Taverham High School
An 11-18 Academy
Inspire | Empower | Achieve

KS4 Revision Evening

"The bad news is that from now onwards time flies, the good news is you're the pilot!"

Presentations…

- Mr Hyett – Assistant Headteacher
- Mrs G Higgins – Faculty Lead English and Media
- Mr B Robinson – Head of KS4 Maths
- Mr M Hart – Faculty Lead Science

Revision

GCSE grades are important as they are the keys to unlock the next stage of your life.

More than anything you want to go onto something that you **choose** to do.

When you open your exam results in the summer you don’t want to have any regrets – you know that you tried your very best.

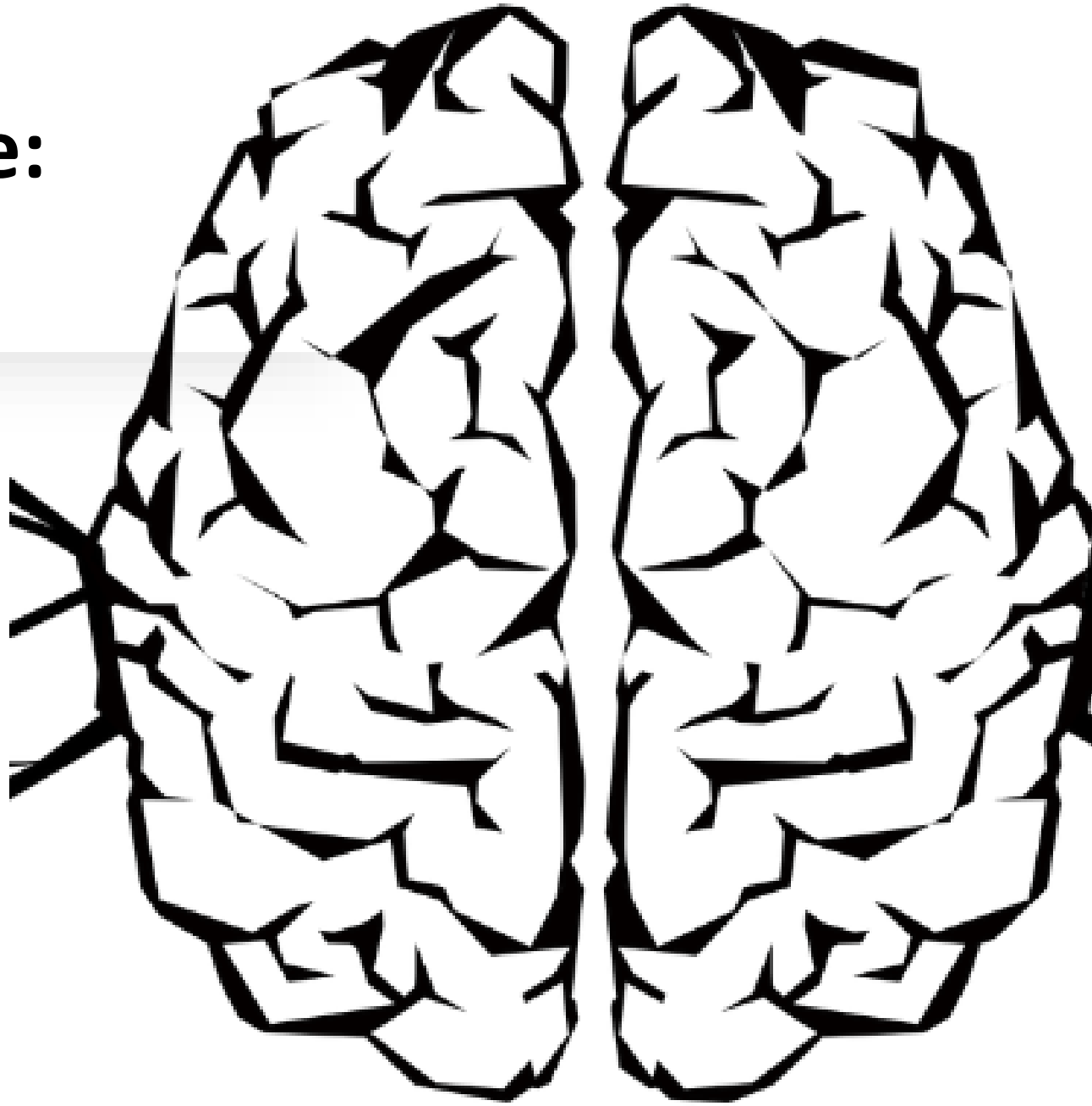

TIME + EFFORT =
SUCCESS

Reflection

How do you currently feel about revision for your GCSEs?

- Have you started or are you putting it off?
- Do you know what to do?
- Have you got a plan in place?

Why it’s important to revise:



Learning is hard work! But it’s definitely possible!

Think about the things you know off-by-heart; the lyrics to songs from a few years ago, the words to your favourite films.

You generally remember these things because

(a) you enjoyed them and

(b) you listened to or watched them lots of times.

But, since you were born, you have learned and understood millions of pieces of information that you will know for the rest of your life.

KEY POINTS:

- Revision should be 'little and often’.

- Revisiting things you find difficult or have got wrong in the past, at regular intervals, is vital. Over time, as you understand a little more, the work gets easier and you learn more. You start to make links between topics and ideas, and it becomes easier still.

- But beware – it’s tempting to spend time revising stuff you already know but **progress is made by revising things we don’t know!**

Planning your revision:

To get the most out of your revision you must plan it! If not, it's too tempting to pick up something comfortable and easy and learn very little.

You need to plan:

- **When you are going to revise?** (what times are best for you? How long is reasonable? 20-30mins at a time is best)
- **Where you are going to revise?** (have you got a space of your own? **Are your phone and other distractions away while you're revising?**)
- **What you are going to revise?** (have you planned exactly what you want to learn in this chunk of time? Which question do you want to be able to answer?)
- **When and how you're going to relax?** (this is just as important. You need to eat and drink well and plan time with friends and family. **You won't work well if you don't relax well**).

Hr	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
9:00 AM							
	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK
10:00 AM							
	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK
11:00 AM							
	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK	BREAK
1:00 PM						FREE	FREE
	BREAK	BREAK	BREAK	BREAK	BREAK		
2:00 PM						FREE	FREE
	BREAK	BREAK	BREAK	BREAK	BREAK		
3:00 PM						FREE	FREE
4:00 PM	**Review**	**Review**	**Review**	**Review**	FREE	FREE	FREE

Use different colours for different topics . Remember to keep reviewing what you have revised and testing yourself at the end of the day, the next day and the end of the week - this will help you to recall the information in the exam.

How effective are strategies?

Summarising - writing summaries of texts - **LOW**

Highlighting/underlining - **LOW**

Imagery - forming mental pictures while reading or listening - **LOW**

Re-reading - **LOW**

Interleaved practice - switching between different kinds of problems - **MODERATE**

Self-explanation - how a problem was solved - **MODERATE**

Practice testing - Self-testing to check knowledge - especially using flash cards - **HIGH**

Distributed practice - spreading out study over time - **HIGH**

Recommended techniques:

Quizzing

Good old fashioned quizzing is an ideal vehicle to get students self-testing, which is proven to be a robust revision strategy, so that students can calibrate their knowledge and remembering. There are various types of quizzes, of course, such as short answer quizzing, multiple choice or a hybrid of the two, with different question types suiting different purposes.

Flashcards

Flashcards are a very familiar tool used by students. Crucially, however, too many students fail to use them for effective self-testing.

Write a question on the front of a card and the answer/s on the back and test yourself.

Students should beware dropping flashcards they think they know!

Past questions

Students need to practice examination questions over and over, well spaced over time. The effect of exploring worked examples or exam answers, as well as writing their own, helps students process and refine their revision for exam success.

Resources:

Taverham High School
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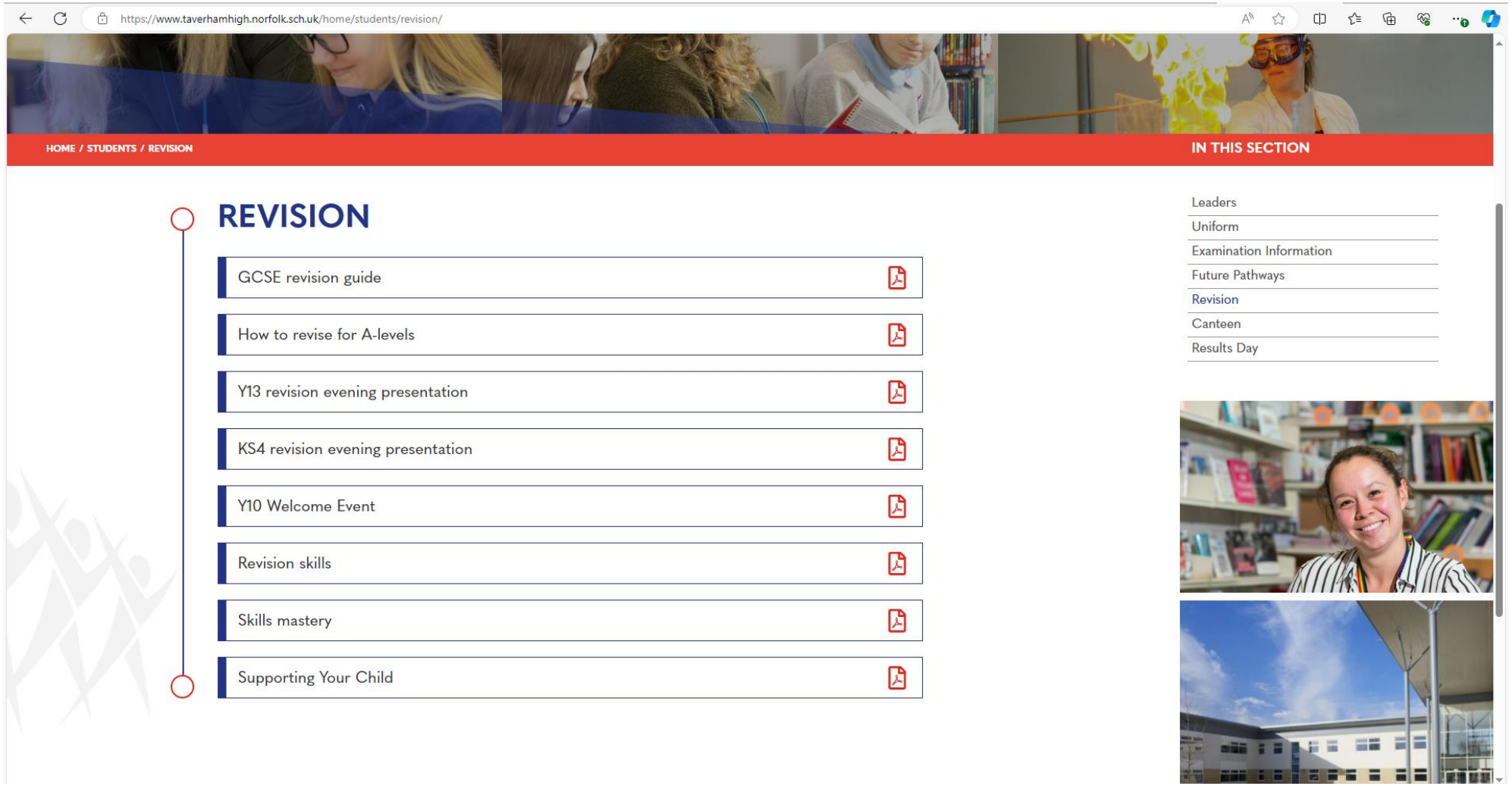


REVISION
Taverham
High School
An 11-18 Academy
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YEAR 11 REVISION & INTERVENTION – STUDENT GUIDE

Subject	When	Where	What it's for
Computer Science	Wed lunchtime	TBC	Extra help & revision
D&T / Engineering	Thurs 3–4pm	D Block	NEA support (until Easter)
Drama	Tues lunch & 3–4pm	PA4	NEA support
Art	Thurs 3–4pm	F9	Coursework support
Art Drop-In	Fri after school	Drop-in	ESA / coursework
German	Tues 3–4pm	F5 / F3	Revision
German Speaking	Tues–Thurs lunch	F5 / F2	Speaking practice
Classics	Thurs lunch	F11	Revision
Music	Mon lunch	PA2	Coursework / practice
Music	Fri after school	PA1	Coursework clinic
Philosophy & Ethics	Tues 3:05–4pm	G14	Content revision
Philosophy Skills	Thurs Week 1 (FT)	G14	Skills workshop
Philosophy Skills	Wed Week 2 (FT)	G14	Skills workshop
Physics	Tues Week 2, 3–4pm	S2	Help with tricky topics
Science	Fri Week 1, 3–3:45pm	S1 / Online	Revision support
Biology	Thurs Week 2 3-4pm	S9	Revision support drop in
Chemistry (Separate)	By arrangement	Online	Teams resources
Maths (All Levels)	Wed 3–4pm	G1	Open revision
Maths (Foundation)	Thurs lunch	G1	Homework help
History – Cold War	Wed after school	F12	Exam skills
History – Cold War	Fri after school	F8	Revision skills
History – Cold War / Henry VIII	Wed after school	F12	Open (from March)
History – Germany	Tues lunch	F7	Open (from March)
Dance (A, B, C)	Mon form time	Atrium	Practical
Dance (A, B)	Tues lunch	TBC	Starts after Easter
Spanish	Thurs after school	F2	Starts after mocks

Revision

88 DAYS TO START OF GCSES

SHORT TERM SACRIFICE – LONG SUMMER – GATE WAY TO SUCCESS

GET STARTED QUICKLY- DON'T KID YOURSELF

BALANCE- REMEMBER HALF TERMS AND EASTER

20 MINUTE CHUNKS ON A TOPIC – TEST YOURSELF ON PREVIOUS ONE

BE SYSTEMATIC GET A COPY OF THE SPEC AND RAG RATE IT – START WITH THE RED AND COME BACK TO IT.

