



Achieving Excellence

GCSE exam window in 2023

Mr A Carter – Deputy Headteacher

4th May 2023

GCSEs: the context and adjustments Nationally for 2023



- Exams will happen as normal in May and June.
- This is a good thing – it is fair and equal for all students across the country. Our students do well in exams.
- GCSEs can assess the full spectrum of content taught
- Equation sheets in Maths/Science will be provided

How will grades be awarded?

- Grading will move back to 2019 standards.
- Ofqual have asked exam boards to carefully set grade boundaries so that students will not be disadvantaged by the disruption caused by Covid.

“Broadly speaking, therefore, a typical student who would have achieved an A grade in their A level geography before the pandemic will be just as likely to get an A next summer, even if their performance in the assessments is a little weaker in 2023 than it would have been before the pandemic.”

When will the exam series occur? (Provisional)

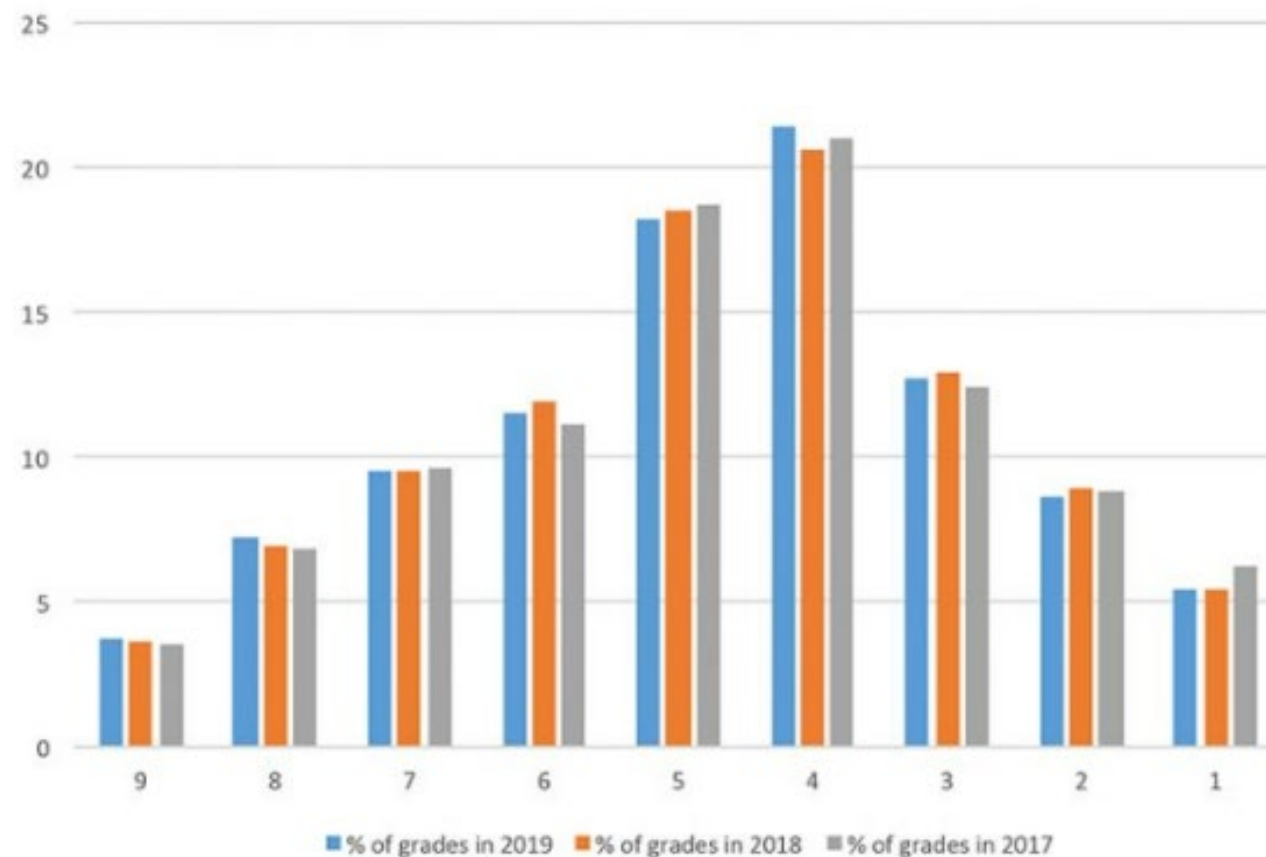
- Exams begin w/b 15th May.
- Exams end 21st June.
- Contingency days – Thursday 8th June and Wednesday 28th June
- Results day : Thursday 24th August.

Comparable outcomes

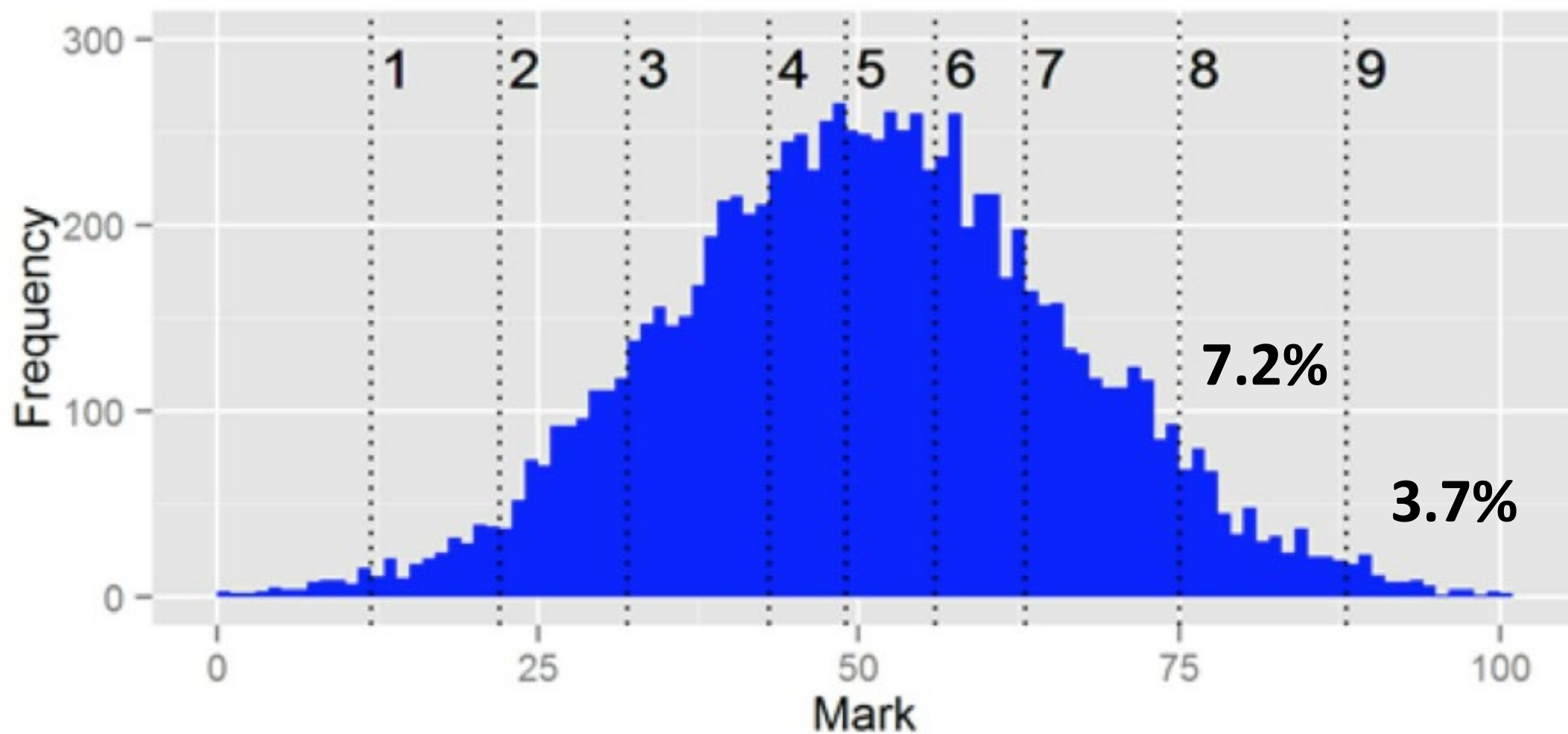
Maths GCSE results (England, age 16)

