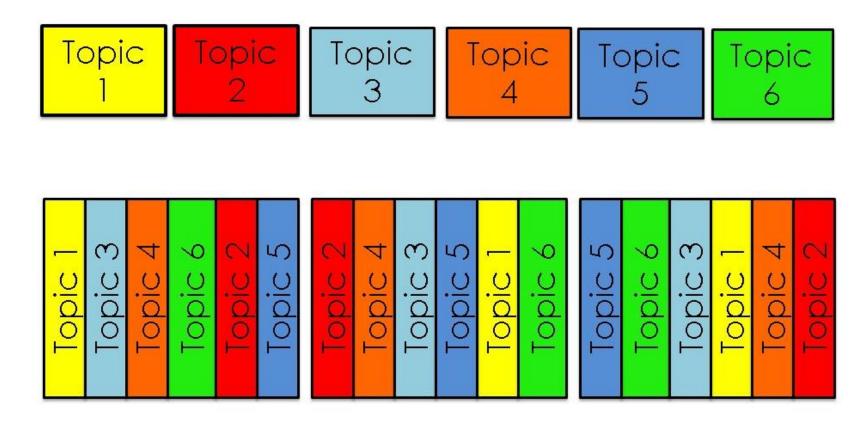


Each time we revise, the information "sticks" better in our brain and moves from our working memory, to our long term memory. The more we revise, the more we remember.

Interleaving

Interleaving means switching between topics when revising, which has been shown to improve long term learning

Blocking vs Interleaving



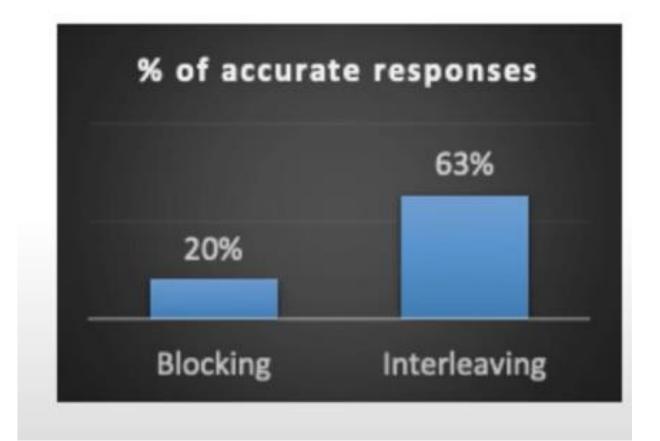
Tips for effective revision

Interleaving

To improve your results further, also consider interleaving. This is where you mix up the subjects and topics you revise

e.g. 30 minutes of Macbeth in English, 30 minutes of ratio in maths, 30 minutes of body systems in PE - rather than 90 mins of one subject





Your child needs to make sure they know where their strengths and weaknesses are.

Traffic lights / RAG rating

Contents

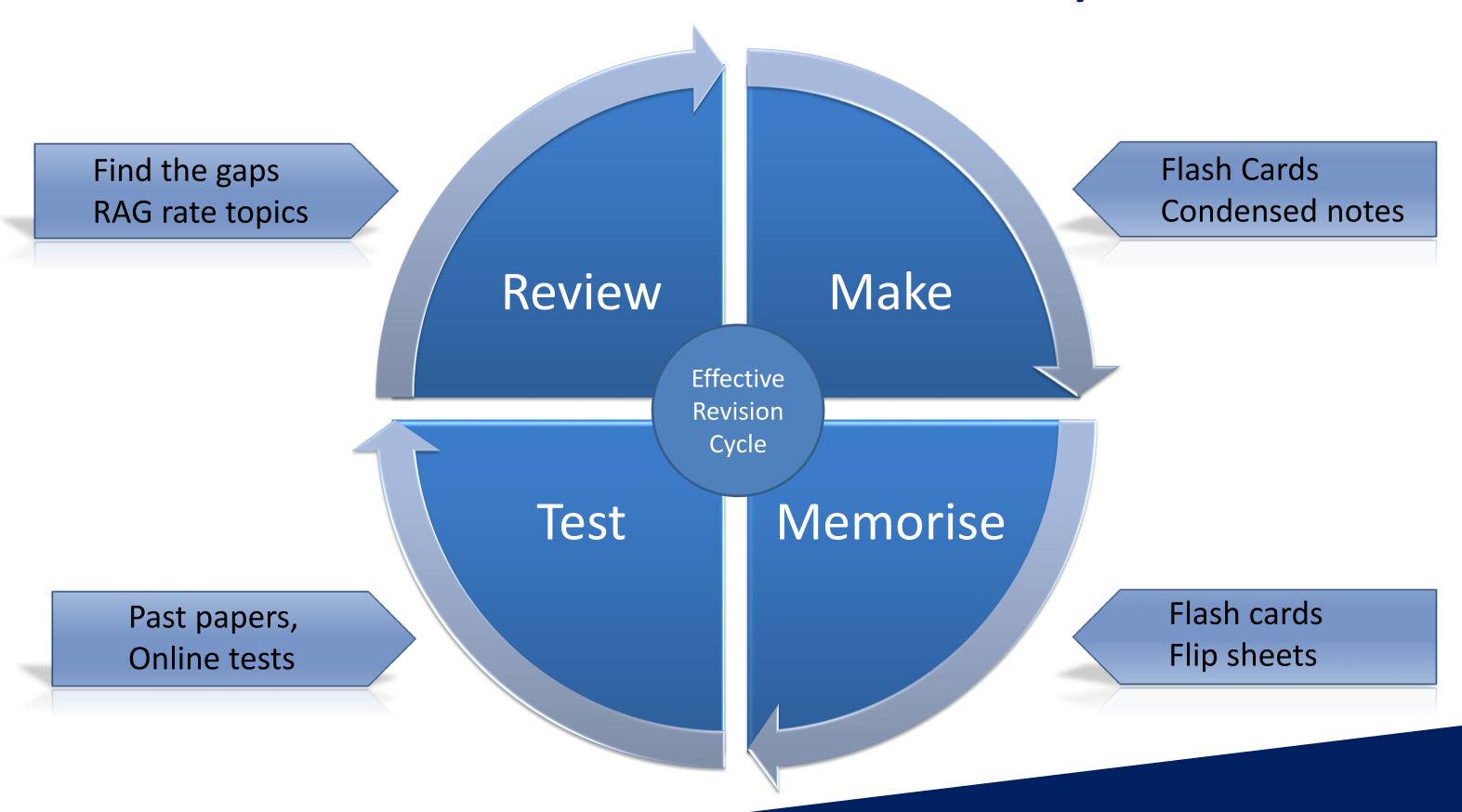
OOTH	CTITO
	Topic B4 — Bioenergetics
1	Photosynthesis and Limiting Factors
2	The Rate of Photosynthesis
3	Respiration and Metabolism
4	Aerobic and Anaerobic Respiration
5	Exercise
6	Revision Questions for Topics B3 & B4
8	Maria DE Maria antonia and Dannara
9	Topic B5 — Homeostasis and Response
10	Homeostasis
	The Nervous System
	Synapses and Reflexes
	Investigating Reaction Time
	The Endocrine System
	Controlling Blood Glucose
	Puberty and the Menstrual Cycle
	Controlling Fertility
	More on Controlling Fertility
	Adrenaline and Thyroxine
	Topic B6 — Inheritance, Variation and
	Evolution
	DNA
	Reproduction
22	Meiosis
23	X and Y Chromosomes
	Genetic Diagrams
24	More Genetic Diagrams
	Inherited Disorders
	Variation
	Evolution
	Selective Breeding
	Genetic Engineering
	Fossils
	Antibiotic-Resistant Bacteria
	Classification
	Revision Questions for Topics B5 & B6
	Topic B7 — Ecology
	Competition
	Abiotic and Biotic Factors
	Adaptations
	Food Chains
	Using Quadrats
	Using Transects
	The Water Cycle
	The Carbon Cycle
	Biodiversity and Waste Management
43	Global Warming
44	Deforestation and Land Use
45	Maintaining Ecosystems and Biodiversity
46	Revision Questions for Topic B7
47	
	2 3 3 4 5 5 6 6 8 8 9 9 10 10 11 12 12 13 13 14 15 16 16 17 18 19 20 21 22 23 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 42 45 46

- Mark green the topics you feel confident
- Mark amber the ones you are less sure of
- Mark red the ones you struggle with.