WE ARE ALL DIFFERENT BUT WOULD START WITH 30 MINUTES A NIGHT BUT BE REALISTIC WHEN YOU WILL STUDY – GRADUALLY BUILD YOUR TIME UP

How can pupils revise for their English GCSEs?

Mrs Higgins

Head of Faulty – English and Media

English Department
Year 11 Revision Evening

AQA

No tiered entry

English Literature		English Language	
Paper 1 40%	**Paper 2** 60%	**Paper 1**	**Paper 2**
Shakespeare & The 19th Century Novel - Macbeth - A Christmas Carol / Jekyll and Hyde	**Modern Texts & Poetry** - An Inspector Calls - Power & Conflict - Unseen Poetry	**Explorations in Creative Reading and Writing** Fiction Text	**Writers' Viewpoints and Perspectives** Non-Fiction Texts
1hr 45 mins	2hr 15 mins	1hr 45 mins	1hr 45 mins
11th May (AM)	19th May (AM)	21st May (AM)	5th June (AM)

English Department
Year 11 Revision Evening

English Language

Paper 1

1hr 45 mins

Explorations in Creative Reading and Writing

Fiction

Section A	Reading
Q1	Comprehension
Q2	Language analysis
Q3	Structure analysis
Q4	Evaluation
Section B	**Writing**
Q5	**Description or Narrative**

Paper 2

Comparative paper with 2 sources to read

1hr 45 mins

Writers' Viewpoints and Perspectives

Non-Fiction

Section A	Reading
Q1	Comprehension
Q2	Comparative Summary
Q3	Language analysis
Q4	Comparing writers Viewpoints and Perspectives
Section B	**Writing**
Q5	**Opinion Writing**

English Department
Year 11 Revision Evening

English Language – How can I revise?

Paper 1

C20th or C21st

- Novel extracts
- Short stories

Focus on openings, endings, descriptive parts, settings, and characters.

Paper 2

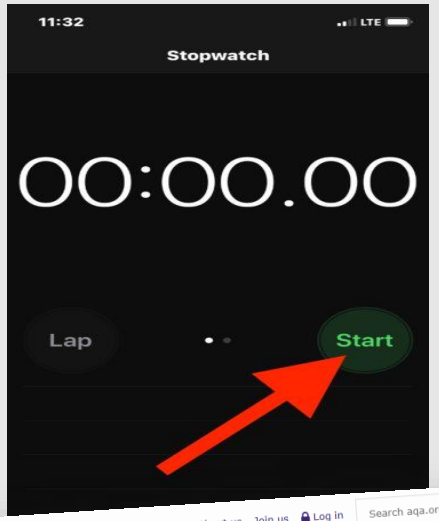
C19th + C20 or C21st

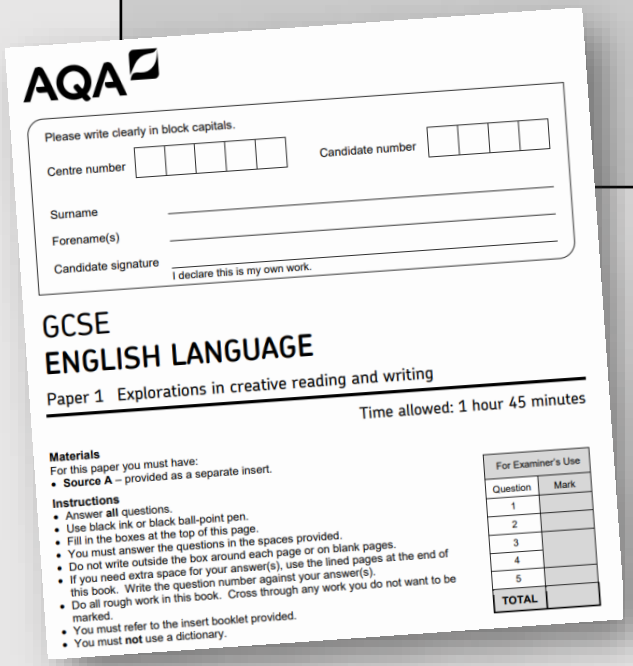
- Letters
- Journals
- Diary entries
- Speeches
- Articles
- Travel writing

English Department
Year 11 Revision Evening

English Language – How can I revise?

PAST PAPERS!




AQA

Please write clearly in block capitals.

Centre number | Candidate number

Surname

Forename(s)

Candidate signature | I declare this is my own work.

GCSE
ENGLISH LANGUAGE

Paper 1 Explorations in creative reading and writing

Time allowed: 1 hour 45 minutes

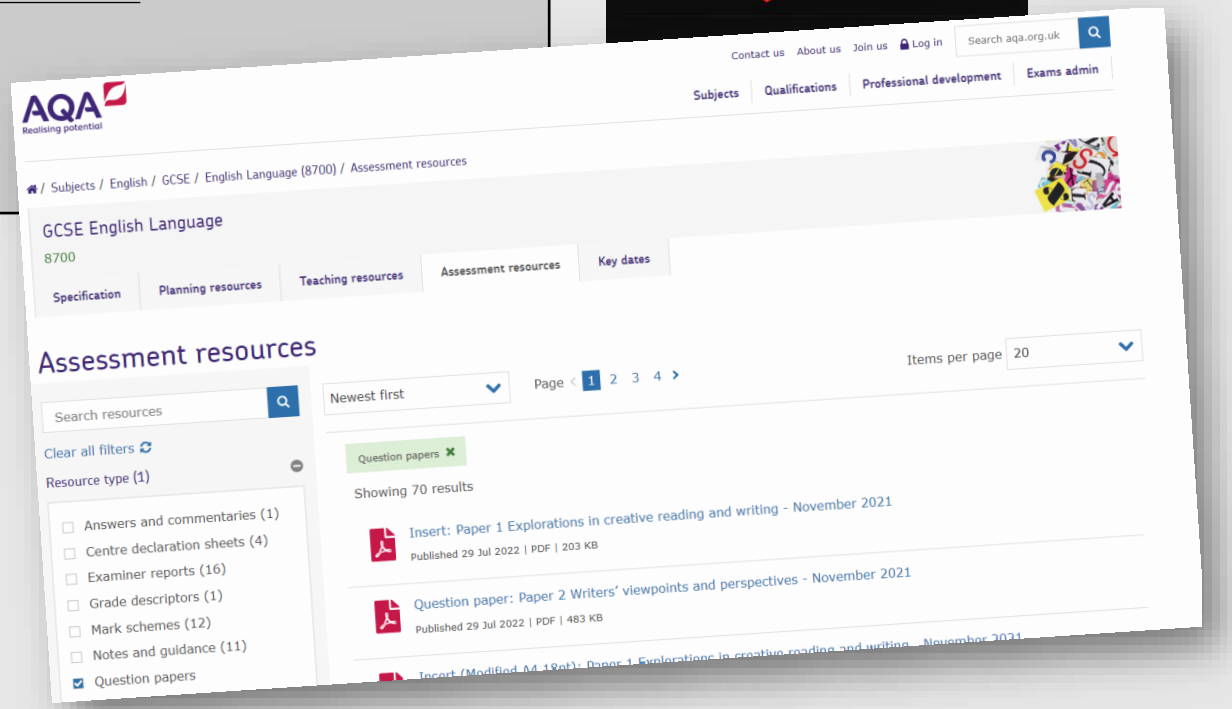
Materials
For this paper you must have:
- **Source A** – provided as a separate insert.

Instructions
- Answer **all** questions.
- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- You must answer the questions in the spaces provided.
- Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.
- You must refer to the insert booklet provided.
- You must **not** use a dictionary.

For Examiner's Use	
Question	Mark
1	
2	
3	
4	
5	
TOTAL	

Available on the AQA [website](#).

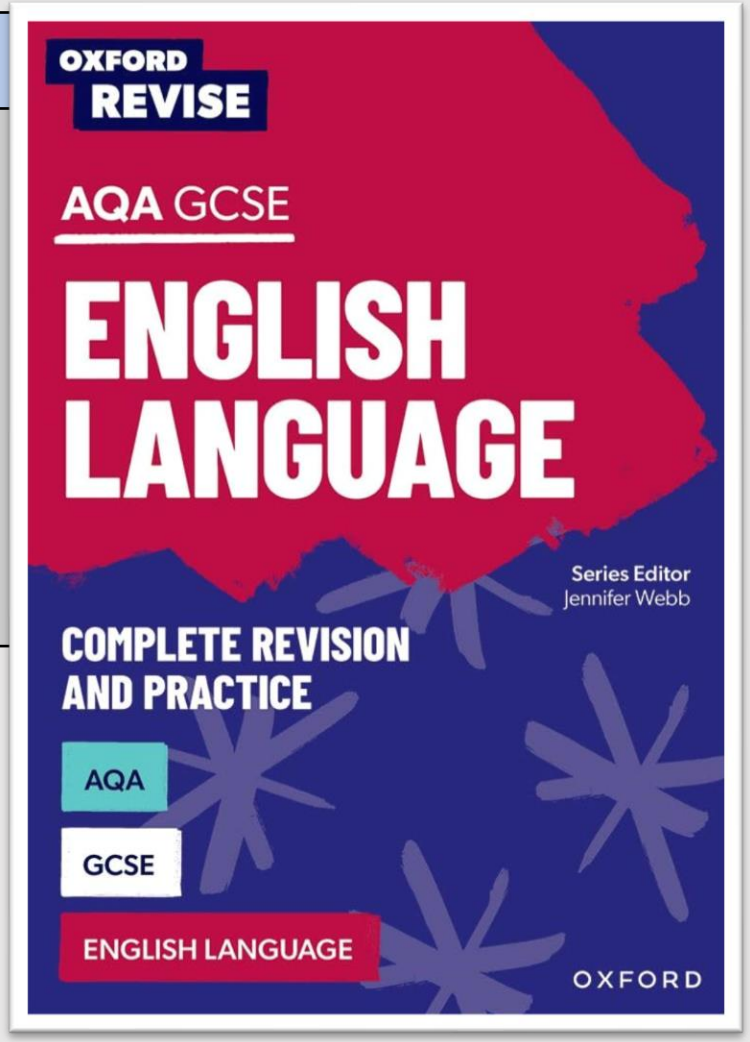
Pupils can ask their English teacher if unsure.



English Department
Year 11 Revision Evening

English Language – How can I revise?