Grade	2019	2018	2017
9	3.7	3.6	3.5
8	7.2	6.9	6.8
7	9.5	9.5	9.6
6	11.5	11.9	11.1
5	18.2	18.5	18.7
4	21.4	20.6	21
3	12.7	12.9	12.4
2	8.6	8.9	8.8
1	5.4	5.4	6.2

Maths GCSE grade distributions



Grading of GCSEs

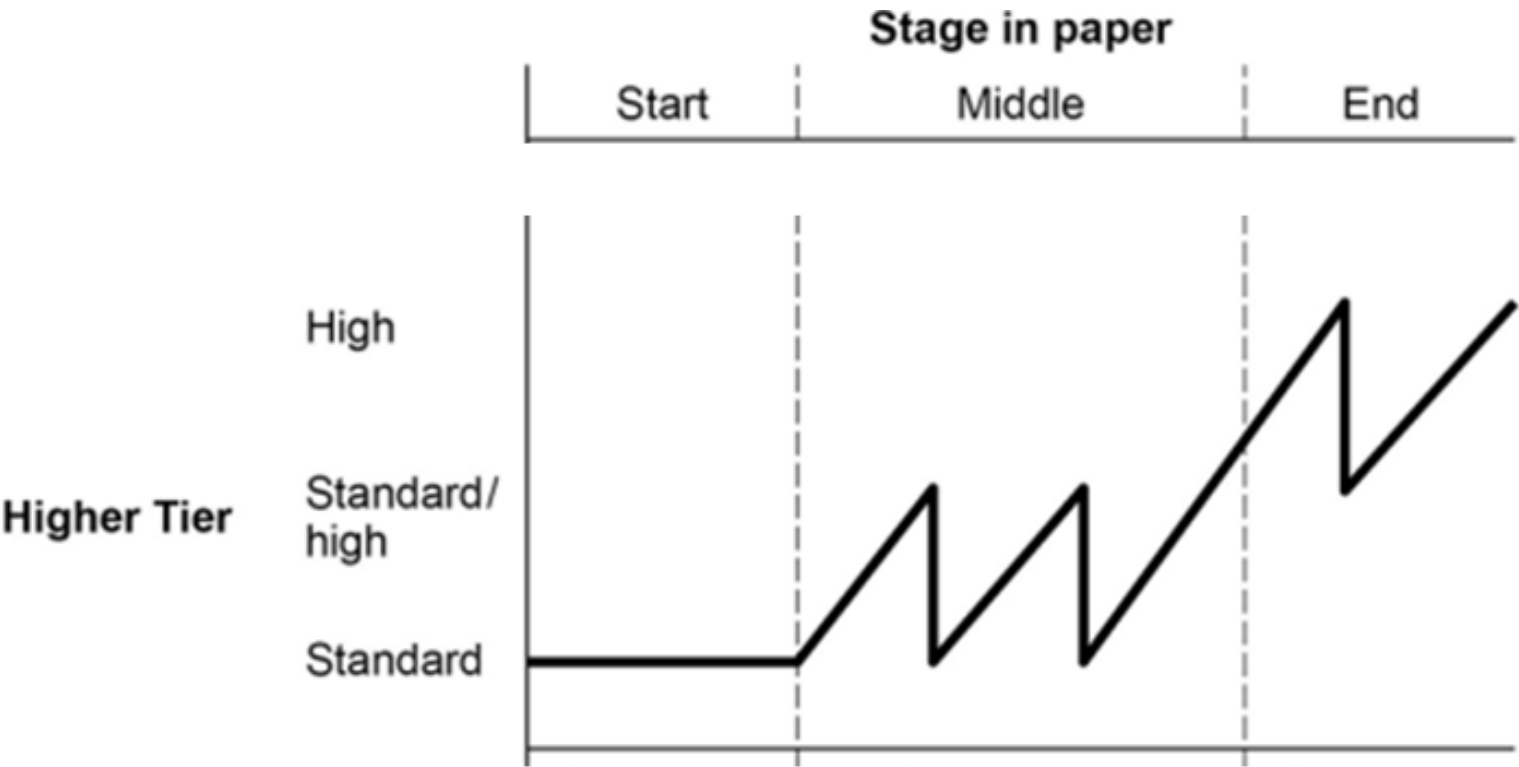


Grading of GCSEs

Subject grade boundaries – June 2019 exams

GCSE – Combined Science double award specifications

Subject Code	Subject Title	Maximum Mark	Grade Boundaries											
			9-9	9-8	8-8	8-7	7-7	7-6	6-6	6-5	5-5	5-4	4-4	4-3
8464F	COMBINED SCIENCE: TRILOGY TIER F	420	-	-	-	-	-	-	-	-	243	221	200	173
8464H	COMBINED SCIENCE: TRILOGY TIER H	420	269	251	233	216	199	180	161	142	123	105	87	78



Conclusions about grading

- Competition
- Everything a student does to help themselves can provide them with that advantage over the rest
- While it is best to prepare earlier it is never too late
- One mark can be the difference

Subject grade boundaries – June 2019 exams

GCSE – single awards

Subject Code	Subject Title	Maximum Mark	Grade Boundaries								
			9	8	7	6	5	4	3	2	1
8463F	PHYSICS TIER F	200	-	-	-	-	129	111	80	50	20
8463H	PHYSICS TIER H	200	143	125	108	89	70	51	41	-	-

Exams

- Students **cannot** take the exam at a later date. This is **different** than ST1 and ST2 where we gave them this opportunity
- If students are ill on the day of an exam – contact school ASAP.
- There are procedures exam boards have in place if students are ill
- Students need to follow examination conditions in the hall or exam rooms