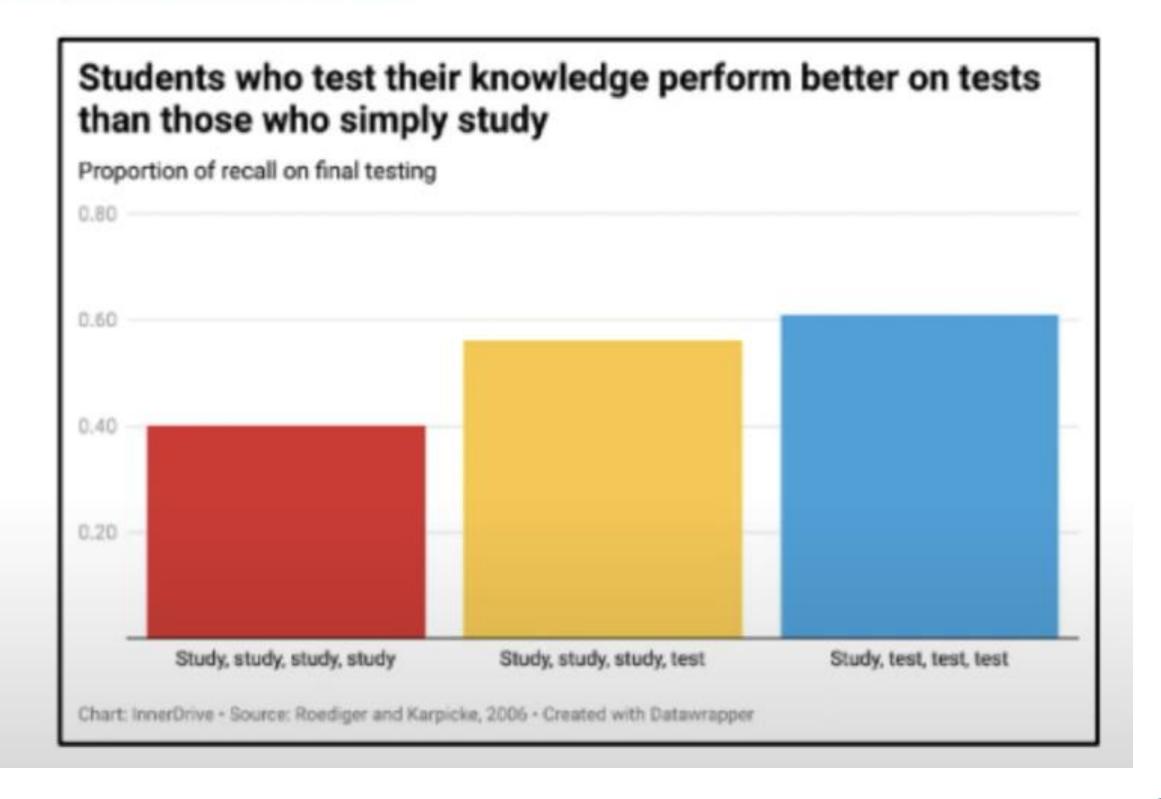
Next steps

- Quiz your self on the green ones retrieval practice.
- Bullet points and flash card your notes on the amber ones before you try quizzing yourself.
- Watch videos, go to revision sessions or ask your teacher for help on the red topics before you can try recalling the information in revision.

The Bolsover Revision Cycle

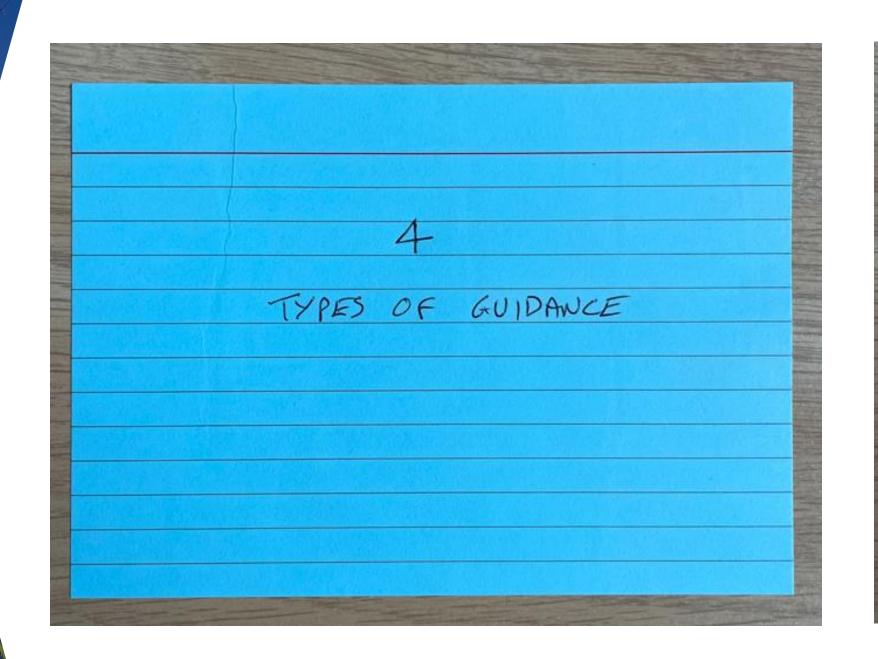


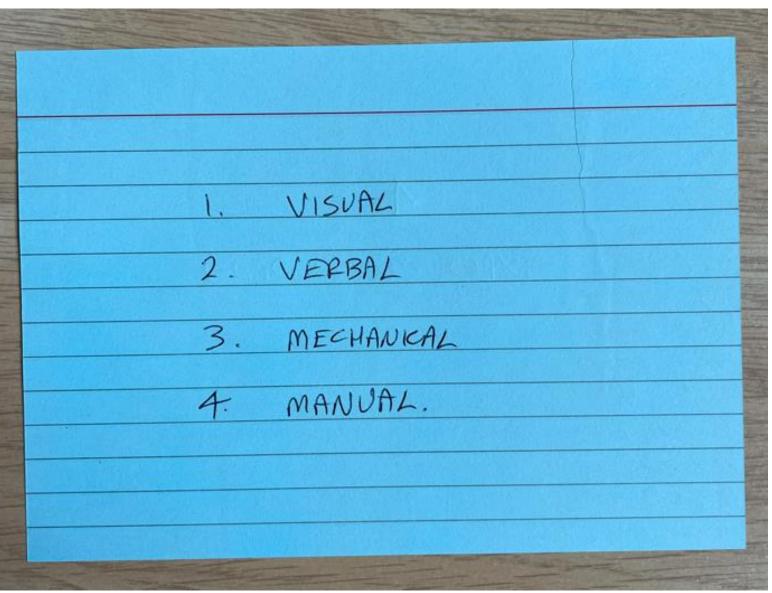
Tips for effective revision



Let's look at some specific revision strategies

Flash Cards

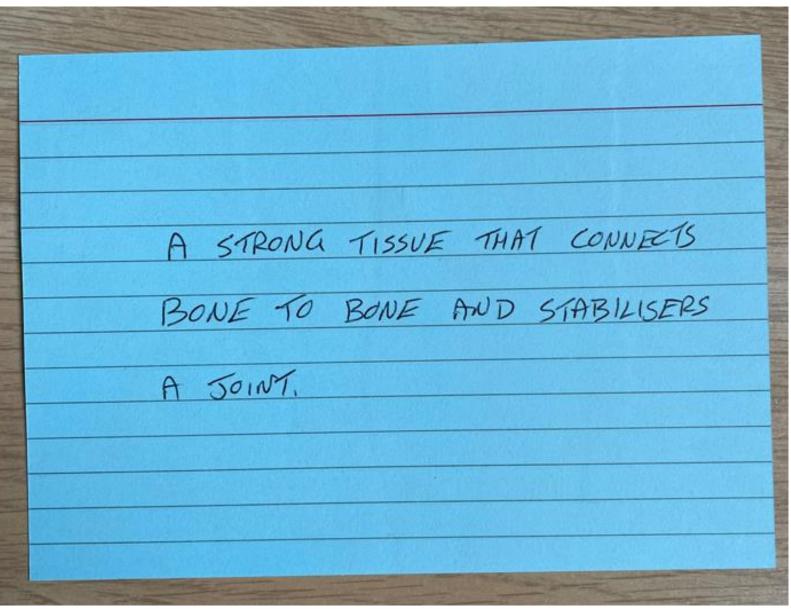




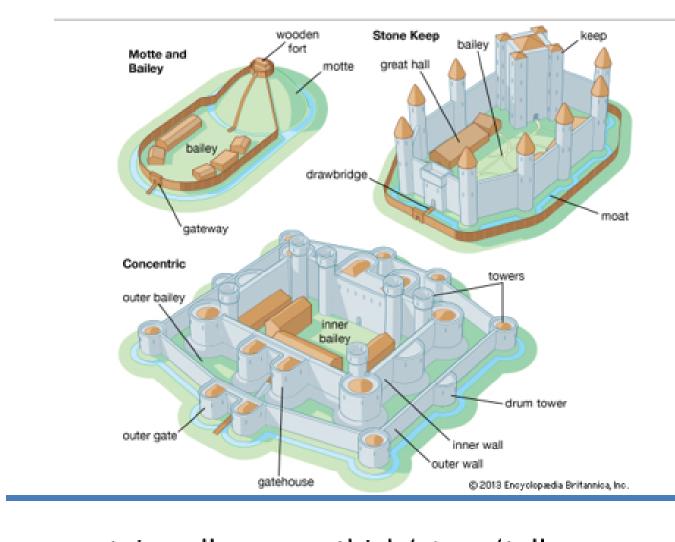
Where to find the information to go on the cards?