Revision Guide

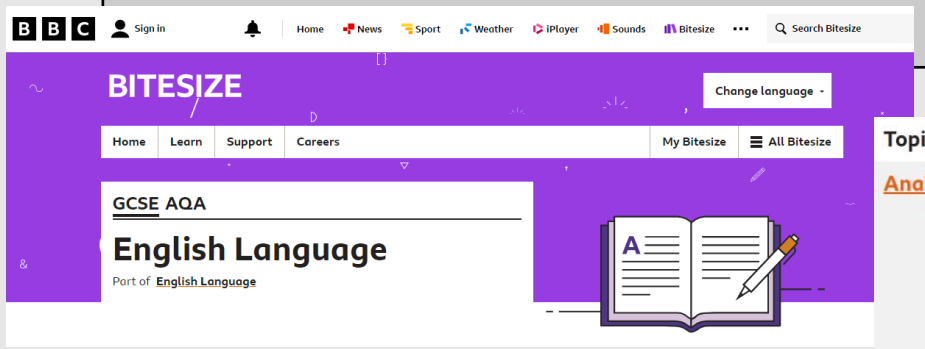


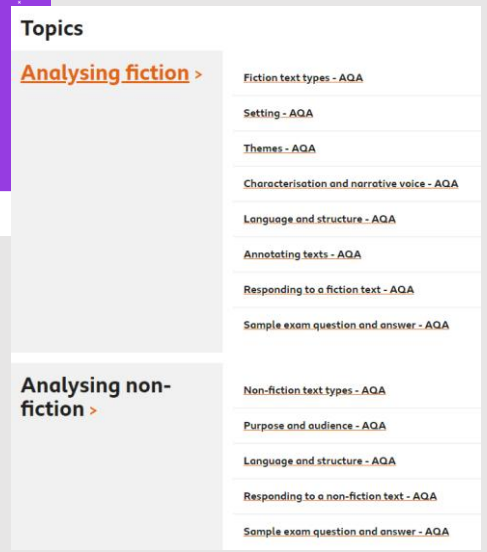
Click here for a look inside.

English Department
Year 11 Revision Evening

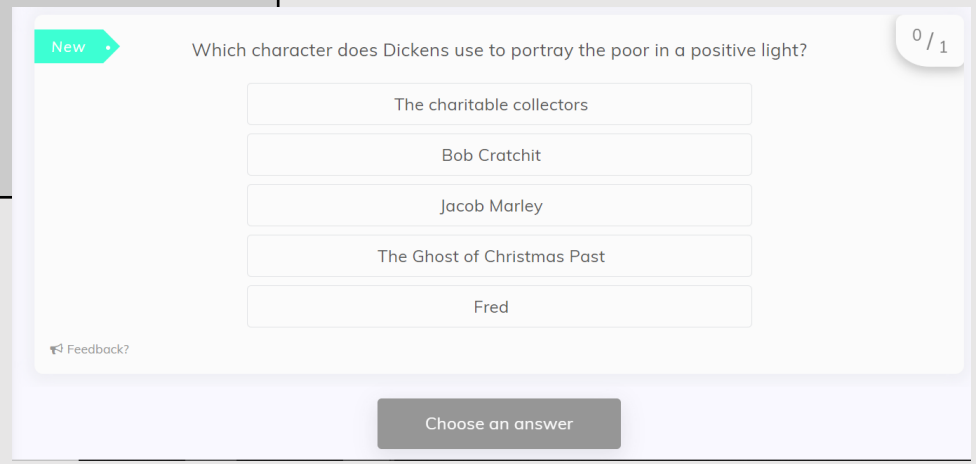
English Language – How can I revise?

Websites





[Bitesize](#) has a great range of reading, videos and quizzes on each language paper.



Class teachers can allocate topics to pupils, or they can log in and search for relevant quizzes.

English Department
Year 11 Revision Evening

English Literature

Paper 1
Shakespeare & The 19th Century Novel

Section A	
Macbeth	Extract based essay question (closed book)
Section B	
A Christmas Carol / Jekyll & Hyde	Extract based essay question (closed book)

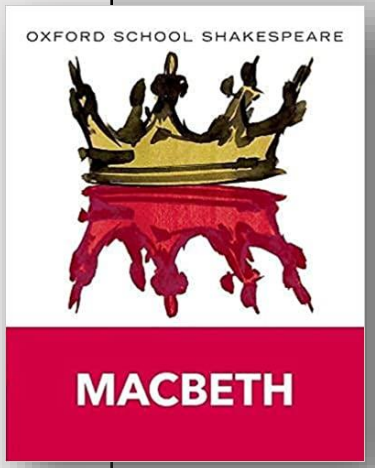
Paper 2
Modern Texts & Poetry

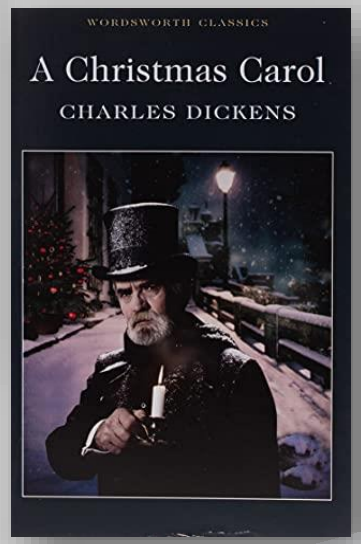
Section A	
An Inspector Calls	Essay question no extract (closed book)
Section B	
Power & Conflict Poetry	Comparative essay question exploring a theme in named poem (provided) and one other (not)
Section C	
Unseen poetry	Essay question on theme (poem provided)
Unseen comparison	Essay comparing 2 unseen poems

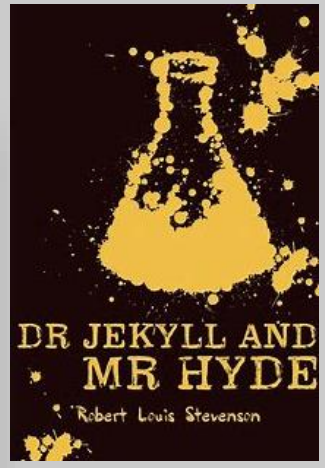
English Department
Year 11 Revision Evening

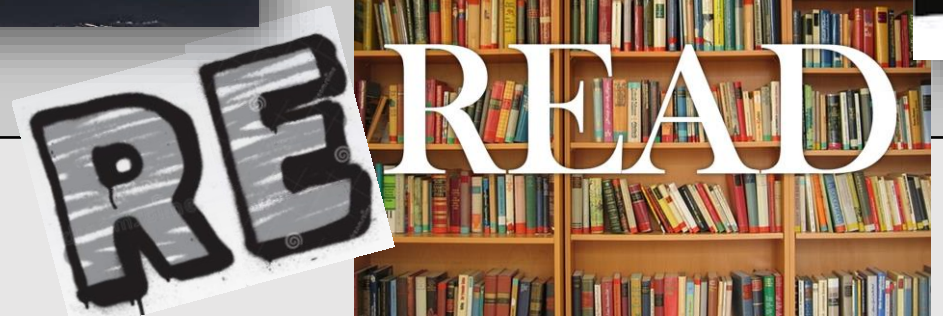
English Literature – How can I revise?

Paper 1



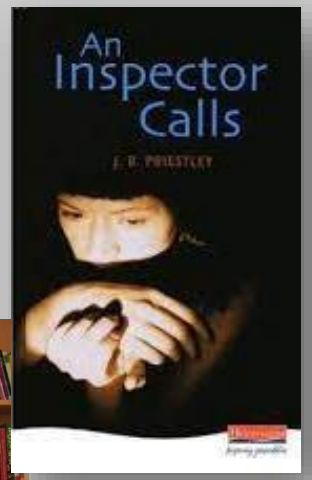






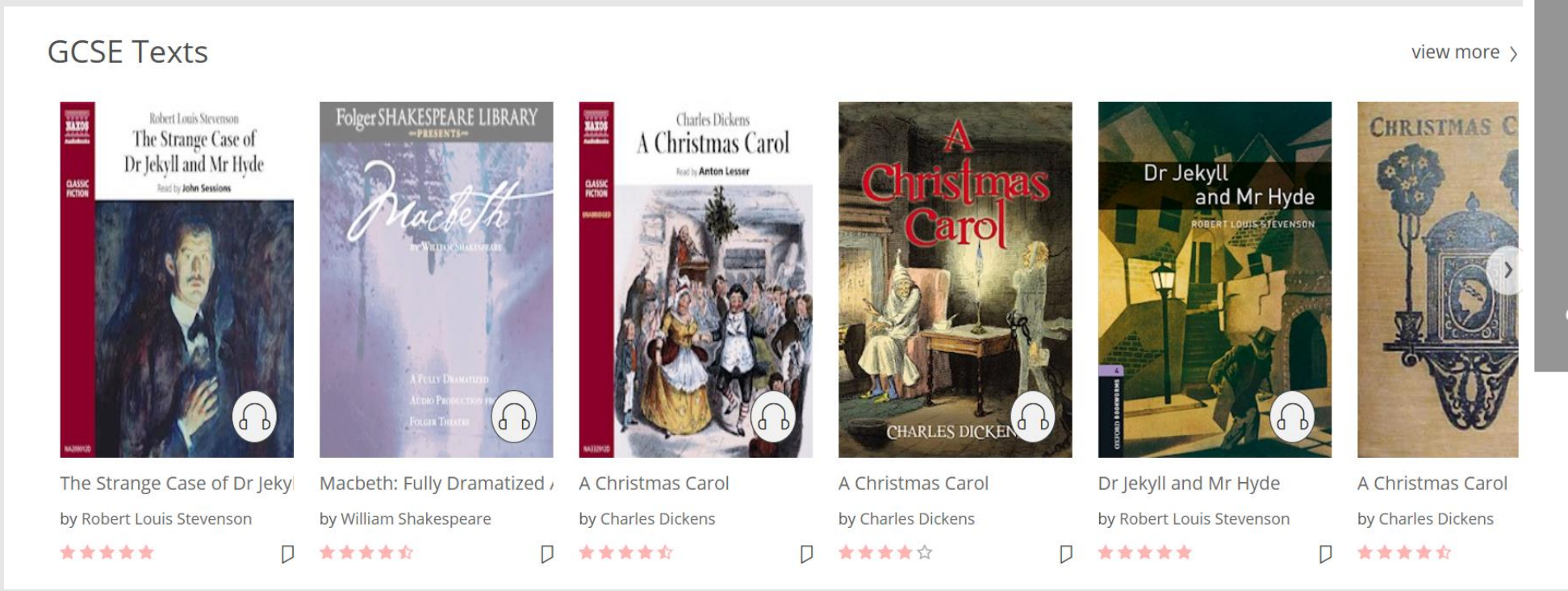
Paper 2

- Unseen poems



English Department
Year 11 Revision Evening

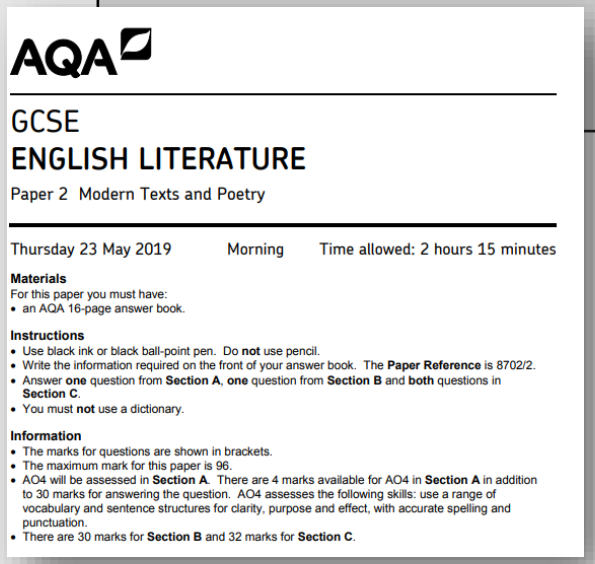
All GCSE Literature texts are available via e-Platform library which can be found on our Portals page of the school website.



English Department
Year 11 Revision Evening

English Literature – How can I revise?

PAST PAPERS!