Achieving Excellence

Effective Revision

Mr A Carter – Deputy Headteacher

4th May 2023

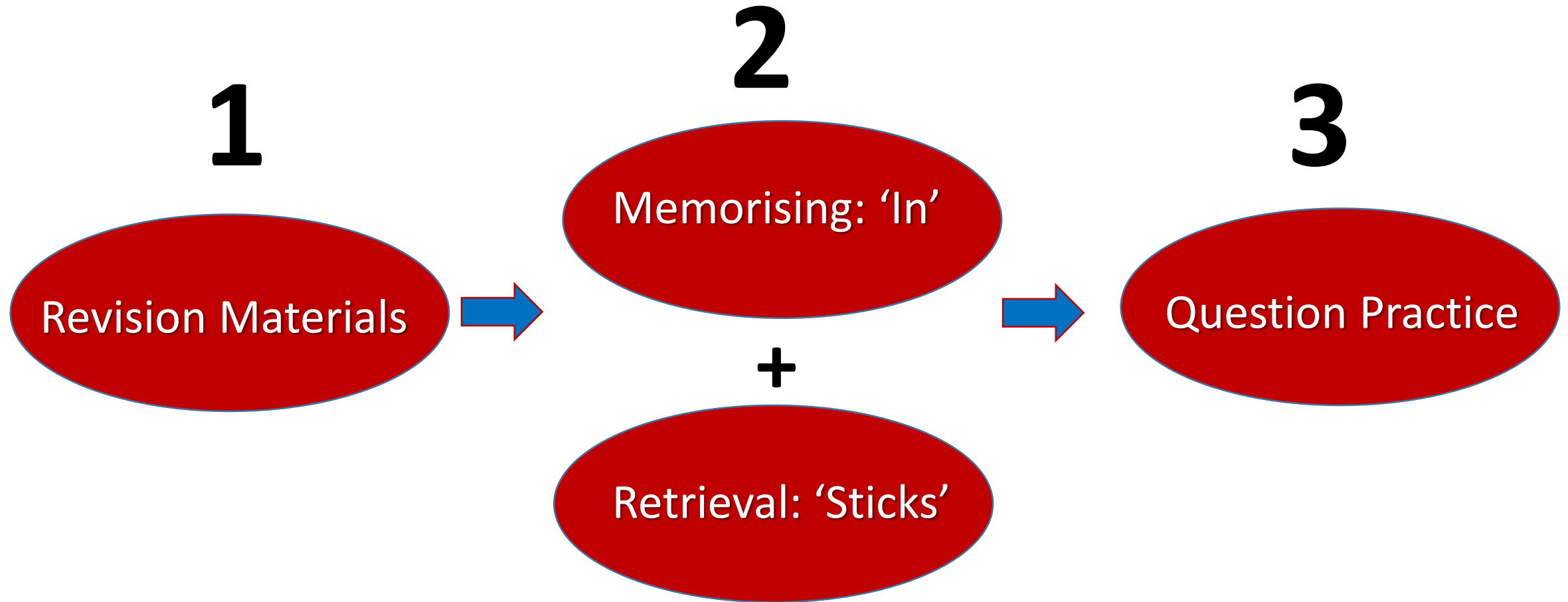
Advice from Subject Leaders

- You have just one chance to ‘hit it out of the park’...take it!
- Don’t fool yourself...reading something through, or simply writing something out is not revision. Commit to memory properly.
- Always ask yourself when learning facts...how can I use this in my exams?

Advice from Subject Leaders

- Be honest about what you do and don't know. **Focus on what you don't know.**
- Always get someone to **help test you** – retrieval is the key. Do not **underestimate** the power of this.
- **Plan your revision** carefully, identify exactly which topics you are going to revise

How to revise



Revision materials

- Notes from lessons (exercise books)
- Completed exam questions (ebi advice)
- Revision books
- Flashcards

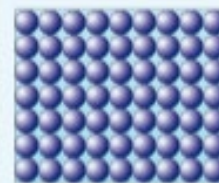
Particle Model

The **particle model** is simpler than it sounds. It says that everything is made up of **lots of tiny particles** and describes how those particles behave in the three states of matter — **solids**, **liquids** and **gases**.

The Particle Model can Explain the Three States of Matter

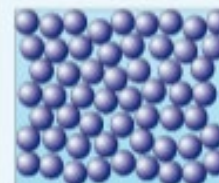
- 1) In the **particle model**, you can think of the particles that make up matter as **tiny balls**. You can explain the ways that matter behaves in terms of how these tiny balls move, and the forces between them.
- 2) The **three states of matter** are **solid** (e.g. ice), **liquid** (e.g. water) and **gas** (e.g. water vapour). The **particles** of a substance in each state are the same — only the **arrangement** and **energy** of the particles are different.

Solids



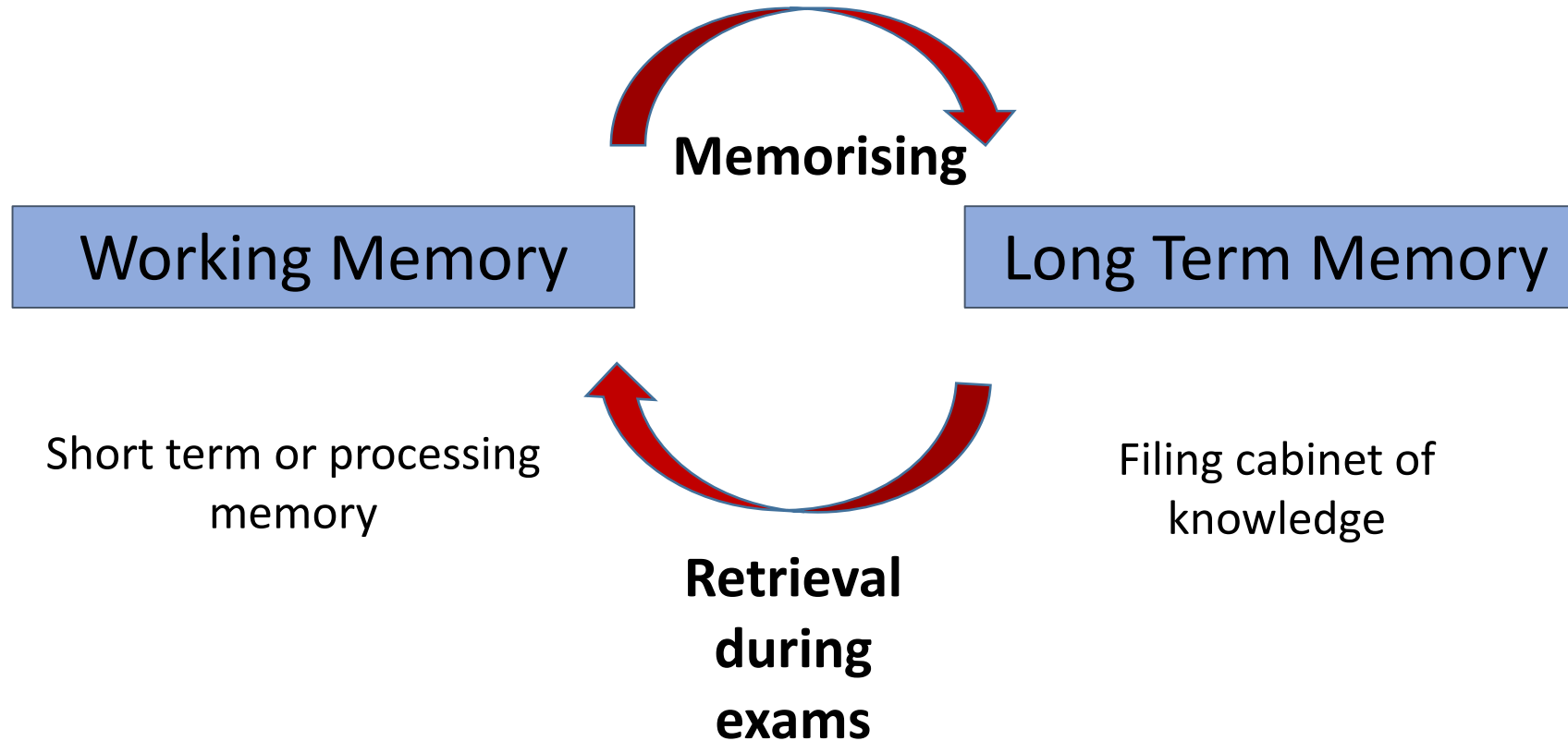
- 1) **Strong forces** of attraction hold the particles **close together** in a **fixed, regular** arrangement.
- 2) The particles don't have much **energy** so they **can only vibrate** about their **fixed** positions.
- 3) The **density** is generally **highest** in this state as the particles are **closest together**.