Flash Cards





Describe the key features of a castle.



Castles defended themselves in a number of ways.

Firstly, they often had a think curtain wall surrounding the main part of the castle. This was thick, high and made of stone. Another feature castles had were tall towers. These were very high and again made of thick stone to make it difficult to attack. Sometimes, castles were surrounded by deep moats, often filled with water, but sometimes without water. Even if moats had no water in they were so steep that it would have been impossible to climb up. Many castles also had gatehouses. These had lots of features which helped to protect a castle including crenellations (which allowed archers to hide behind before shooting), murder holes (for dropping hot sand down) and portcullises (big metal gates).

2

curtain wall

thick/stone/tall

towers

tall/thick/stone

moats - water or dry

steep/hard to climb

gatehouses

crenellations murder holes portcullis

throwing metal gate things

curtain wall

thick/stone/tall

towers

tall/thick/stone

moats - water or dry

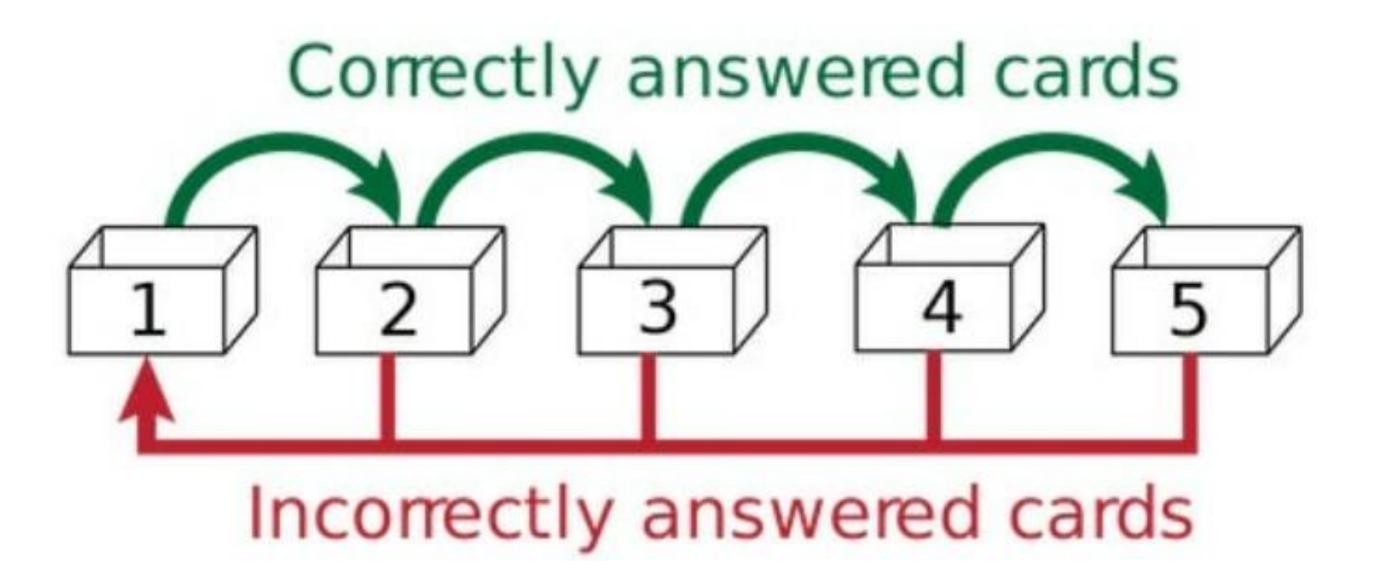
steep/hard to climb

gatehouses

crenellations murder holes portcullis

throwing metal gate things

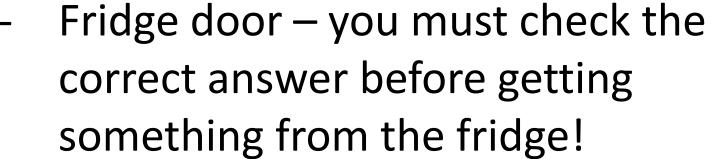
How to use flash cards





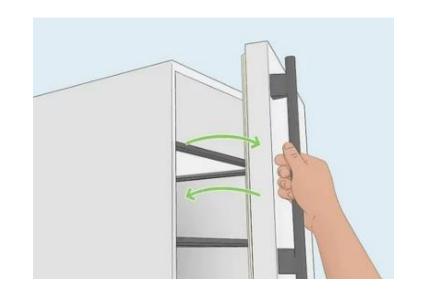
Top tips:

 Blue tack flash cards around commonly used places in your house, i.e.



- Pillow – you must check the correct answer before getting into bed.

 Next to your phone charger – you must check the correct answer before plugging in your phone!







Where can I get flash cards from?

School will provide an initial sample.

You can purchase more at Amazon* – next day delivery! 100 for £3.99!

*other retailers are available.

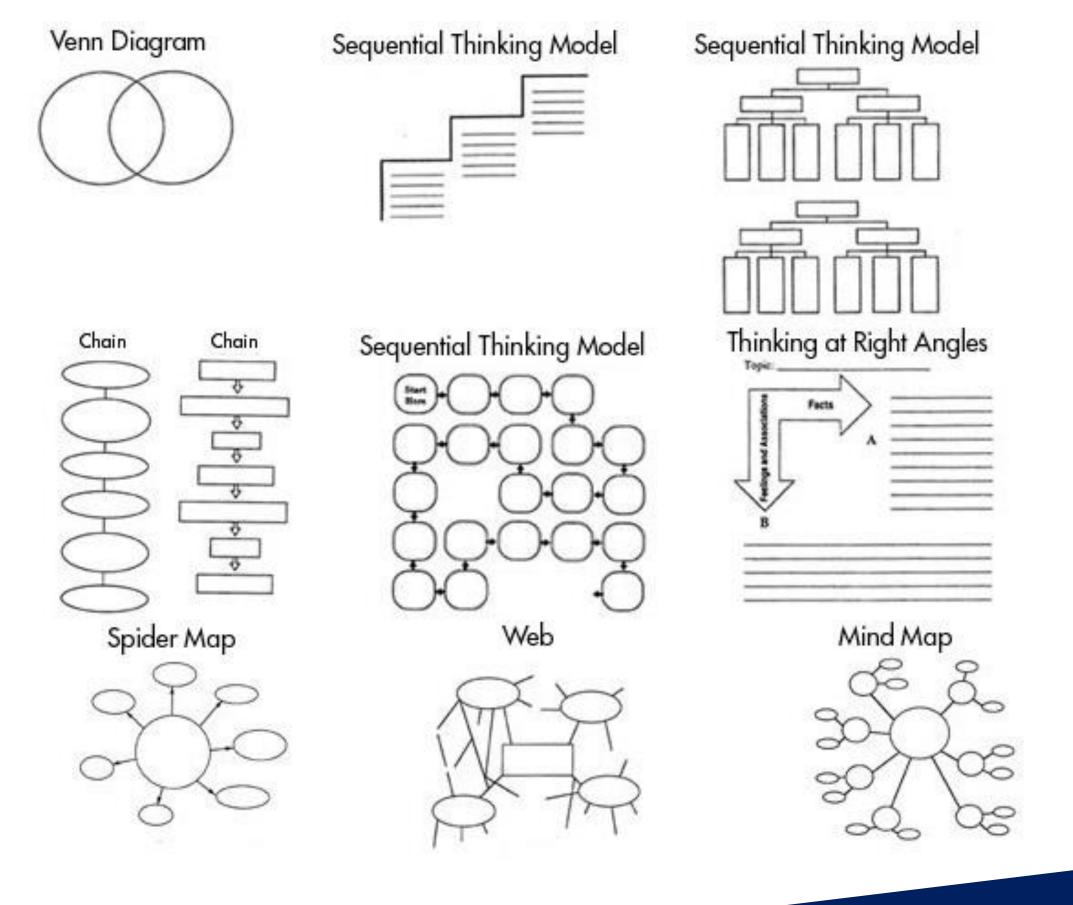


KAV 6x4 inces 100-Sheet
Coloured Record Flash Cards Study Revision, Indexing, for
Home Office and School Use ...