AQA

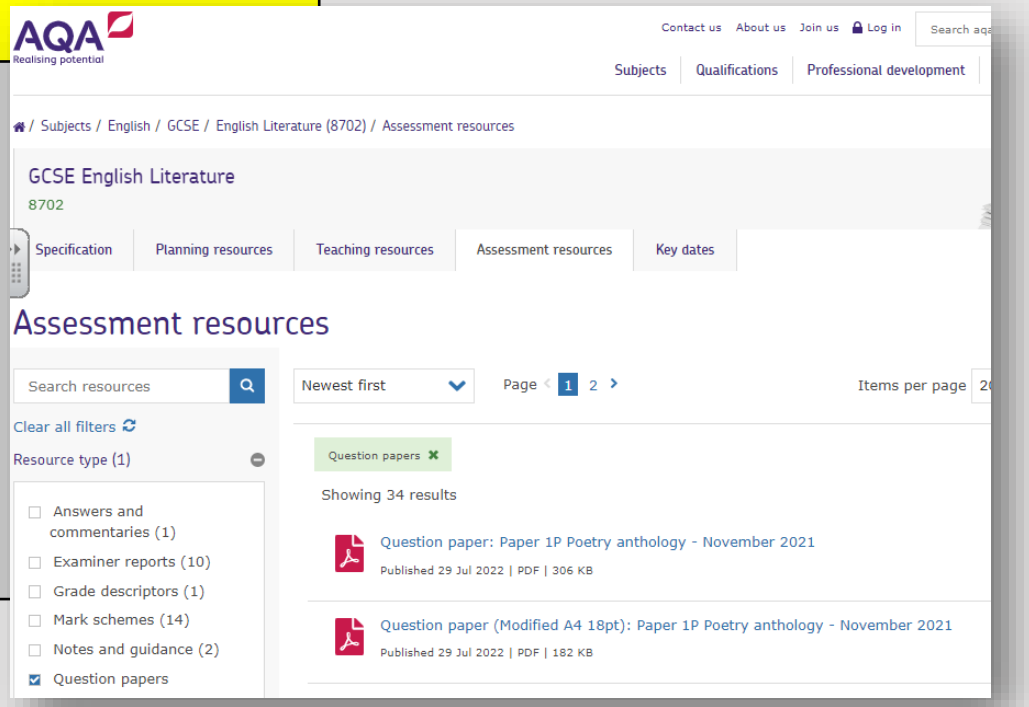
GCSE
ENGLISH LITERATURE
Paper 2 Modern Texts and Poetry

Thursday 23 May 2019 Morning Time allowed: 2 hours 15 minutes

Materials
For this paper you must have:
- an AQA 16-page answer book.

Instructions
- Use black ink or black ball-point pen. Do **not** use pencil.
- Write the information required on the front of your answer book. The **Paper Reference** is 8702/2.
- Answer **one** question from **Section A**, **one** question from **Section B** and **both** questions in **Section C**.
- You must **not** use a dictionary.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 96.
- AO4 will be assessed in **Section A**. There are 4 marks available for AO4 in **Section A** in addition to 30 marks for answering the question. AO4 assesses the following skills: use a range of vocabulary and sentence structures for clarity, purpose and effect, with accurate spelling and punctuation.
- There are 30 marks for **Section B** and 32 marks for **Section C**.



AQA
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/ Subjects / English / GCSE / English Literature (8702) / Assessment resources

GCSE English Literature
8702

Specification | Planning resources | Teaching resources | Assessment resources | Key dates

Assessment resources

Search resources

Clear all filters

Resource type (1)

- Answers and commentaries (1)
- Examiner reports (10)
- Grade descriptors (1)
- Mark schemes (14)
- Notes and guidance (2)
- Question papers

Newest first Page 1 2 Items per page

Question papers

Showing 34 results

Question paper: Paper 1P Poetry anthology - November 2021
Published 29 Jul 2022 | PDF | 306 KB

Question paper (Modified A4 18pt): Paper 1P Poetry anthology - November 2021
Published 29 Jul 2022 | PDF | 182 KB

Available on the AQA website.

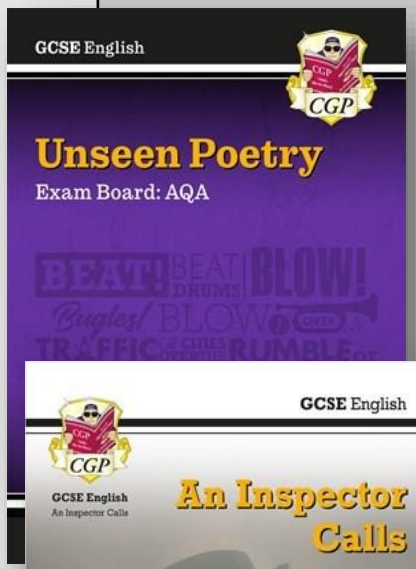
Pupils can ask their English teacher if unsure.

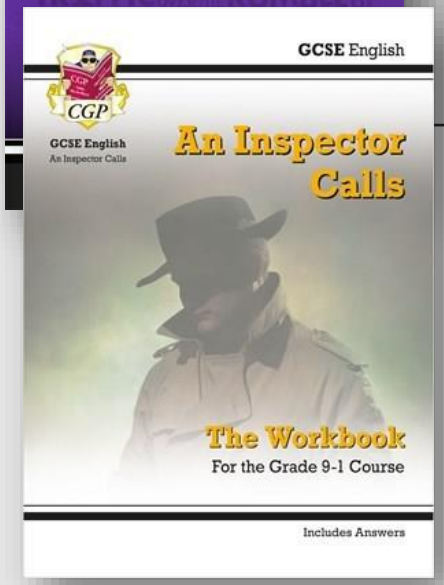
CAUTION!
The 2022 papers were structured differently due to COVID.

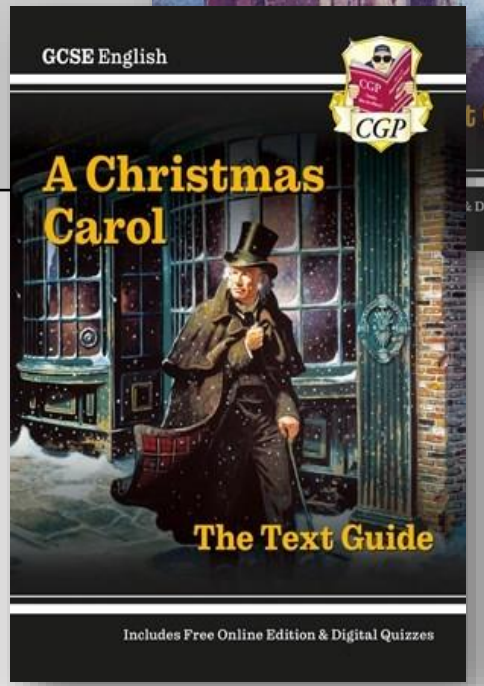
English Department
Year 11 Revision Evening

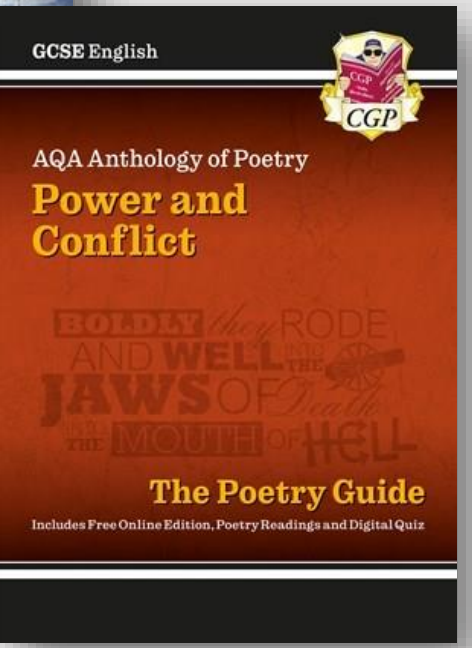
English Literature – How can I revise?

Revision Guides









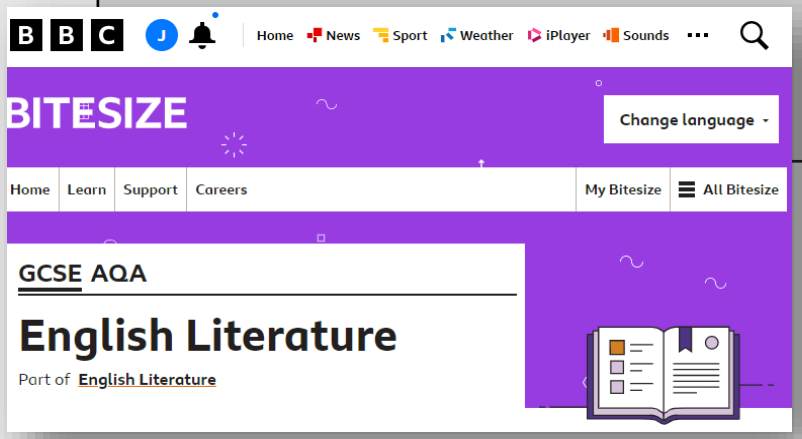
CGP have a great range at excellent value.

Average cost £5-7 per book.

English Department
Year 11 Revision Evening

English Literature – How can I revise?

Websites



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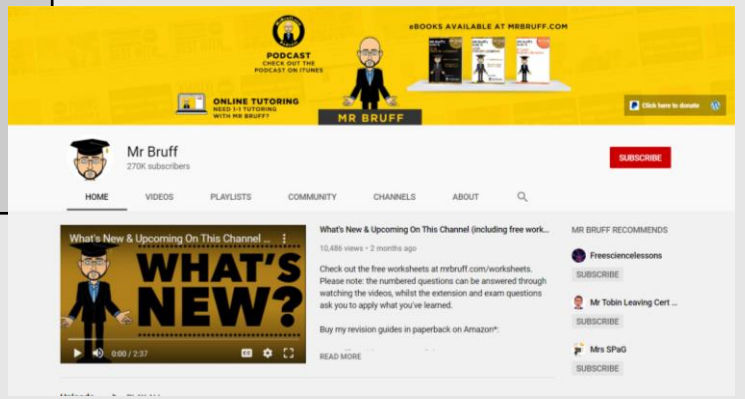
SENECA

Class teachers can allocate topics to pupils, or they can log in and search for relevant quizzes.

YouTube



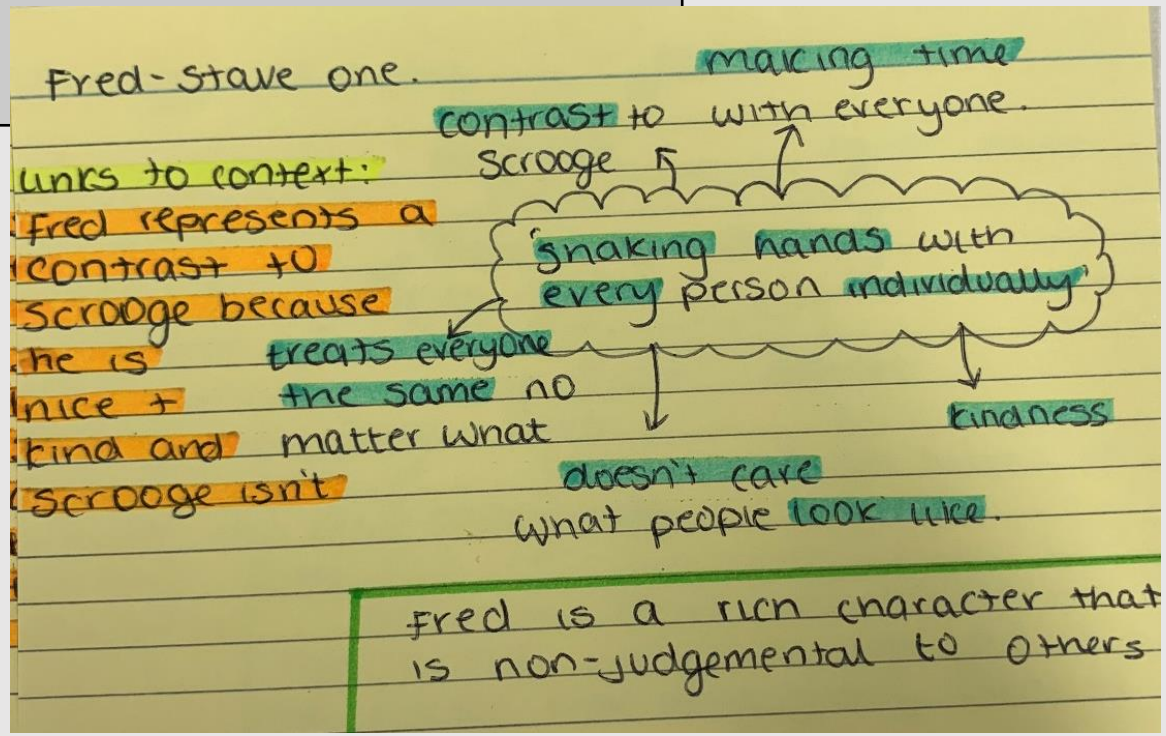
Revision videos on YouTube such as MrBruff: https://www.youtube.com/user/mrbruff

English Department
Year 11 Revision Evening

English Literature – How can I revise?