Liquids



- 1) There are **weaker forces** of attraction between the particles.
- 2) The particles are **close together**, but can **move past each other**, and form **irregular** arrangements.
- 3) For any given substance, in the liquid state its particles will have **more energy** than in the solid state (but less energy than in the gas state).
- 4) They move in **random directions** at **low speeds**.
- 5) Liquids are generally **less dense** than solids.

Step 2 Memorising



Step 2 Memorising (done badly)

- Simply reading through notes in silence or,
- May even be using a highlighter as you read or,
- Writing out your notes in silence
- Purely in working memory



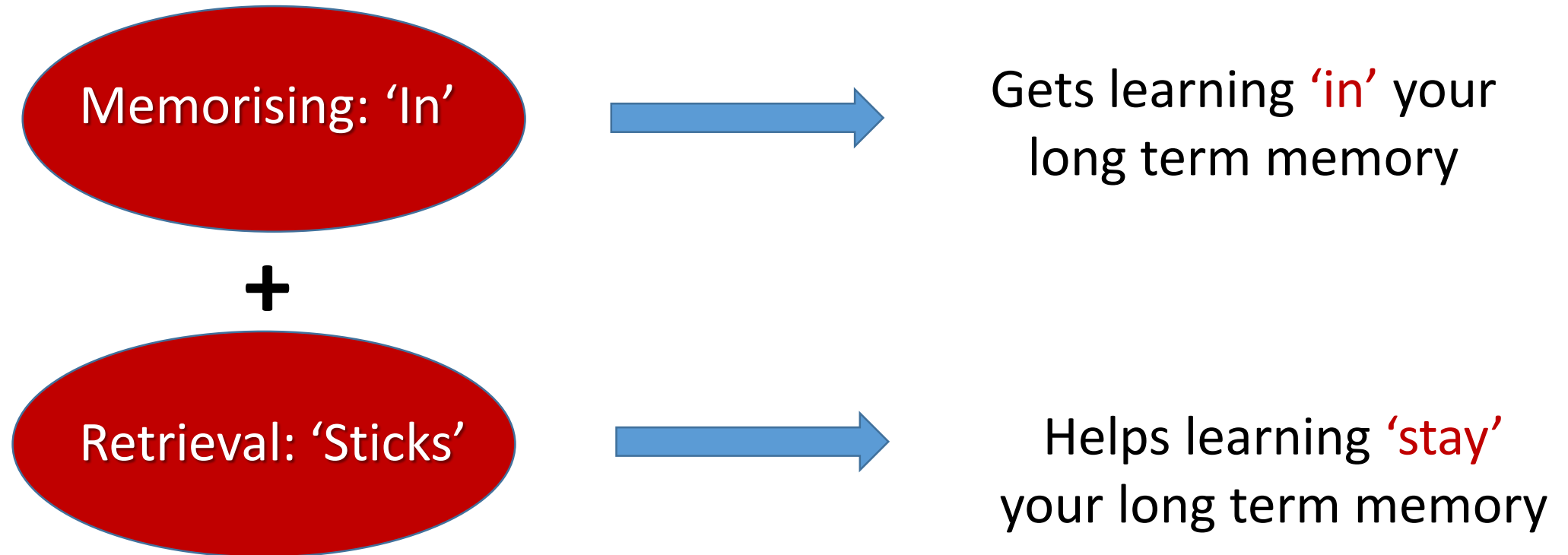
- Yes...it feels fresh and familiar
- Yes...you feel you have learnt it
- But...memory quickly fades
- Fooling yourself

} Illusion of knowing

Step 2 Memorising

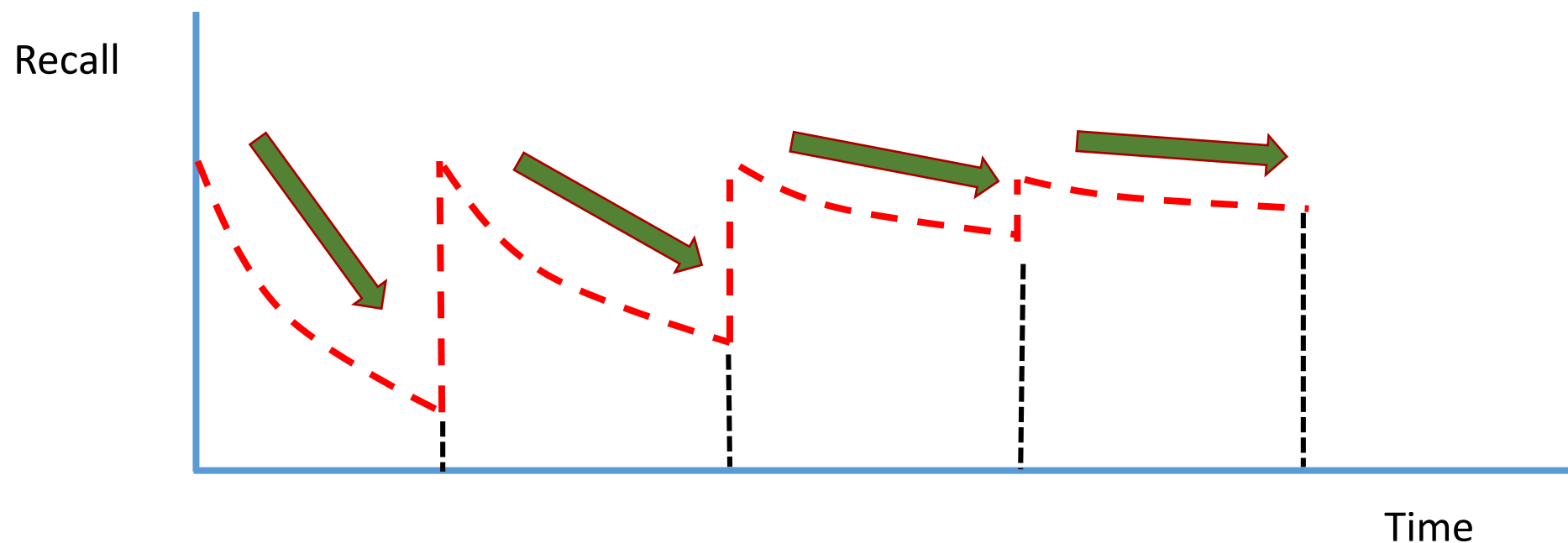
- Make your memorising of information challenging
- Talk out loud
- Quiz yourself on the raw facts
- Read in the morning and make notes in the afternoon