Graphic Organisers

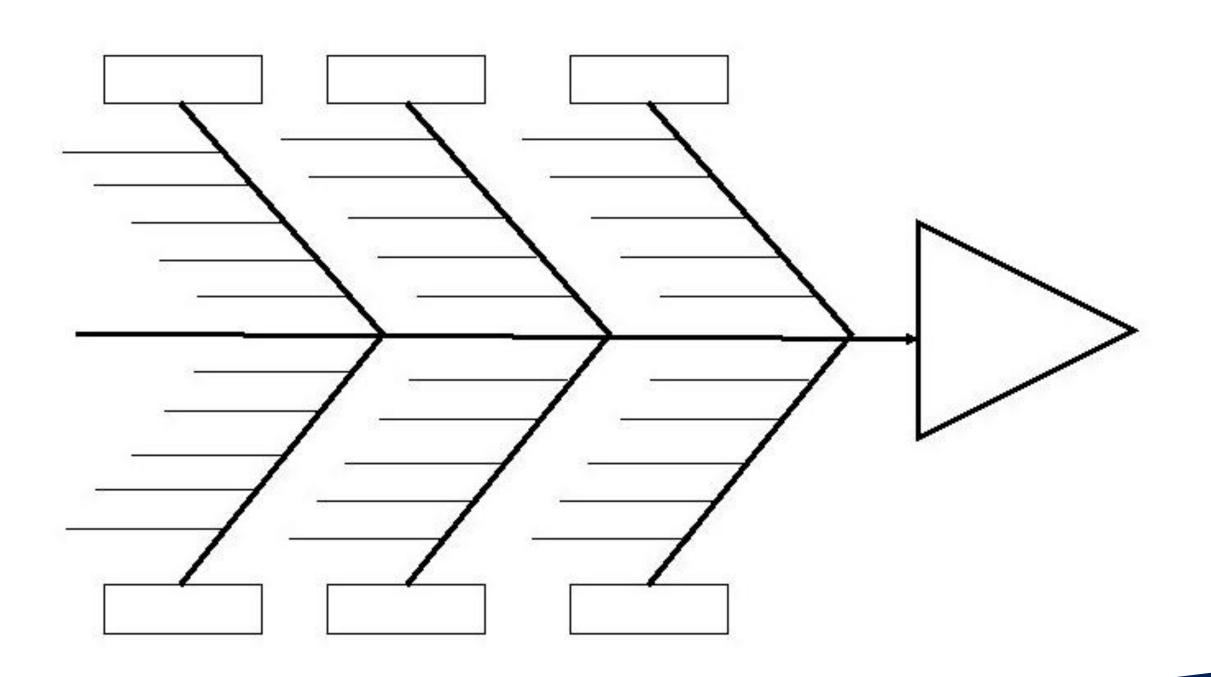
Graphic Organisers get you to **TRANSFORM** information and provide a different way of seeing and thinking.

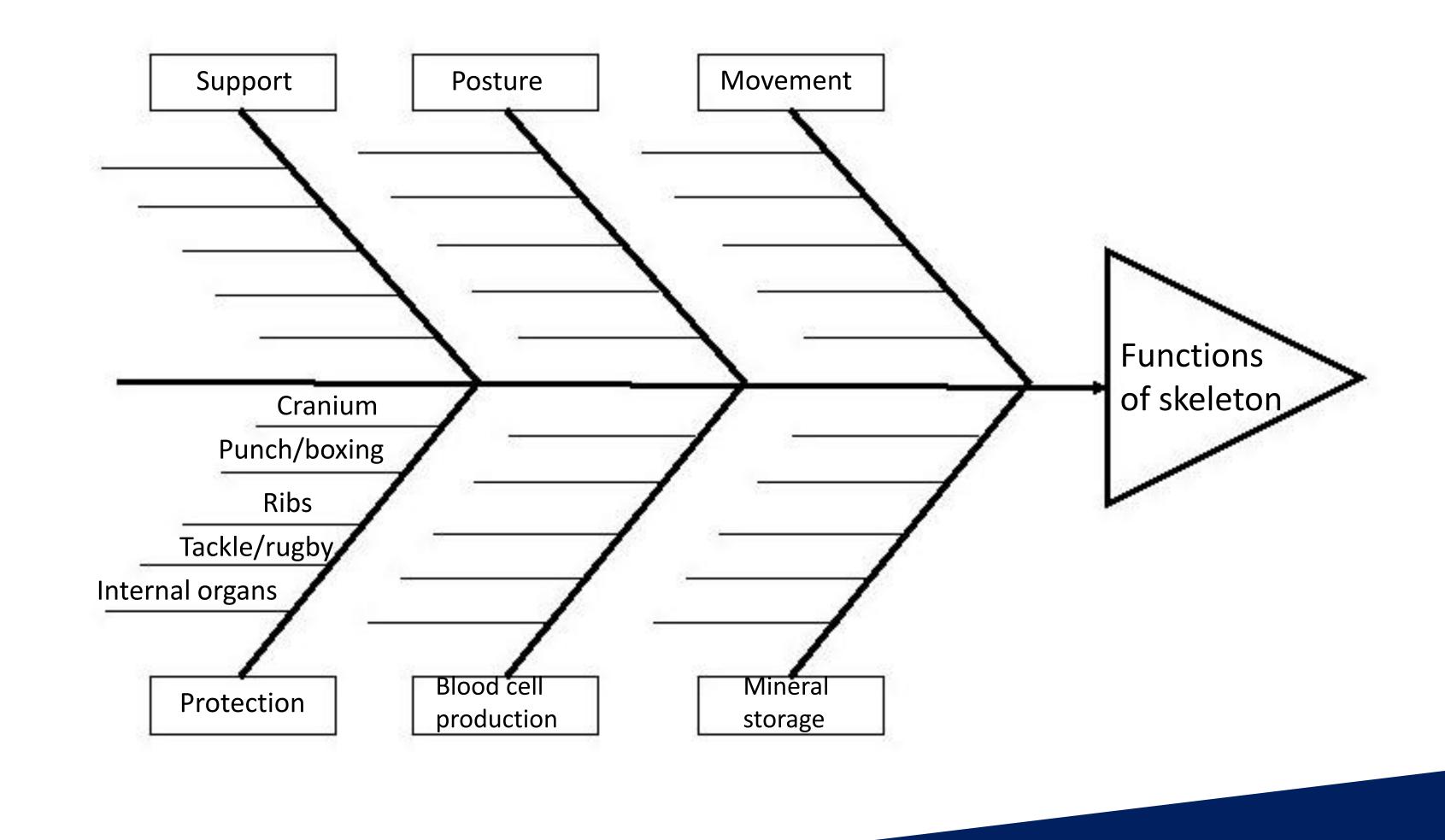
There are templates for lots of these in the revision section on our school website.