Creating Flashcards

Create flashcards for key terminology and quotations for the Literature texts.

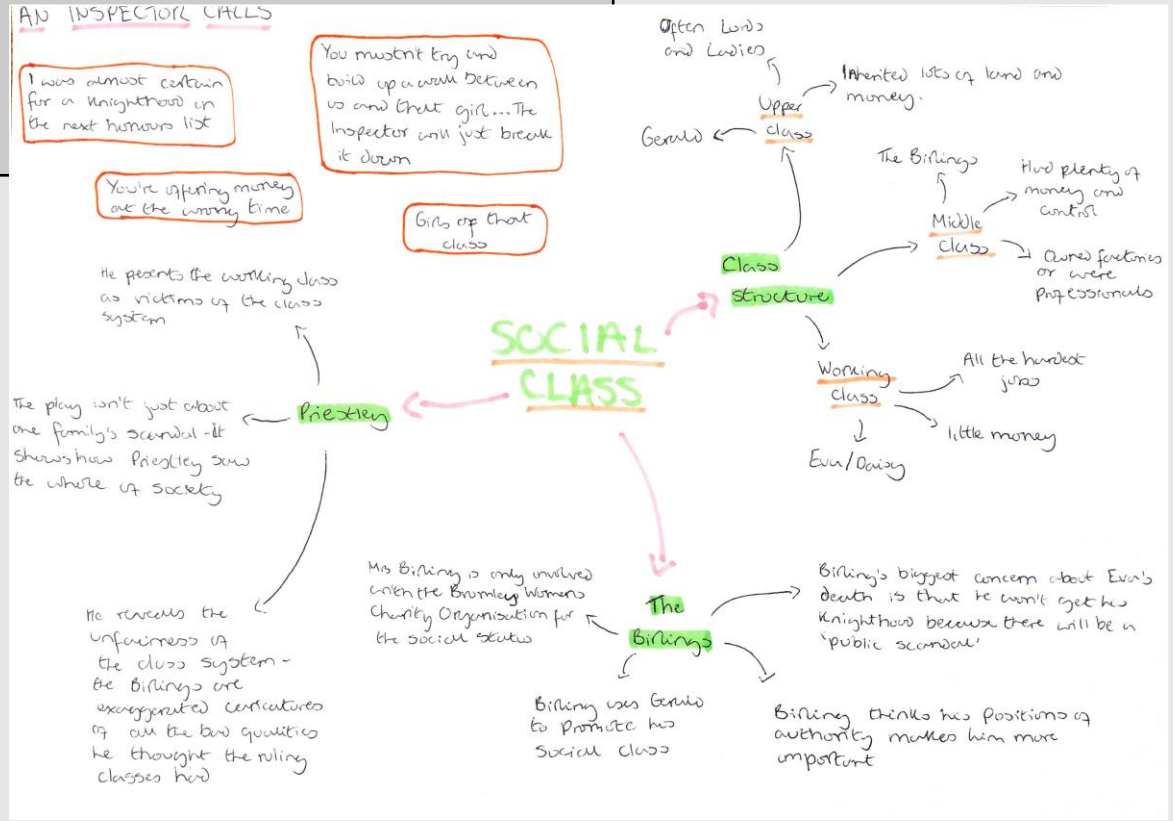


English Department
Year 11 Revision Evening

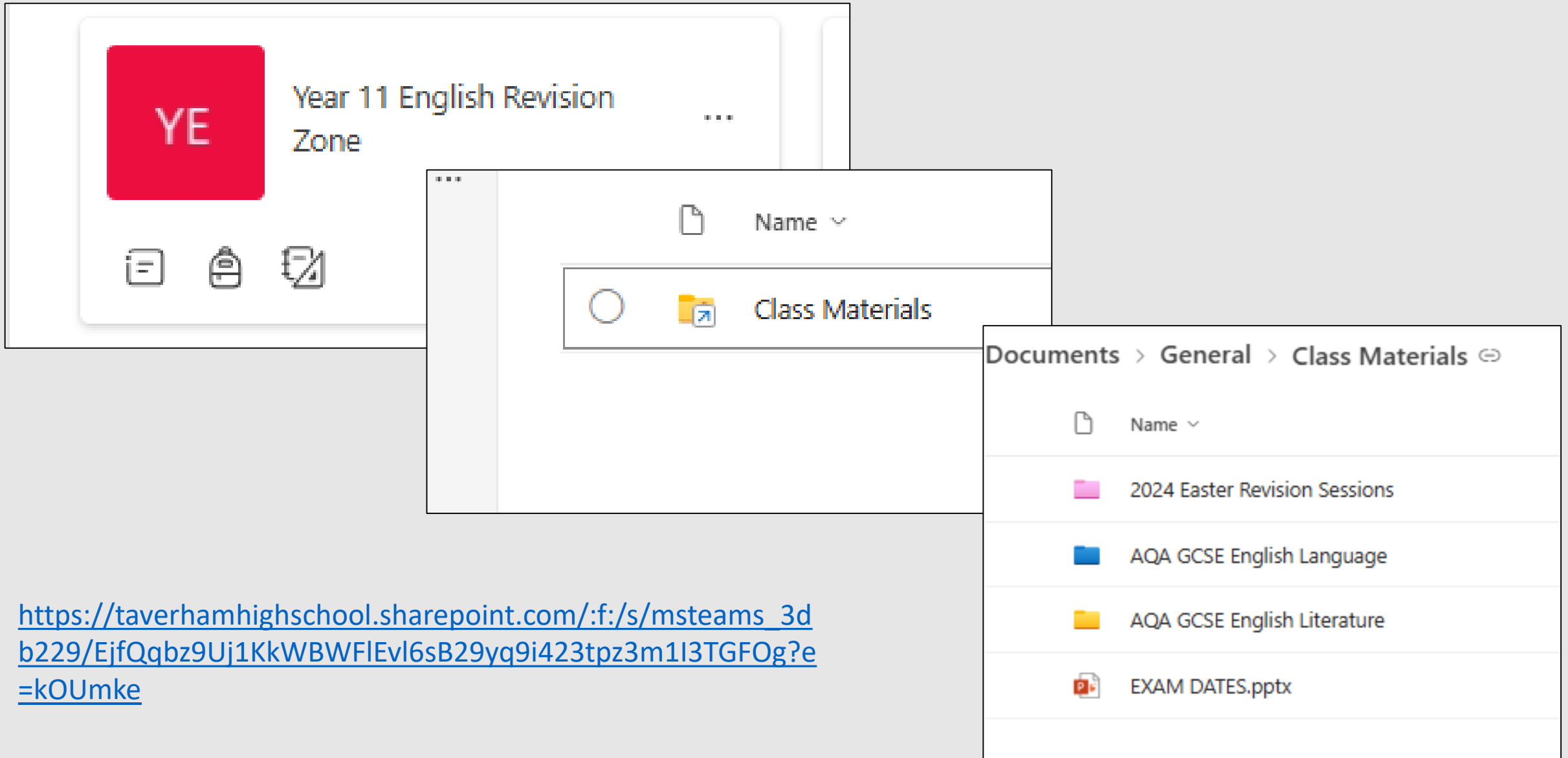
English Literature – How can I revise?

Creating Mind-Maps

Create mind-maps for key characters and themes in the Literature texts.

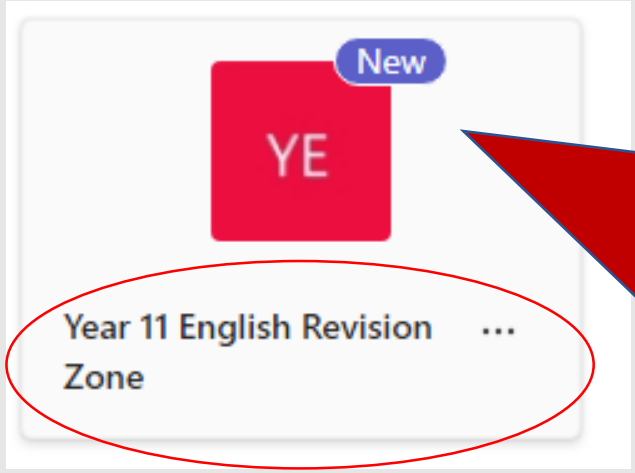


English Department
Year 11 Revision Evening



https://taverhamhighschool.sharepoint.com/:f:/s/msteams_3db229/EjfQqbz9Uj1KkWBWFlEvl6sB29yq9i423tpz3m1I3TGFOg?e=kOUmke

English Department
Year 11 Revision Evening



New TEAMS area specifically for English Revision!

Any further questions, please get in touch:

g.higgins@taverhamhigh.org
m.hollis@taverhamhigh.org

YouTube:

Mr Bruff -
https://www.youtube.com/channel/UCM2vdqz-7e4HAuzhpFuRY8w

Famous Speeches -
– watch and analyse Barack Obama, Emma Watson, Maya Angelou, Greta Thunberg, Martin Luther King etc.

Mr Sallis -
https://www.youtube.com/@MrSallesTeachesEnglish

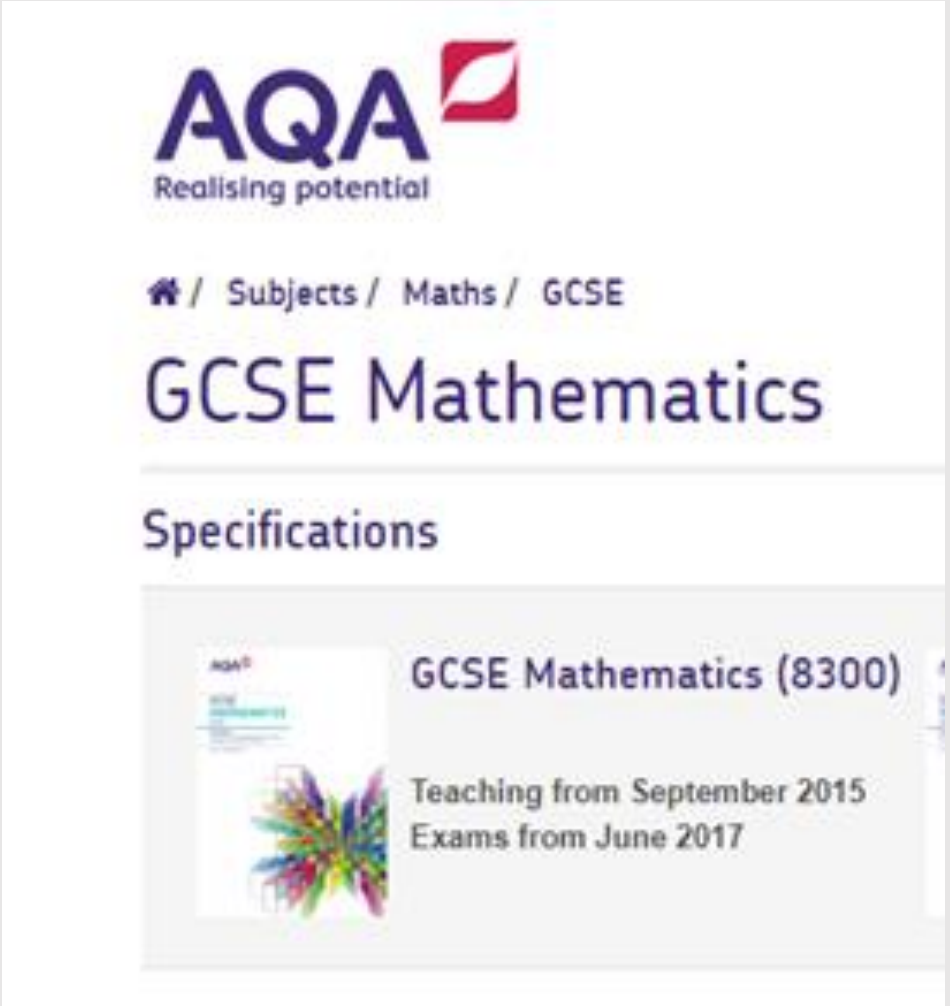
Royal Shakespeare Company -
https://www.youtube.com/watch?v=jPa2rKXDQP0&list=PLolOYEpIfPsloAacNeATvlaQKlk7Q2lyf

Maths GCSE

Mr Robinson, Head of KS4 Maths

GCSE - Mathematics

- Exam board AQA
- Foundation Grades 1 – 5
- Higher Grades 4 – 9
- 3 papers each 1 hour 30mins
- Paper 1 Non calculator
- Papers 2 & 3 Calculator allowed



Changes from Summer 2023.