Step 2 Memorising



Step 2 Memorising – keeping it

1. You have to **work hard** to stop forgetting...
2. You have to **work hard** to making your learning stick...



A B C D is ok

A B A C B D A C D B is better

What do you do for retrieval?

Regularly testing or
quizzing each other
(friend or parent)

Regularly testing
yourself using
flashcards / cue
cards or similar
phone apps

Regularly trying to
rewrite your
revision materials
from memory

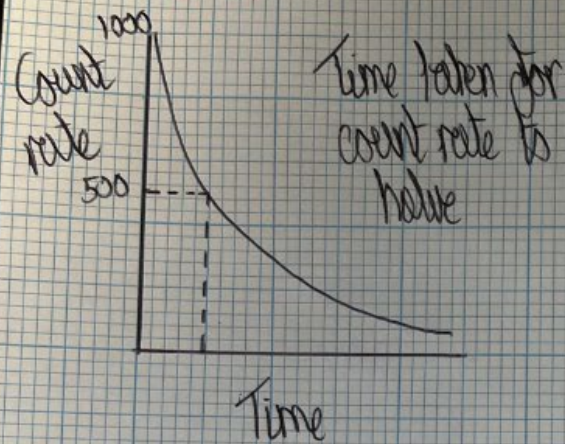
Regularly reciting out
loud work back to
yourself

Retrieval

Regularly doing a
'memory dump'
on a piece of
paper

Nuclear Physics

Half life

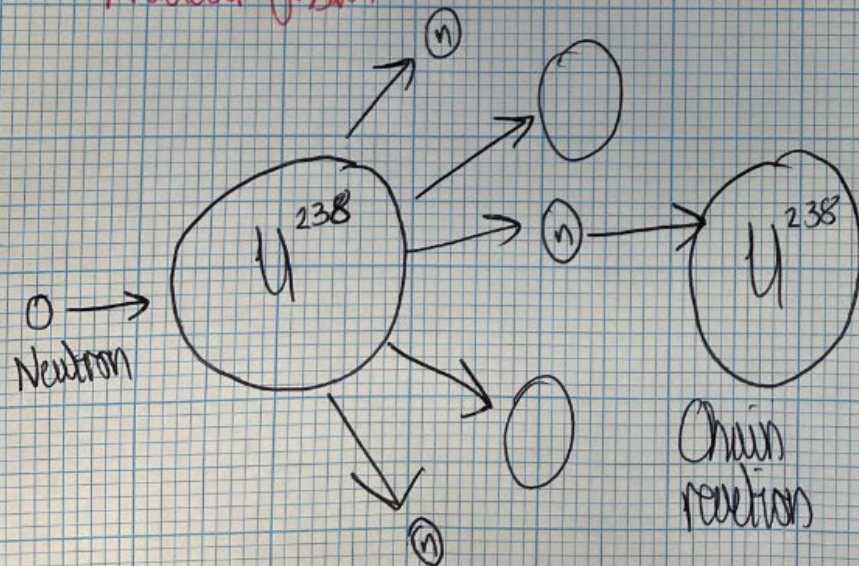


Types of radiation

Alpha - $2p2n$	paper	2cm
Beta - electron	aluminium	1m
Gamma	Thick lead	1km

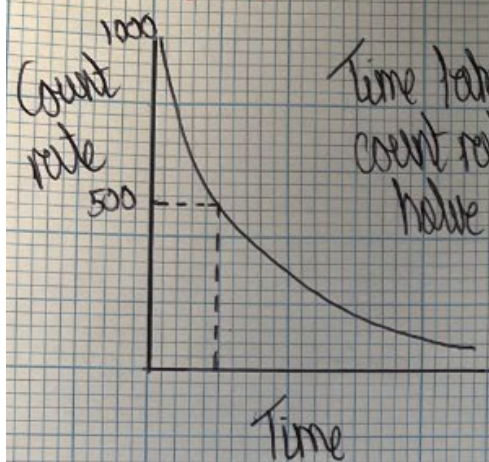
Nuclear Physics

Nuclear fission



Nuclear decay equations

Half life



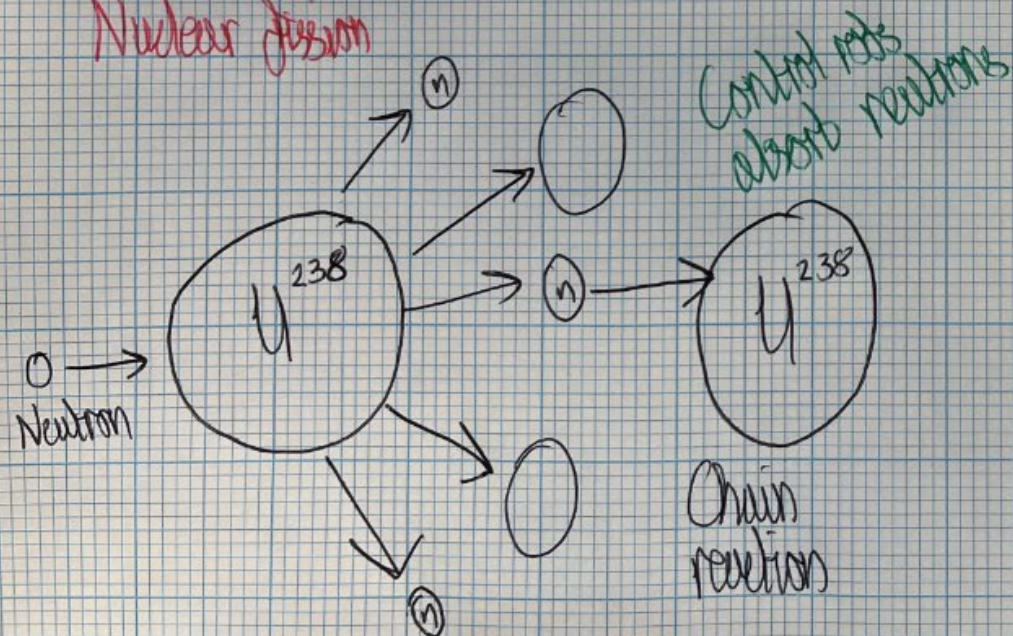
On calculations
show stages
 $1000 \rightarrow 500 \rightarrow 250$
 \downarrow
125