This technique helps to breakdown larger revision topics into the main facts

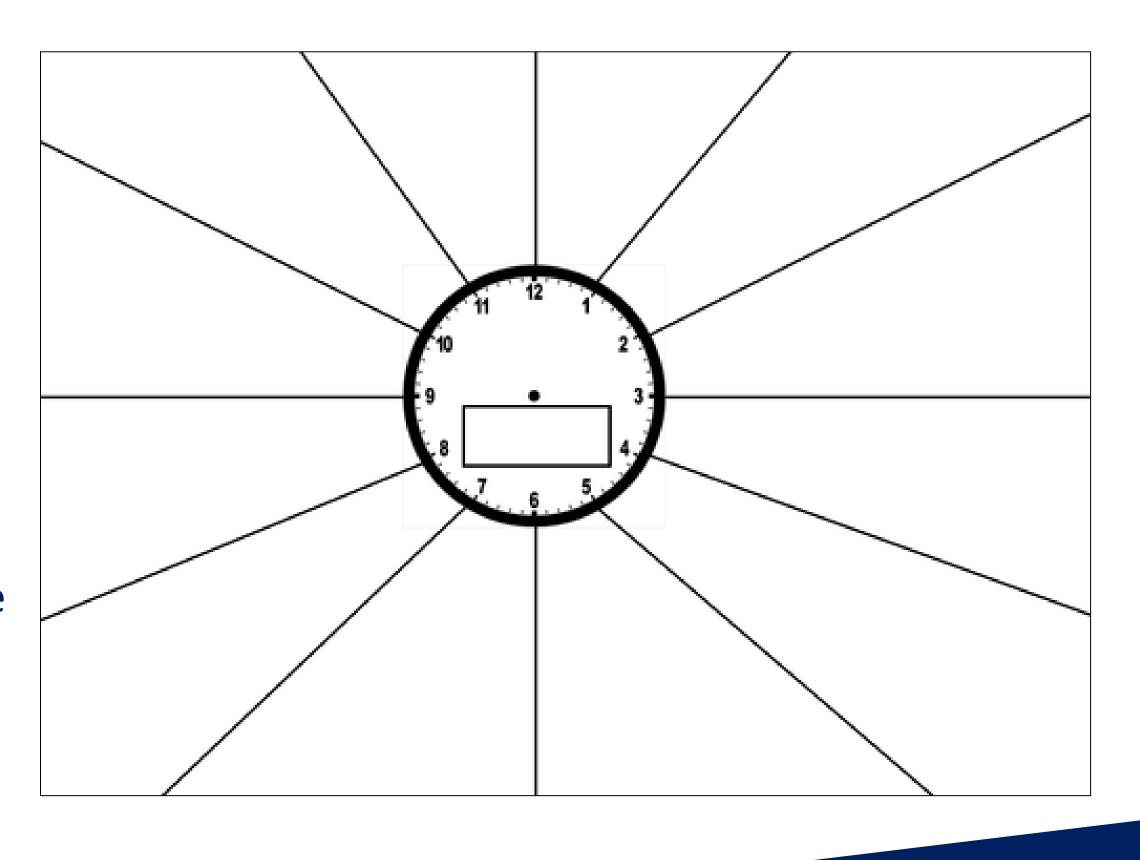
Fishbone diagram

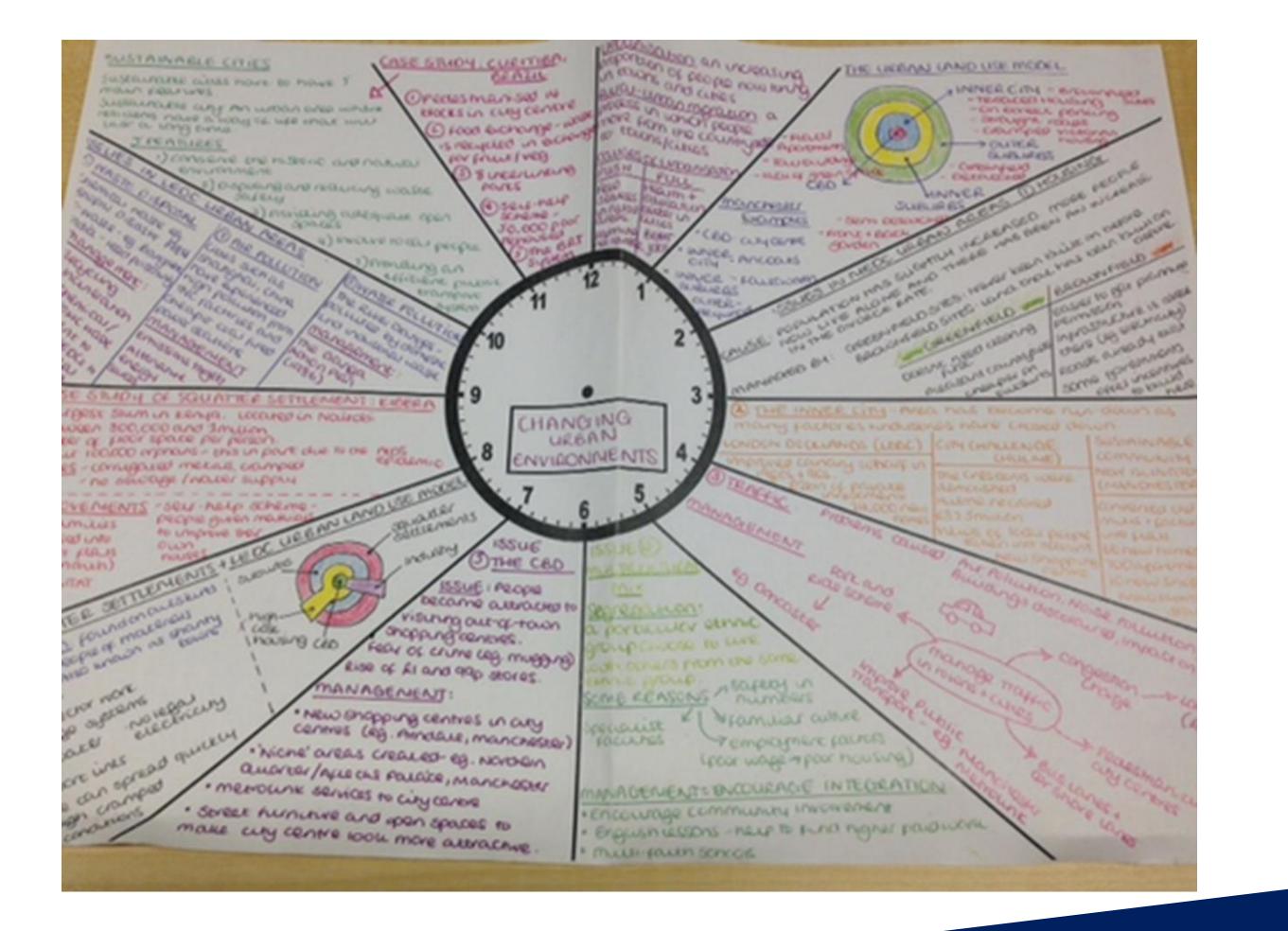




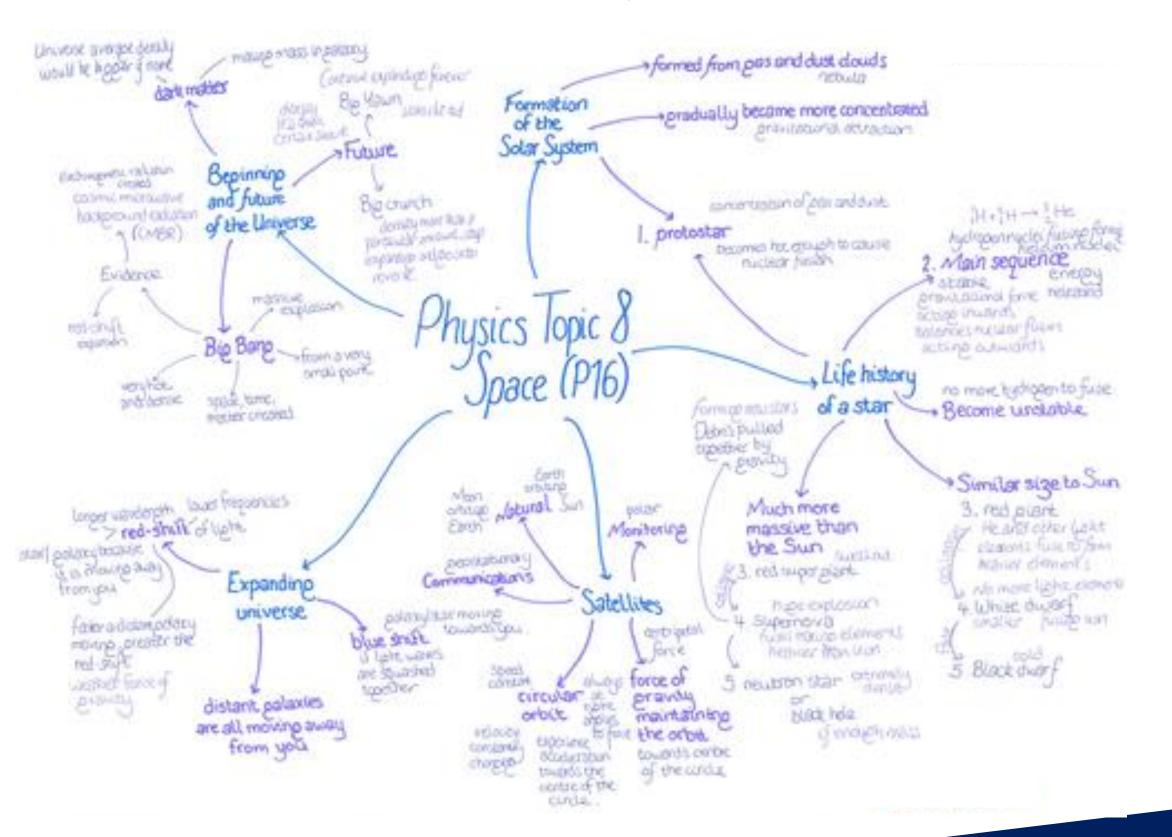
Revision Clock

- Revise a topic.
- Put 12 key themes in the segments – one theme per segment.
- Give yourself 5 minutes per segment to write down everything you can remember about the theme.
- Change segment every 5 minutes, with a short break after 30 minutes.
- Check your notes against the revision guide.

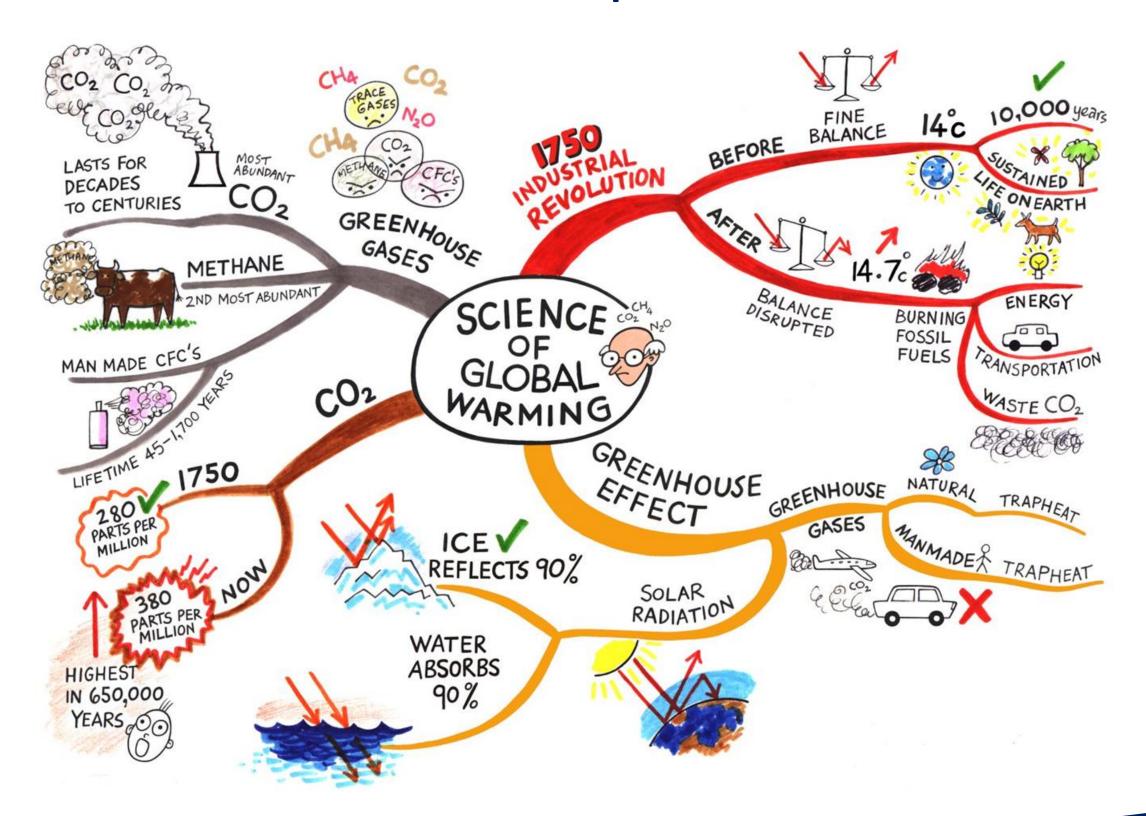




Mind Maps



Mind Maps





Cornell Notes

Subject	Торіс	Date
---------	-------	------

Key words	Notes

Summary

Cornell Notes

How to use a revision guide

RAG the content pages
Then pick one of the topics based on this (note which ones you've covered)

Condense notes, mind map, flash card key words
Have a go at the Qs at the end of chapter (or question booklet)

Then BBC Bitesize topic and past paper questions

Over time continue to test yourself on the flash cards

ea of high concentration to an area of low

which is in a high concentration in iving at the alveoli, diffuses into the alveoli to

n a high concentration in the alveoli, diffuses be collected by the red blood cells.

y muscles

at rest: the **diaphragm** and **intercostals**.

Tact, the effect is to draw air into the lungs (see

, function and effect of respiratory muscle iration

Fu	inction	Effect
th	crease the volume of e chest cavity which ecreases the pressure side the lungs	Air is drawn into the lungs (inspiration)

intercostals relax, the rib cage moves in and e chest cavity volume, which in turn raises the of the lungs (expiration). **Diffusion** Movement of gases across a membrane from an area of high to low concentration

Breathing frequency (f)

The number of inspirations or expirations each minute (breaths/min)

Tidal volume (TV)

The volume of air inspired or expired each breath (ml)