- There will be between 0 and 4 multiple choice questions in each paper (there used to be 8). They are only worth 1 mark each.

- There will be a formula sheet issued with every exam paper. Familiarise yourself with this before the exam.

- More focus on fewer words and ease of reading. AQA will make sure that they use the minimum words that convey the necessary meaning across all our questions.

AQA

GCSE
MATHEMATICS HIGHER TIER

Formulae Sheet

Insert

Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium $= \frac{1}{2}(a+b)h$

Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle $= 2\pi r = \pi d$

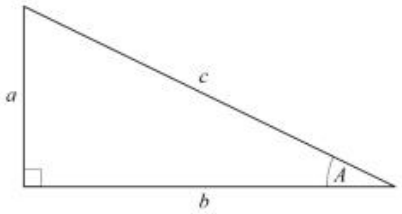
Area of a circle $= \pi r^2$

Quadratic formula

The solution of $ax^2 + bx + c = 0$ where $a \neq 0$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Pythagoras' Theorem and Trigonometry

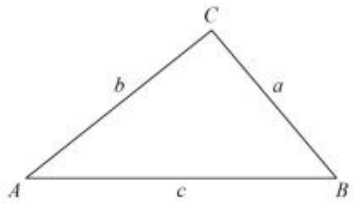


In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

$$a^2 + b^2 = c^2$$

In any right-angled triangle ABC where a, b and c are the length of the sides and c is the hypotenuse:

$$\sin A = \frac{a}{c} \qquad \cos A = \frac{b}{c} \qquad \tan A = \frac{a}{b}$$



In any triangle ABC where a, b and c are the length of the sides:

sine rule: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

cosine rule: $a^2 = b^2 + c^2 - 2bc\cos A$

Area of triangle $= \frac{1}{2}ab\sin C$

Compound Interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

$$\text{Total accrued} = P\left(1 + \frac{r}{100}\right)^n$$

Probability

Where $\mathrm{P}(A)$ is the probability of outcome A and $\mathrm{P}(B)$ is the probability of outcome B:

$$\mathrm{P}(A \text{ or } B) = \mathrm{P}(A) + \mathrm{P}(B) - \mathrm{P}(A \text{ and } B)$$

$$\mathrm{P}(A \text{ and } B) = \mathrm{P}(A \text{ given } B)\,\mathrm{P}(B)$$

AQA

GCSE
MATHEMATICS FOUNDATION TIER

Formulae Sheet

Insert

Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium $= \frac{1}{2}(a+b)h$

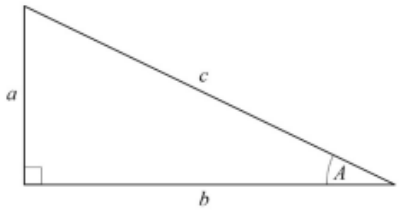
Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle $= 2\pi r = \pi d$

Area of a circle $= \pi r^2$

Pythagoras' Theorem and Trigonometry



In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

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$$\mathrm{P}(A \text{ or } B) = \mathrm{P}(A) + \mathrm{P}(B) - \mathrm{P}(A \text{ and } B)$$

Additional formulae

- These formulae are embedded within a question where it's required to answer the question:

- Curved surface area of a cone = $\pi \times r \times l$,
  where r is the radius and l is the slant height
- Volume of a cone = $\frac{1}{3} \times \pi \times r^2 \times h$,
  where r is the radius and h is the perpendicular height
- Volume of a pyramid = $\frac{1}{3} \times area\ of\ base \times h$,
  where h is the perpendicular height
- Surface area of a sphere = $4 \times \pi \times r^2$,
  where r is the radius
- Volume of a sphere = $\frac{4}{3} \times \pi \times r^3$,
  where r is the radius
- Final velocity: $v = u + a \times t$, $v^2 = u^2 + 2 \times a \times s$
  Displacement: $s = u \times t + \frac{1}{2} \times a \times t^2$,
  where a is constant acceleration, u is initial velocity, v is final velocity, s is displacement, and t is time.

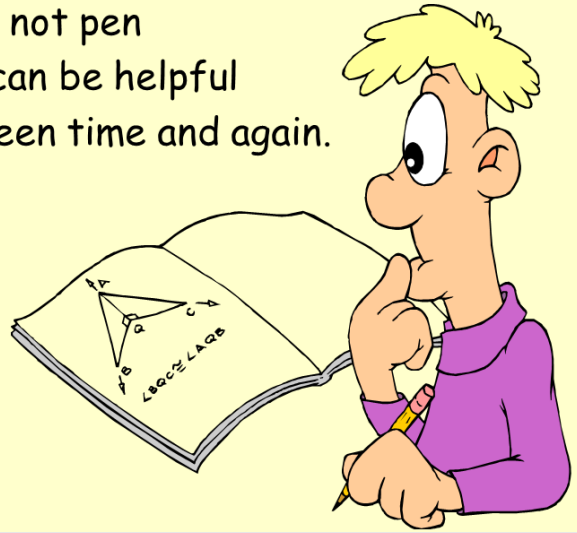
Additional formulae

- These formulae aren't provided within an exam paper, and it's expected that you know them:

- Area of a rectangle = $l \times w$,
  where l is the length and w is the width
- Area of a triangle = $\frac{1}{2} \times b \times h$,
  where b is the base and h is the perpendicular height
- Area of a parallelogram = $b \times h$,
  where b is the base and h is the perpendicular height
- Volume of a cuboid = $l \times w \times h$,
  where l is the length, w is the width and h is the height
- Volume of a prism = $area\ of\ cross\ section \times l$,
  where l is the length
- Volume of a cylinder = $\pi \times r^2 \times h$,
  where r is the radius and h is the height
- Speed = $distance \div time$
- Density = $mass \div volume$
- General form for the equation of a straight line: $y = mx + c$,
  where m is the gradient, c is the y-intercept
- General form for the equation of a circle (Higher tier only):
  $x^2 + y^2 = r^2$, where r is the radius.

You can earn marks for working
If your answer is wrong.
So write down each process
It won't take too long!

Draw diagrams if needed
Use pencil not pen
A sketch can be helpful
And has been time and again.



This question has three marks
Available to you
So make sure your answer
Has three parts too

(ii) Describe fully the **single** transformation represented by the matrix $\begin{pmatrix} 1 & 0 \\ 1 & 1 \end{pmatrix}$.

Answer (c)(ii) ..... [3]

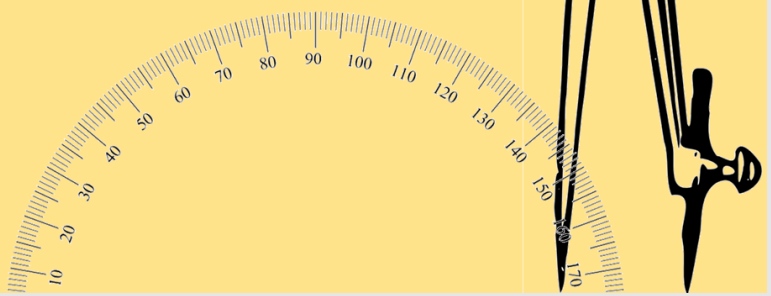
Some questions are real life
Involving measures and more
Answers are not just numbers
Units get the top score

Kilometres per hour

The weight of the kitten is 345 tonnes.

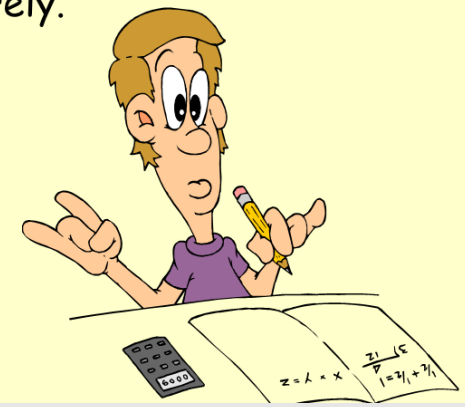
When you do get an answer
You've not finished at all
You should check if it feels right
Not too big or too small.

Get your equipment together
Long before you get there
Protractor, pen, pencils
And a compasses pair



You might finish early
Don't sleep or look around
Go over your answers
There could be
errors to be found

Don't round off your answers
Too prematurely
That will lose you some marks
And confidence surely.



Top tips for productive Maths revision:

Practice, practice, practice. DO actual maths problems. Short, daily practice (15-20 mins) is better than long, infrequent sessions.

Use Past Papers. They are crucial for understanding question styles, timings, and identifying weaknesses. Mark them and focus on topics where you lost marks.

Target weaknesses. After past papers, make a list of topics you struggled with and revise those specific areas using online resources.

Learn Formulas. Use flashcards or posters for key formulas and equations.

How to approach worded problems

Read the question

- Understanding the question and what is being asked before writing any working.

Start at the beginning

- Begin thinking about how the numbers interact with each other and write down the required calculations.

Identify key information

- Perhaps by underlining key words or information. Give attention to differing units, as these might need converting.

Write the units in your calculations

- Avoid confusion about what different numbers represent, possibly adding notes to your work to avoid any confusion.

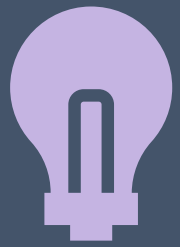
Recall any relevant formulae

- That you might need to apply within the question.

Review your work

- Make sure that your answers make sense in the context offered, and that you have answered all parts of the question. It's easy to forget the goal in multi-step problems.

Tips for during the exam



Read the question

- Take your time to read the question carefully
- Identify key terms to direct your working.

Use time wisely

- Each mark roughly equates to 1 minute. Aim to spend about 2 minutes on questions worth 2 marks.
  Use ‘banked’ time to work through harder questions.

Show your working

- Write down all the steps in your work, including work you used a calculator for.
  Marks can be awarded for correct methods, even if you don’t get to the correct answer.

Take care with writing

- Make sure that your workings and answers are clear. Only cross out work that you don’t want to be marked when it has been replaced with new work.

Attempt every question

- Write down what you know, even if you don’t get the final answer.
  An educated guess is better than leaving a question blank.

Check your work

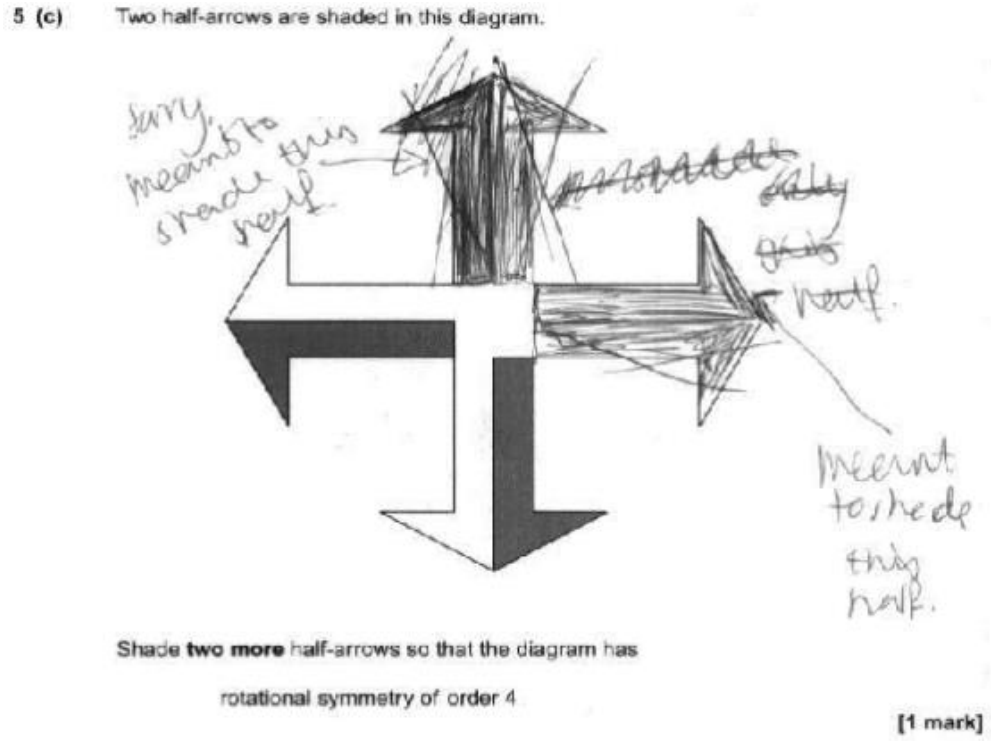
- Make sure that you have answered the question being asked, and that your answer makes sense in context.