Types of radiation

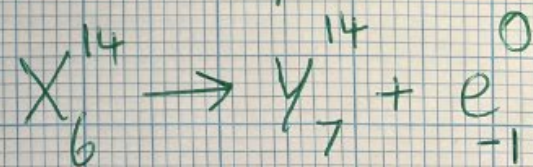
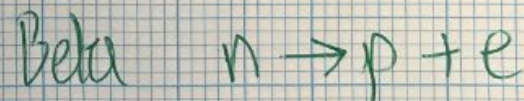
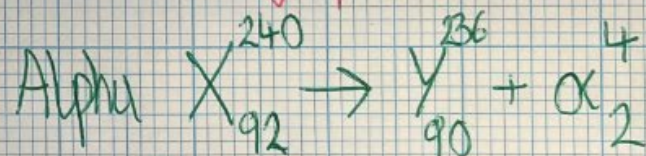
Alpha	- 2p 2n	paper	2cm
Beta	- electron	aluminium	1m
Gamma	EM wave	Thick lead	1km

Nuclear Physics

Nuclear fission



Nuclear decay equations





Achieving Excellence

Wellbeing

How can you look after yourself?

Mrs Laura Measures – Assistant Headteacher

GCSEs are a Challenge:

Students on average will have:

- 22 Exams in May and June of Year 11
- 35 hours of examinations



Feeling overwhelmed

- Heart beating faster than usual
- Increased breathing rate
- Tense
- Sweaty
- Nauseous



How can students look after their wellbeing?

Body (Physical)

Sleep
Healthy eating
Water
Exercise
Relaxation
Hygiene

Mind (Mental)

Positive thinking
Take breaks
Problem solving
Goals
Learning new things

Soul (Emotional)

Have fun
Friends
Hobbies
Mindfulness
Pets
Fresh air

How to revise Maths



1. Login and complete set assignments:

- Revision for ST2 Paper 1,2 & 3.
- Graded assignments (Year 11 only)

Login Details (e.g Harry Kane):

User: HaKane@leftwichhigh

Password: leftwich



My Work

Assigned Work 1072

This Year's Work

All Work

Showing All Types ▾

Homework Average

64.8%

Test Average

Title	Type	Assigned By	Assigned	Due	Marks	%	Grad
11H ST2 Paper 1 Revision	HW	C Malam	12/12/2022	17/02/2023 08			
Higher Grade 5 Recall	HW	E Gregory	29/11/2022	24/02/2023 08			
Higher Grade 6-7 Recall	HW	E Gregory	29/11/2022	24/02/2023 08			
Higher Grade 8-9 Recall	HW	E Gregory	29/11/2022	24/02/2023 08			
Year 11 ST1 H P3 Revision	HW	C Malam	10/10/2022	14/11/2022 08	94/122	77%	
Year 11 ST1 H P2 Revision	HW	C Malam	03/10/2022	31/10/2022 09	55/112	49%	
Year 11 H ST1 P1 Revision	HW	C Malam	19/09/2022	17/10/2022 08	102/154	66%	

How to revise Maths

Students in Years 10 and 11 have been given , personalised strengths and areas for development following their most recent tracking exams. This helps to guide their revision by identifying the topics they need to improve.

Grade	Clips	Topic	9to1 GCSE OCR Nov20 22 4H	9to1 GCSE OCR Nov20 22 5H	9to1 GCSE OCR Nov20 22 6H
3	188	Negative Indices	-	100%**	-
3	36	Number machines	-	-	80%*
3	112	Metric Area and Volume C...	0%*	-	-
3	138	Inequalities and the Numb...	-	0%*	-
4	129	Scattergraphs	-	-	100%*
4	129	Scattergraphs and Reason...	-	-	100%**
4	125	Probability and Relative Fr...	100%*	-	-
4	107	Equivalence of ratio and fr...	-	100%*	-
4	72	Fractions of Amounts	-	100%***	-
4	136	Changing the Subject of a...	25%**	-	-
4	80	Worded LCM Questions	100%*	-	-
4	124	Bearings	75%*	-	-
4	146	Construction	100%*	-	-
4	165	Loci and Construction	80%**	-	-
4	108	percentage increase	-	100%*	-
4	58	Simple Sample Space	-	100%*	-
4	NA	Area and Perimeter Proble...	-	100%***	-
4	78	Products of Primes Proble...	-	-	100%***
4	39	Proportion and Ratio Recip...	-	-	100%**
4	114	Surface Area	-	-	100%*
4	109	Calculating Percentage Inc...	-	-	50%***
4	NA	Finding volume, then mass...	100%*	-	-
4	40	Percentages	-	50%***	-
4	120	Angles in Parallel Lines	-	100%*	-
4	159	Equation of a Line from a...	-	-	0%*

Grade	Clips	Topic	9to1 GCSE OCR Nov20 22 4H	9to1 GCSE OCR Nov20 22 5H	9to1 GCSE OCR Nov20 22 6H
7	211	Simultaneous Equations wi...	0%*	-	-
7	194	Exponential Graphs	-	75%***	-
7	207	Calculate with Surds	-	50%*	-
7	207	Surds	-	67%*	-
7	216	Estimating Gradient from S...	-	100%*	-
7	203	Sine, Cosine Rules and Ar...	-	0%*	-
7	209	Complete the Square	-	40%*	-
7	217	3D Pythagoras	-	100%*	-
7	190	Rearranging With Algebrai...	-	0%*	-
7	192	Factorising Quadratics with...	-	-	33%*
7	201 to 203	Combined Sine and Cosin...	-	-	33%*
8	197	Equation of a circle	-	-	22%**
8	159	Understanding Lines and...	67%*	-	-
8	183 and 184	Circle Theorems and Alge...	-	0%**	-
9	210	Adding Algebraic Fractions	-	-	0%*

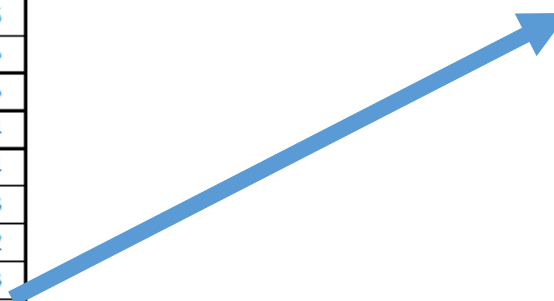
Q	Tracking Point / Paper	ST1 H	P3 Calculator	Marks
1	Completing, and Using, a Sample Space Diagram			4 4
2	Calculating with Area and Circumference of Circles			1 4
3	Calculating Speed with Standard Form			3 4
4	Calculating Equivalent Fractions with Algebraic Terms			0 4
5	Using Proofs of Congruence			3 3
6	Calculating Density			2 3
7a	Expanding Pairs of Brackets			2 2
7b	Factorising a Difference of Two Squares			1 1
8a	Calculating Repeated Percentage Change			3 3
8bc	Plotting, and Interpreting, Graphs of Exponential Growth			2 5
9	Calculating the Original Amount before a Percentage Change			5 5
10	Calculating with Volume and Surface Area of Prisms			2 6
11	Forming and Solving Equations in Money Context			6 6
12	Calculating Combined Probability of Independent Events			4 4
13	Calculating Enumeration of Possible Outcomes			0 4
14	Sketching Trigonometric Functions			1 3
15a	Collecting Cumulative Frequency Data			2 2
15b	Drawing Cumulative Frequency Graphs			3 3
15c	Interpreting Cumulative Frequency Graphs			0 3
16	Interpreting Graphs of Quadratic Functions			0 5
17ab	Writing Numbers as a Product of Prime Factors			3 3
17c	Using the Prime Factor Form to Calculate the Highest Common Factor			0 2
18	Plotting Regions from Inequalities			1 6
19a	Completing the Square			1 3