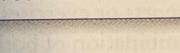
Minute ventilation (VE)

The volume of air inspired or expired each minute (l/min)

Typical mistake

Carbon dioxide moves out of the blood into the alveoli to be expired and oxygen moves into the bloodstream from the air inspired. Make sure you get them the right way round!

Key definitions.
These are suitable for flash cards.









Now test yourself

[1]

- 1 Compare the duration of aerobic to anaerobic exercise.
- 2 Give two examples of anaerobic exercise.
- 3 Using a sporting example, describe the intensity and duration of aerobic exercise.
- 4 What is a disadvantage of anaerobic exercise?
- 5 True or false? To perform anaerobic exercise oxygen is required to create energy.
- 6 True or false? Aerobic activity raises heart rate and breathing rate and can be sustained for a long period of time.
- 7 True or false? Throwing the javelin is an anaerobic activity.

Exam practice

- 1 Which chamber of the heart is responsible for ejecting blood into the aorta?
 - a) right atrium
 - b) left atrium
 - c) right ventricle
 - d) left ventricle.
- 2 What is the volume of air expired from the lungs per breath measured as?
 - a) breathing frequency
 - b) stroke volume
- c) tidal volume
- d) minute ventilation.
- 3 Which of the following activities is an example of anaerobic exercise?
 - a) 100 m sprint
 - b) 200 m sprint
- c) discus
- d) all of the above.
- 4 Describe the pathway of air through the body to the lungs.
- 5 Define cardiac output and state how it can be calculated.
- 6 Identify one role of red blood cells.
- 7 Give one common feature of capillaries and alveoli.
- 8 Describe the role of the diaphragm and intercostals in creating one breath in (inspiration).
- 9 Using practical examples, compare the intensity and duration of aerobic and anaerobic exercise.

At the end of each chapter

- to win at all costs as a result of the real
- the belief that other performers are doing the same or the belief that they can get away with it.