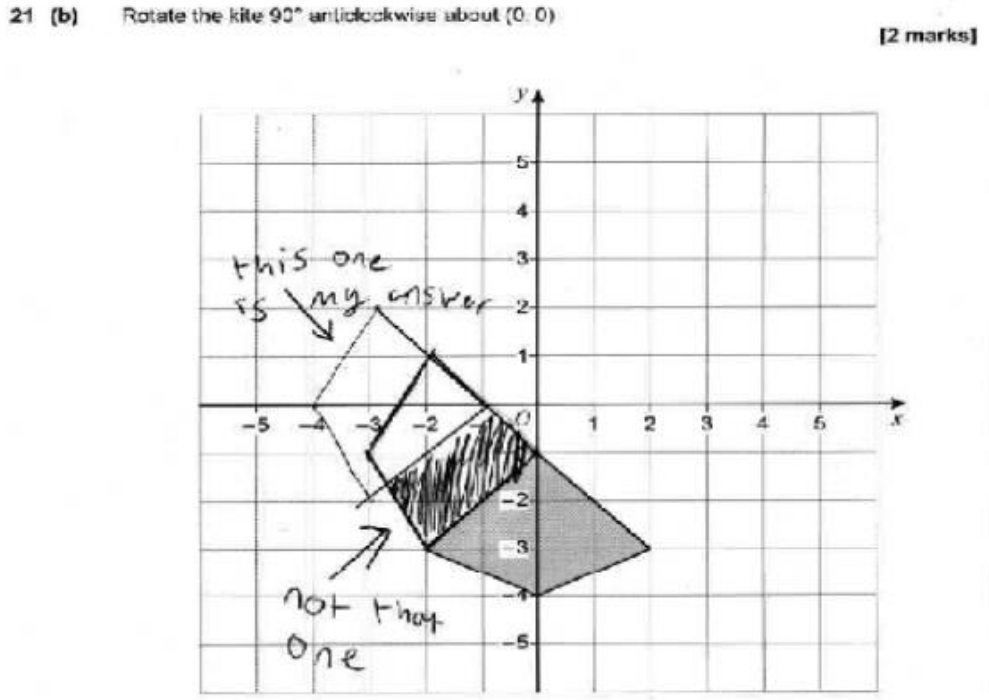
AQA

Insights from the examiners

Present your work clearly –

'scruffy' work is a common cause of lost marks. Draw diagrams in pencil, so you can erase your work if needed





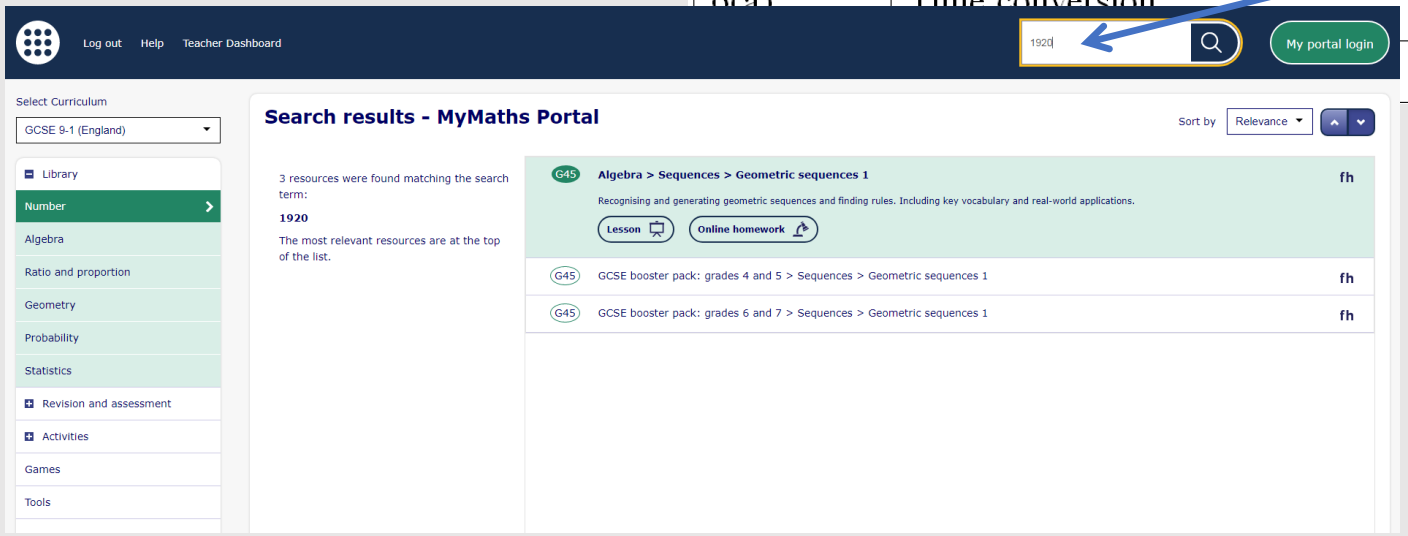
Insights from the examiners

- **Check your work often** –
  Basic calculation errors are common, and you wouldn't normally make them
- **Use a calculator when you can** –
  Marks are often lost through inaccurate calculations in papers 2 and 3
- **Use the formulae sheet** –
  Incorrectly recalling a provided formula will result in marks being lost
- **Begin questions by writing down what you can** –
  Longer questions tend to result in more 'non-attempts', but you could gain some marks by writing down what you know about the question.

- Assessment feedback Sheets

Students should have an assessment feedback sheet stuck in their books after every assessment they sit in Year 10 and 11. This is used to identify problematic topics and areas of weakness which require further practice.

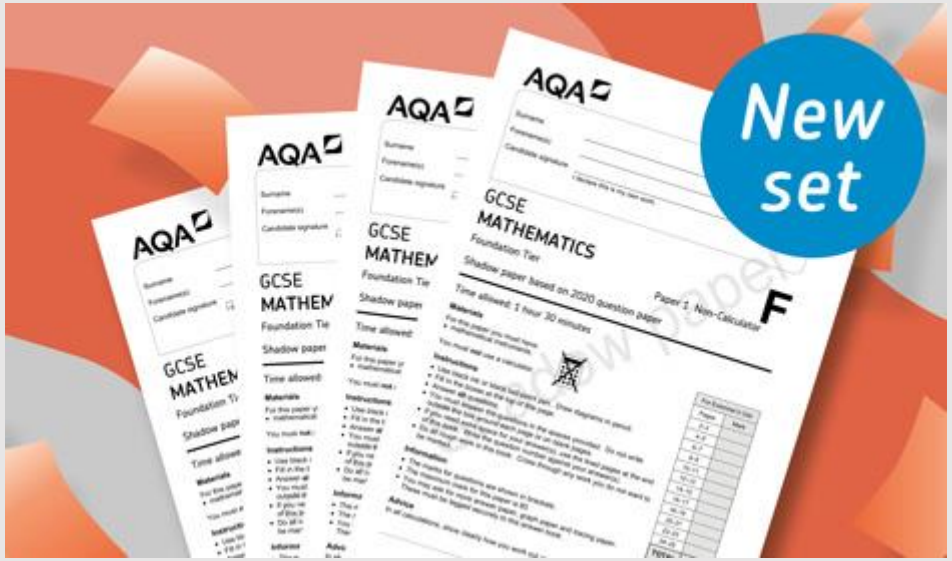
Question	Mathematical Skill	Marks	All	Some	None	Next Steps MyMaths
1	Range	1				1203
2	Place value	1				1931
3	Negative numbers	1				1068,1069
4	Conversion	1				1061
5	Ratio of areas	2				1052
6(a)	Time conversion	2				1123
		2				1123



- GCSE Past Papers

Students have access on Teams to GCSE past papers.

Students will also be given a number of past papers by their class teacher.



11 (a) A sequence starts 5 13 21 29

Circle the expression for the nth term.

$8 - 3n$ $8n + 5$ $8n - 3$ $5n + 8$

(1)

(b) The term-to-term rule for a different sequence is

Multiply the previous term by 2 then subtract 5

The second term in this sequence is $2x + 7$

The sum of the first three terms is 57

Work out the value of x.

Answer _____

(4)

(Total 5 marks)

AQA exampro

GCSE MATHEMATICS Name:

Practice Paper Foundation 1 Maximum marks: 80

Non-Calculator Time allowed: 1 hour and 30 minutes

These questions are from past papers covering topics and skills based on the advance information to help you prepare for the exams this summer.

Answer all questions in the spaces provided. You must **not** use a calculator.

Resources

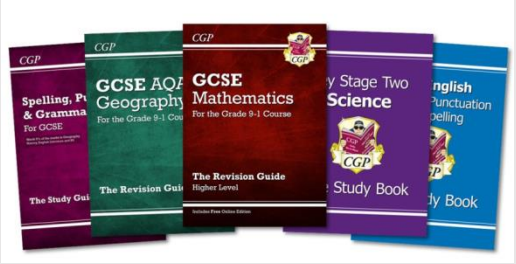
Mymaths.co.uk (Username : taverham Password : maths)

CorbettMaths.com (video demonstrations)

astarlearning.co.uk (video demonstrations)

mathsgenie.co.uk (graded questions by topic)

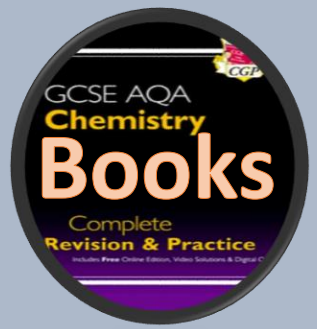
onmaths.com/revisionator (generates graded questions and marks them)



CPG Revision Guides / Practice Workbook / Revision Cards

Science Revision
Top tips

Taverham High School
An 11-18 Academy
Inspire | Empower | Achieve



GCSE Revision

Matthew Hart
Head of Science Faculty
M.hart@taverhamhigh.org

What is your child studying and how are they assessed?

Taverham High School
An 11-18 Academy

Combined Science	Separate (Triple) Science
2 GCSE grades	3 GCSE grades (one for each science)
AQA Trilogy Specification – 2 tiers available	AQA Biology, Chemistry and Physics Specifications 2 tiers available
Exams: 6 papers: Paper 1: Chemistry (Topics C1-C5) 12th May Paper 1: Physics (Topics P1-P4) 18nd May Paper 1: Biology (Topics B1-B4) 2nd June Paper 2: Chemistry (Topics C6-C10) 8th June Paper 2: Physics (Topics P5 – P7) 12th June Paper 2: Biology (Topics B5 – B7) 15th June **All papers are 1 hour 15 mins each and have the same weighting**	**Exams: 6 papers** Paper 1: Chemistry (Topics C1-C5) Paper 1: Physics (Topics P1-P4) Paper 1: Biology (Topics B1-B4) Paper 2: Chemistry (Topics C6-C10) Paper 2: Physics (Topics P5 – P8 – extra Space unit) Paper 2: Biology (Topics B5 – B7) **All papers are 1 hour 45 mins each and have the same weighting**

13.7 Weeks from tomorrow

Scary?