How to revise Maths

Tracking Point / Paper ST1 H P3 Calculator

Q		Marks
1	Completing, and Using, a Sample Space Diagram	4 4
2	Calculating with Area and Circumference of Circles	1 4
3	Calculating Speed with Standard Form	3 4
4	Calculating Equivalent Fractions with Algebraic Terms	0 4
5	Using Proofs of Congruence	3 3
6	Calculating Density	2 3
7a	Expanding Pairs of Brackets	2 2
7b	Factorising a Difference of Two Squares	1 1
8a	Calculating Repeated Percentage Change	3 3
8bc	Plotting, and Interpreting, Graphs of Exponential Growth	2 5
9	Calculating the Original Amount before a Percentage Change	5 5
10	Calculating with Volume and Surface Area of Prisms	2 6
11	Forming and Solving Equations in Money Context	6 6
12	Calculating Combined Probability of Independent Events	4 4
13	Calculating Enumeration of Possible Outcomes	0 4
14	Sketching Trigonometric Functions	1 3
15a	Collecting Cumulative Frequency Data	2 2
15b	Drawing Cumulative Frequency Graphs	3 3
15c	Interpreting Cumulative Frequency Graphs	0 3
16	Interpreting Graphs of Quadratic Functions	0 5
17ab	Writing Numbers as a Product of Prime Factors	3 3
17c	Using the Prime Factor Form to Calculate the Highest Common Factor	0 2
18	Plotting Regions from Inequalities	1 6
19a	Completing the Square	1 3

15c	Interpreting Cumulative Frequency Graphs
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How to revise Maths



The
COUNTY
HIGH SCHOOL
Leftwich

15c Interpreting Cumulative Frequency Graphs 03

MathsWatch

My Work Videos My Progress Feedback Extras

Clip 186 Cumulative Frequency One Minute Maths Interactive Questions Worksheet

Clip 186

**CUMULATIVE
FREQUENCY**

07:02

Find a Clip

Qualification GCSE

Tier All

Grade All

Topic All

Search cumulative frequency

Choose Clip (1)

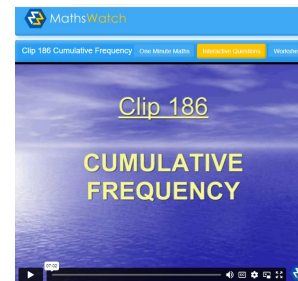
Clip	Title
186	Cumulative Frequency

How to revise Maths

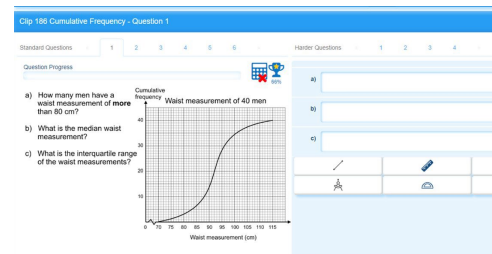
1. Identify the topics you are unsure of.

Grade	Topic	Start Date	Start Time	Start Day	Start Year	Start Month	Start Day	Start Year	Start Month	Start Day
7	211	Simultaneous Equations	19/11	-	-	-	-	-	-	-
7	194	Exponential Graphs	19/11	-	-	-	-	-	-	-
7	207	Calculate with Surds	19/11	-	-	-	-	-	-	-
7	207	Surds	19/11	-	-	-	-	-	-	-
7	216	Estimating Gradient from S...	19/11	-	-	-	-	-	-	-
7	203	Sine, Cosine Rules and Ar...	19/11	-	-	-	-	-	-	-
7	209	Complete the Square	19/11	-	-	-	-	-	-	-
7	217	3D Pythagoras	19/11	-	-	-	-	-	-	-
7	190	Rearranging With Algebra...	19/11	-	-	-	-	-	-	-
7	192	Factorising Quadratics with...	19/11	-	-	-	-	-	-	-
7	201 to 203	Combined Sine and Cosin...	19/11	-	-	-	-	-	-	-
8	197	Equation of a circle	19/11	-	-	-	-	-	-	-
8	199	Understanding Lines and...	19/11	-	-	-	-	-	-	-
8	183 and 184	Circle Theorems and Alge...	19/11	-	-	-	-	-	-	-
9	210	Adding Algebraic Fractions	19/11	-	-	-	-	-	-	-

2. Watch a video/attend a revision session



3. Practise questions



4. Keep practising, little and often. A question a day will help retention.

How to revise Maths-useful websites/resources



<https://vle.mathswatch.co.uk/vle/>

Login Details:
(e.g. Harry Kane)

User: HaKane@leftwichhigh
Password: leftwich

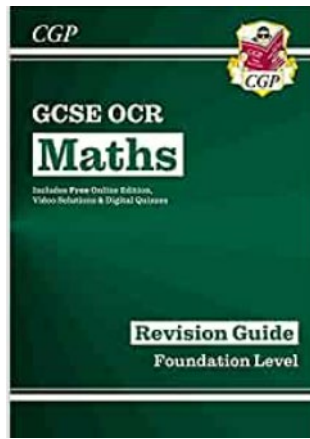
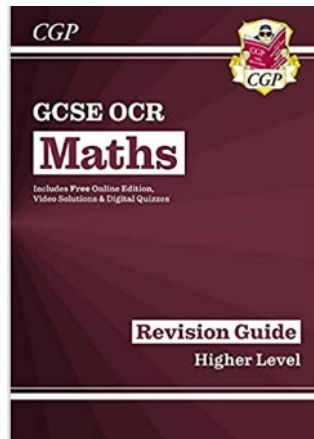


<https://www.ocr.org.uk/qualifications/past-paper-finder/>



Corbettmaths

<https://corbettmaths.com/contents/>



CGP Revision Guides



Achieving Excellence

Purposeful English Revision and Avoiding Cognitive Overload

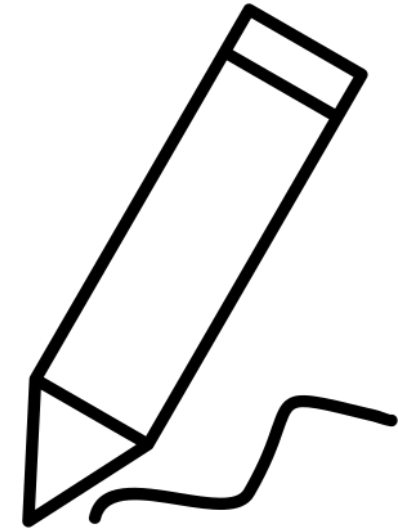
Miss J Martland – Assistant Headteacher

4th May 2023

‘You can’t revise for English.’