Table 2.1.3 Three typical drugs used in sport with the effects on performance and side effects

Table 2.1.3 Three typical drugs used i		Effects on performance	Negative side effects	
Type of drug	Example		Aggression and mood swings	
Anabolic steroids	Weightlifters, throwers, sprinters and 50 m swimmers	Increased muscle mass and strength Increased speed of recovery Increased intensity and duration	Acne and hormonal problems Liver damage and heart failure Dry mouth, dizzy spells, tiredness and stomach problem	
Beta-blockers	Snooker, archery and shooting	of training Decrease blood pressure, heart rate, muscle tremors and		
		anxiety	at a shlows and anxiety	
Stimulants	Motor sport drivers, sprinters and long-distance cyclists	Increased alertness, focus and concentration Increased use of fats and endurance of performance	Sleep problems and anxiety Stomach problems	

The impact of drug use in sport can affect both the athlete and the sport itself. In addition to the side effects listed in Table 2.1.3 there are impacts

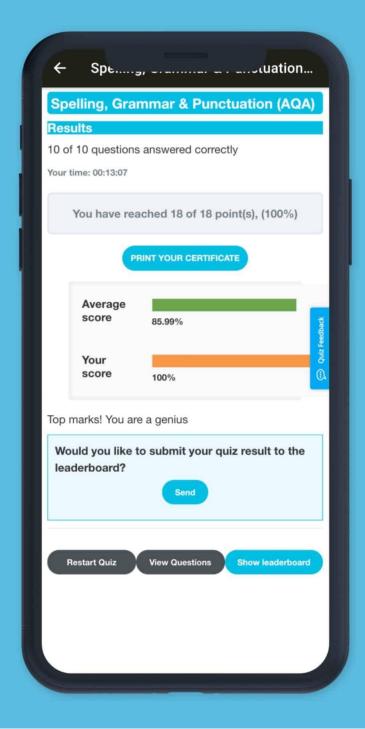
Use Technology

BBC Bitesize, Seneca, YouTube, GCSE Pod, SPARX Maths, Quizlet etc.

They can take pictures of their notes to make revision more portable. Test themselves in their head on the bus or car, then check the photo of their notes to see how much they've remembered.

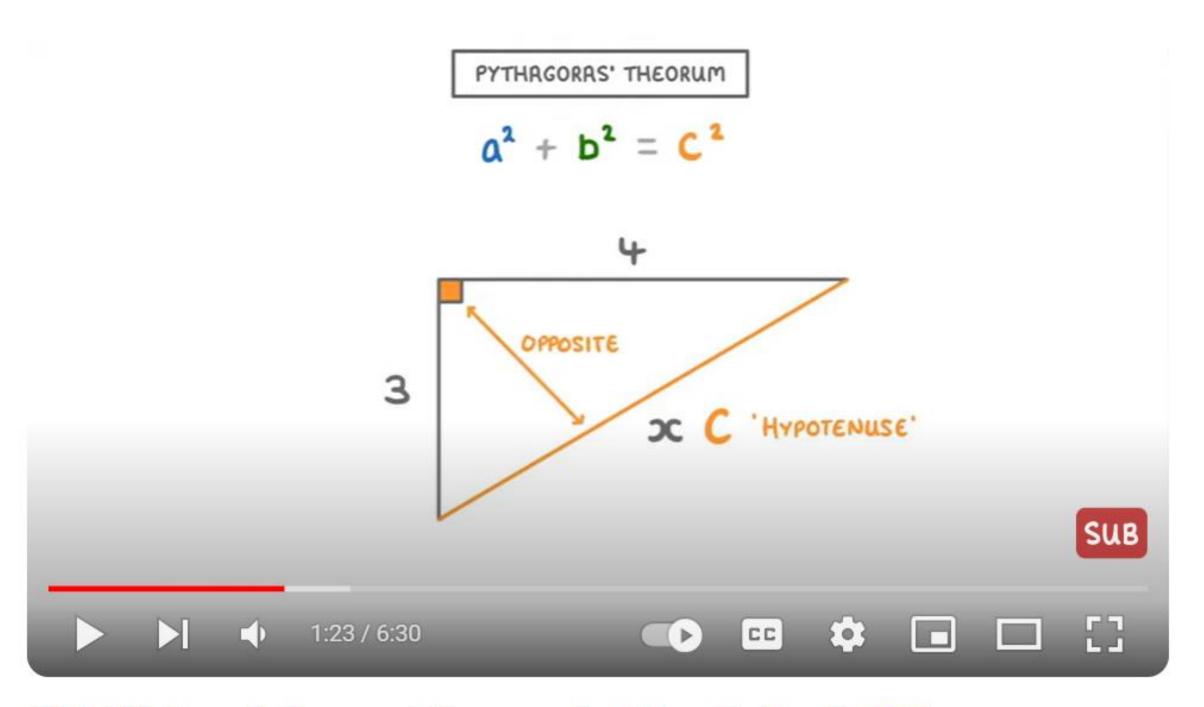
Students can use the QR codes in the revision booklet they've been given to take them straight to suitable websites.

Revision in your pocket!





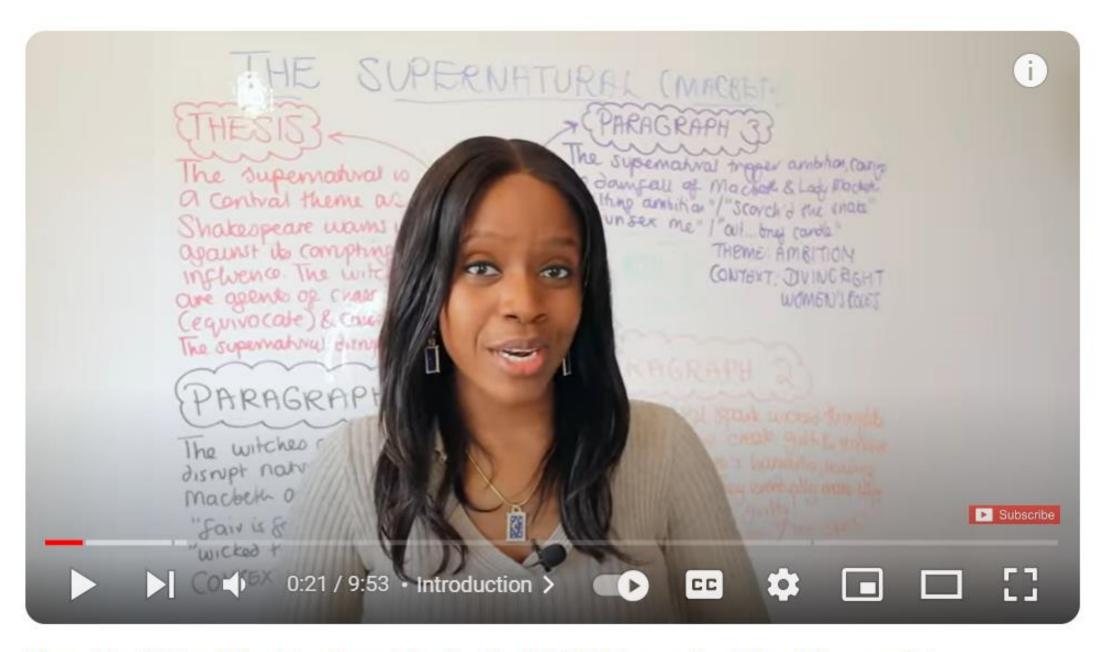
how to do pythagorean theorem gcse



GCSE Maths - Pythagoras' Theorem And How To Use It #120

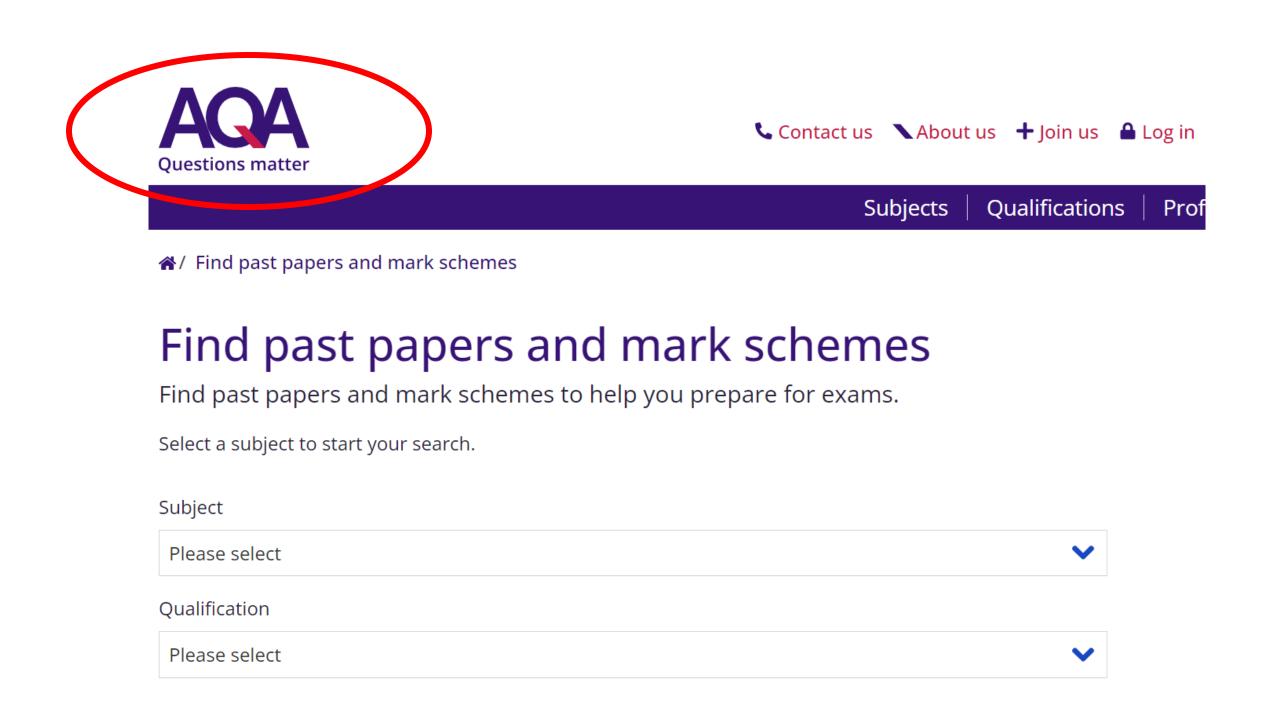


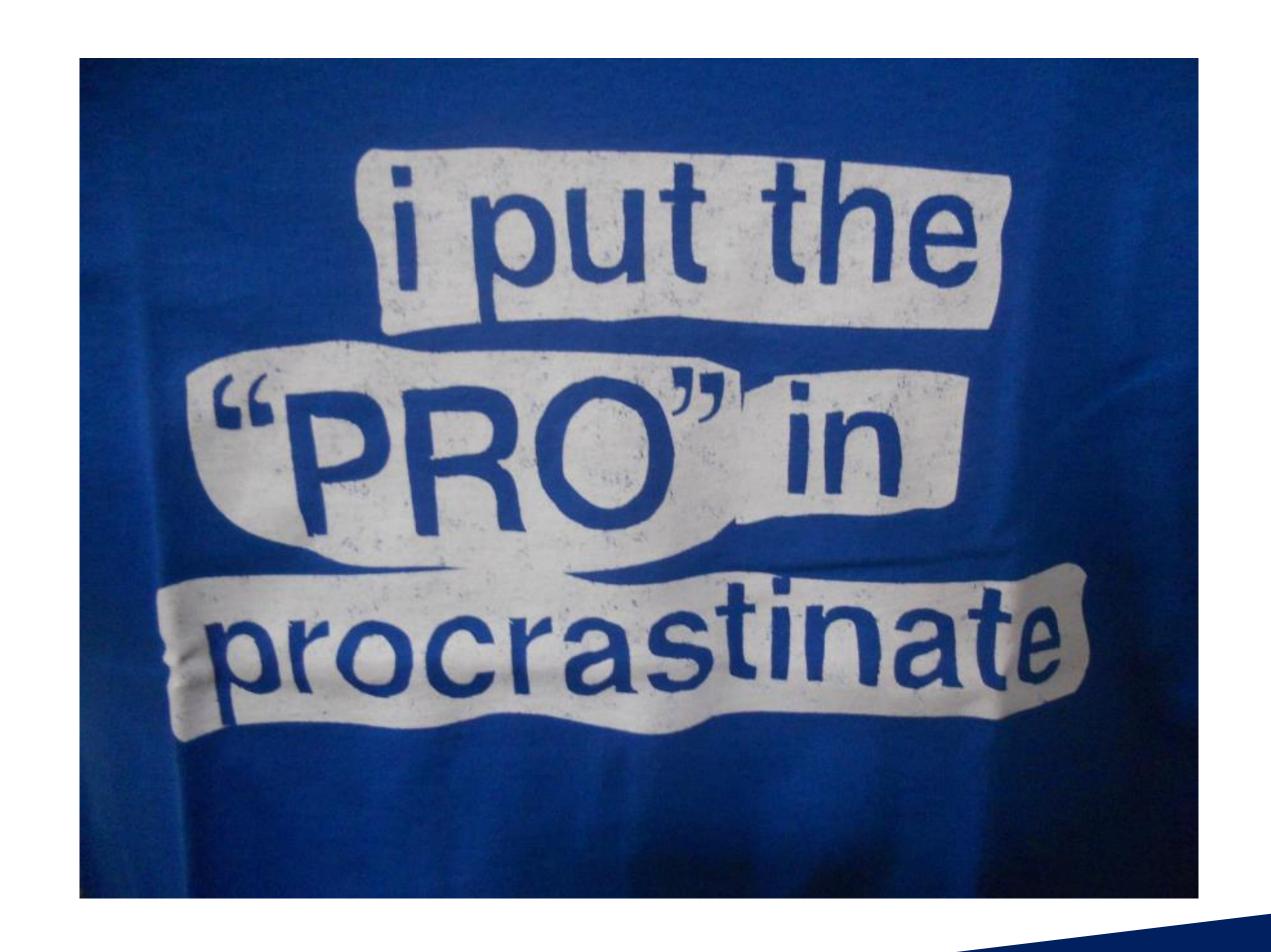
macbeth gcse grade 9 answer



How To Write The Perfect Macbeth GCSE Essay On The Theme Of "Supernatural" | 2023 GCSE English Exams

How to access past papers.







Two 30 minute sessions, four times per week (increase closer to the exams)

Week beginning



Weekly Revision Timetable

Monday Textiles Monday History

Tuesday Maths
Tuesday Science*

Thursday Business
Thursday English Lit

Sunday English Lang Sunday French

3 school weeks until the mocks = just 1.5 hours per subject

17 school weeks until the GCSEs = 8.5 hours per subject

Day	Session 1	Session 2	Session 3	Session 4
Example	4:30 – 5:00pm Geography Formation of volcanos		7:30 – 8:00pm PE Commercialisation	
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

BIOLOGY

Mock exam dates:			
Tuesday 16 th Jan 2024	Biology paper 2		
Wednesday 17 th Jan 2024	Chemistry paper 2		
Monday 22 nd Jan 2024	Physics paper 2		

<u>Week</u> beginning	Topic	Key learning points	Revision guide pages HIGHER	Revision guide pages FOUNDATION	Completed? Tick this box when you
					have revised each topic.
4.12.23	B5	What is the reflex arc?	59-60	58-59	
		 How is blood glucose controlled? 	63	62	
11.12.23	B5	 How do hormones control the menstrual cycle? 	64	63	
		 How can fertility be controlled? 	65-66	64-65	
18.12.23	B6	What are the stages of meiosis?	70	68	
		 How does embryo screening work? 	74	72	
25.12.23	B6	 Merry Christmas! Have some days off – spend 	N/A	N/A	
(CHRISTMAS)		time with your family 😊			
		 What are the stages of evolution? 	76	74	
1.1.24	B7	 How are quadrats and transects used? 	87-88	87-88	
		 List some biotic and abiotic factors. 	84	84	
8.1.24	B7	 Explain the water and carbon cycles. 	89-90	89-90	
		 How is biodiversity maintained? 	94	94	
15.1.24		See physics revision page!			

Private tuition £35p/h

Make the most of Curriculum Plus opportunities

Textiles

Geography

History

Maths

Music

DT

English

French

German

Food & Nutrition

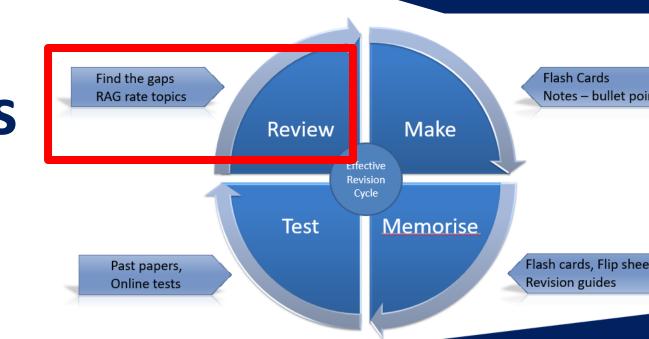
Art

Photography

Physical Studies

Cambridge National Sport

Science



In summary

- Make a reoccurring weekly revision planner and change the topics for the week as a task each Sunday.
- Have the revision materials for each subject in separate folders/piles.
- Follow the revision cycle of: Review Make Memorise Test.
- Use a variety of different methods eg, revision guides, online apps, flash cards, transform diagrams.
- Use past papers and exam questions to help test you (but only when you've understood the information/content).
- Attend as many Curriculum Plus sessions as possible.