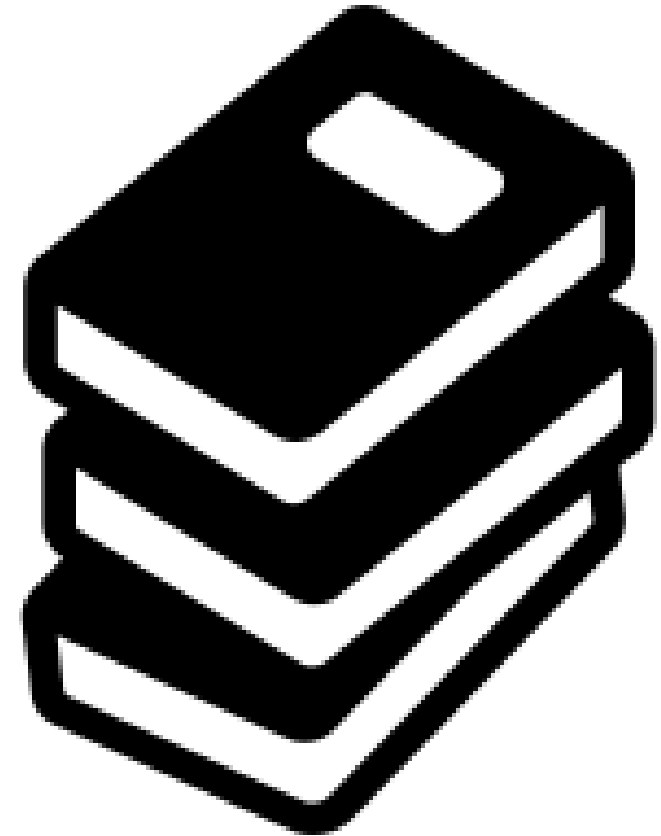
English Language

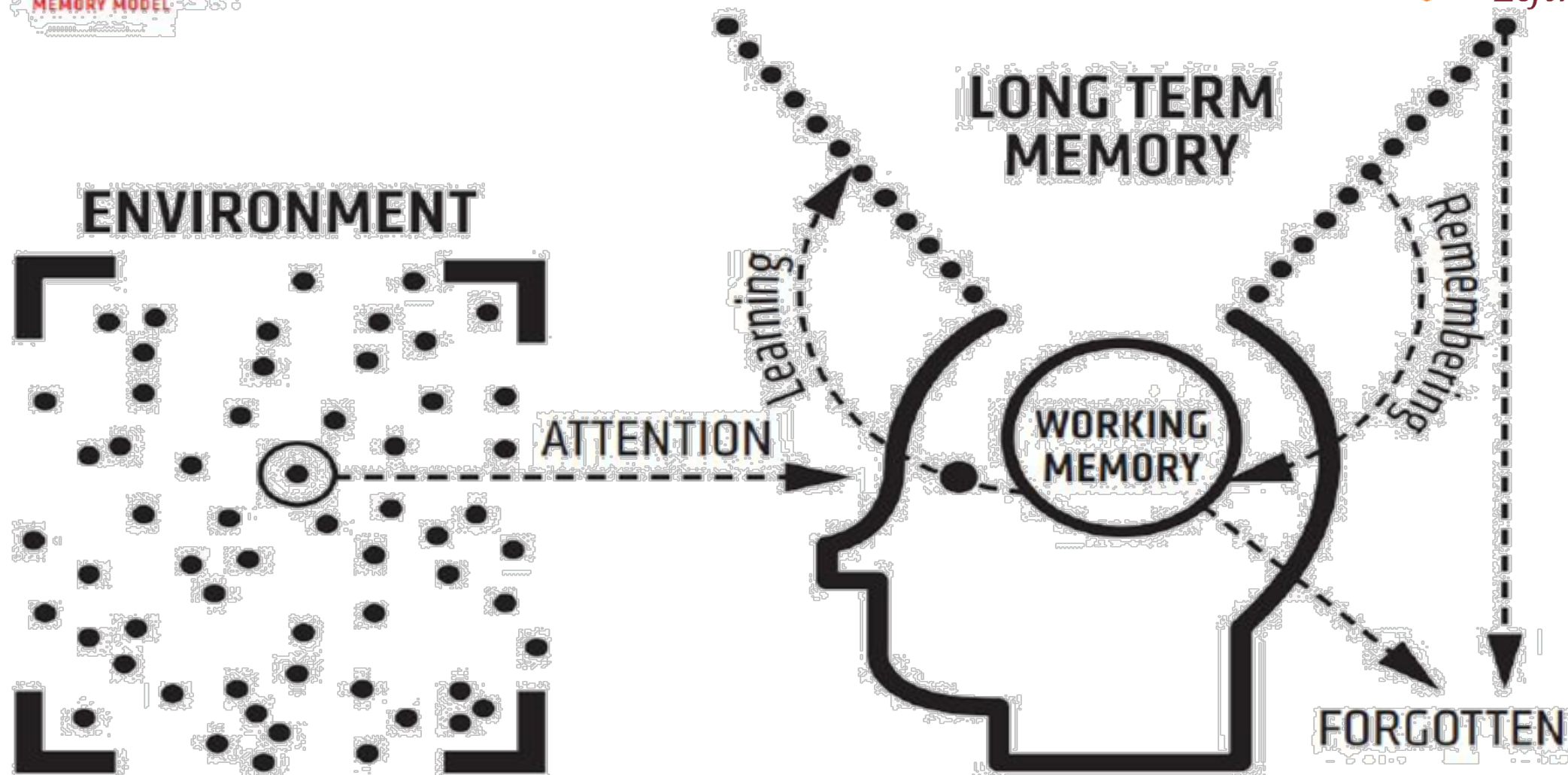
- It's good to talk
- Current Affairs
- Reading
- Practice Papers and Tasks



English Literature

- Movie Night
- Reading
- Quotation Quizzes
- Annotation and Planning
- Storyboards and Dual Coding
- Practice Papers and Tasks





Cognitive Overload



A **Cognitive Overload** is a situation where we are given too much information at once, or too many simultaneous tasks, resulting in not being able to perform or process any information in an effective or worthwhile way.

Cognitive Overload can have a negative impact on learning. An overloaded student becomes an overwhelmed one, who tries to manage too much information at once and cannot effectively focus on anything.

Avoiding **Cognitive Overload** becomes, therefore, of paramount importance.

Reducing Overload

Organisation is key

Appropriate revision space

Timely breaks

Managing technology

(including listening to music !)



‘You can’t revise for English.’