"The best time to plant a tree was 20 years ago. The second best time is now."
- Chinese Proverb -

One of the best ways to…

Know what you need to know

Discover areas of weakness

is to use…

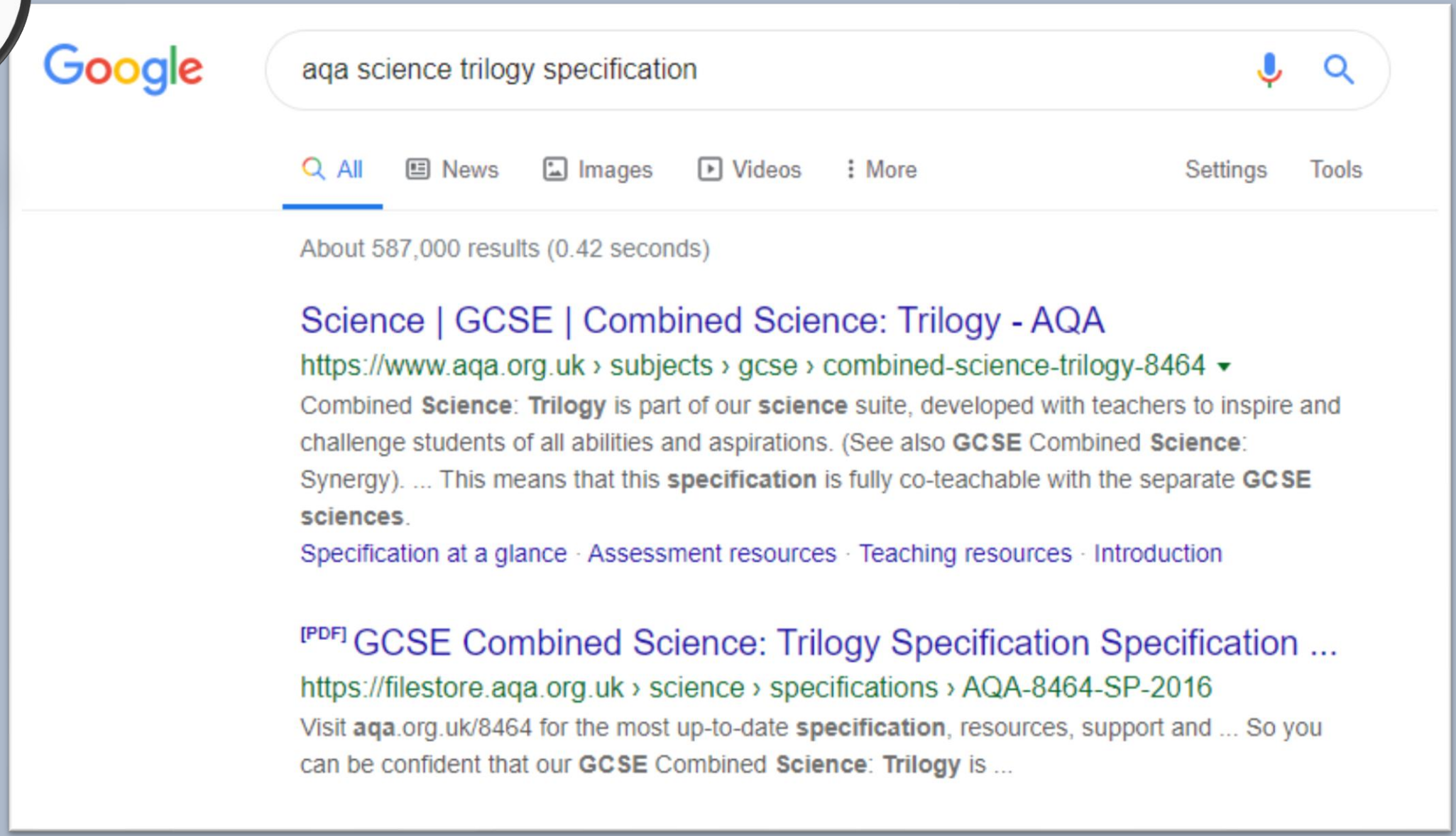
Personalised learning checklists

Specifications

Past paper questions

Science Revision Zone ...

Specifications - Where are they?



Science Revision Zone ...

AQA-8464-SP-2016.PDF (SECURED) - Adobe Acrobat Reader 2017

File Edit View Window Help

Home Tools AQA-8464-SP-201... ×

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What do they look like?

AQA
Realising potential

GCSE
COMBINED
SCIENCE:
TRILOGY
(8464)

Specification
For teaching from September 2016 onwards
For exams in 2018 onwards

Version 1.1 04 October 2019

6.1.1.1 Energy stores and systems

Content	Key opportunities for skills development
A system is an object or group of objects. There are changes in the way energy is stored when a system changes. Students should be able to describe all the changes involved in the way energy is stored when a system changes, for common situations. For example: • an object projected upwards • a moving object hitting an obstacle • an object accelerated by a constant force • a vehicle slowing down • bringing water to a boil in an electric kettle. Throughout this section on Energy students should be able to calculate the changes in energy involved when a system is changed by: • heating • work done by forces • work done when a current flows	The link between work done (energy transfer) and current flow in a circuit is covered in Work done and energy transfer (page 146). WS 4.5

Science Revision Zone ...

Learning checklists

AQA Physics (8463) from 2016 Topics P4.1. Energy				
Topic	**Student Checklist**	**R**	**A**	**G**
Chapters 1 and 2 – Conservation and dissipation of energy Energy transfer by heat	Define a system as an object or group of objects and state examples of changes in the way energy is stored in a system			
	Describe how all the energy changes involved in an energy transfer and calculate relative changes in energy when the heat, work done or flow of charge in a system change			
	Use calculations to show on a common scale how energy in a system is distributed			
	Calculate the kinetic energy of an object by recalling and applying the equation: ***[$E_k = \frac{1}{2}mv^2$]***			
	Calculate the amount of elastic potential energy stored in a stretched spring by applying, but not recalling, the equation: ***[$E_e = \frac{1}{2}ke^2$]***			
	Calculate the amount of gravitational potential energy gained by an object raised above ground level by recalling and applying, the equation: ***[$E_e = mgh$]***			
	Calculate the amount of energy stored in or released from a system as its temperature changes by applying, but not recalling, the equation: ***[$\Delta E = mc\Delta\theta$]***			
	Define the term 'specific heat capacity'			
	Required practical 1: *investigation to determine the specific heat capacity of one or more materials.*			
	Define power as the rate at which energy is transferred or the rate at which work is done and the watt as an energy transfer of 1 joule per second			
	Calculate power by recalling and applying the ***equations: [P = E/t & P = W/t]***			
	Explain, using examples, how two systems transferring the same amount of energy can differ in power output due to the time taken			
	State that energy can be transferred usefully, stored or dissipated, but cannot be created or destroyed and so the total energy in a system does not change			
	Explain that only some of the energy in a system is usefully transferred, with the rest 'wasted', giving examples of how this wasted energy can be reduced			
	Explain ways of reducing unwanted energy transfers and the relationship between thermal conductivity and energy transferred			
	Describe how the rate of cooling of a building is affected by the thickness and thermal conductivity of its walls			
	Required practical 2: *investigate the effectiveness of different materials as thermal insulators and the factors that may affect the thermal insulation properties of a material.*			
	Calculate efficiency by recalling and applying the equation: ***[efficiency = useful power output / total power input]***			
	HT ONLY: Suggest and explain ways to increase the efficiency of an intended energy transfer			
Chapter 3 – Energy Resources	List the main renewable and non-renewable energy resources and define what a renewable energy resource is			
	Compare ways that different energy resources are used, including uses in transport, electricity generation and heating			
	Explain why some energy resources are more reliable than others, explaining patterns and trends in their use			
	Evaluate the use of different energy resources, taking into account any ethical and environmental issues which may arise			
	Justify the use of energy resources, with reference to both environmental issues and the limitations imposed by political, social, ethical or economic considerations			

Identify and describe scalar quantities and vector quantities

R	A	G

Science Revision Zone

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exams.

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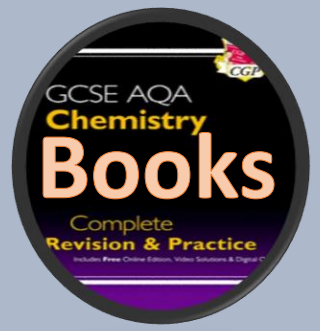
[3 marks]

Do not write outside the box

Act on area of weakness

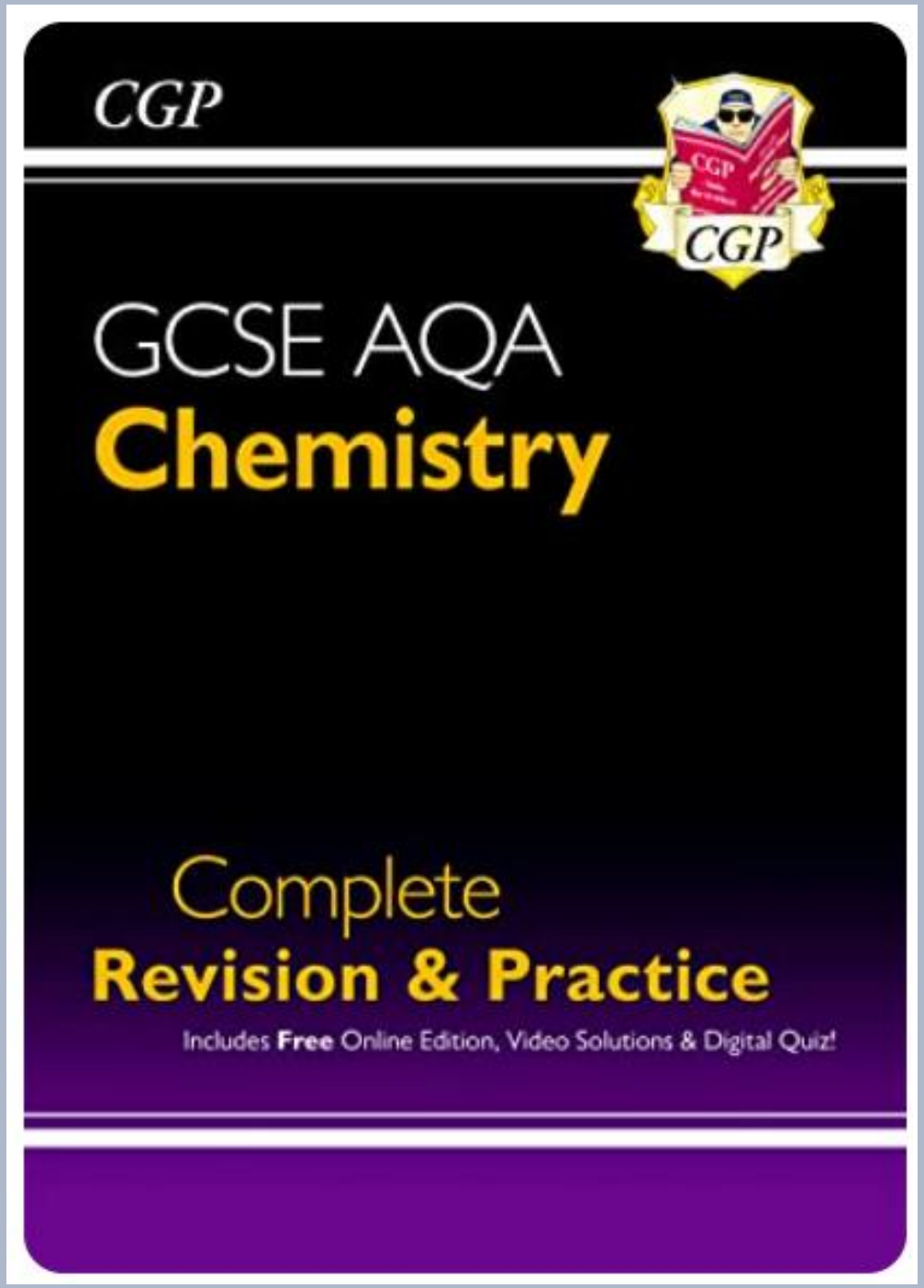
- Revision guides
- Revision knowledge mats
- Revision videos
- Seneca
- BBC Bitesize
- Independence booklets
- Revision sessions
- Contact teachers



Revision guides
Practice books

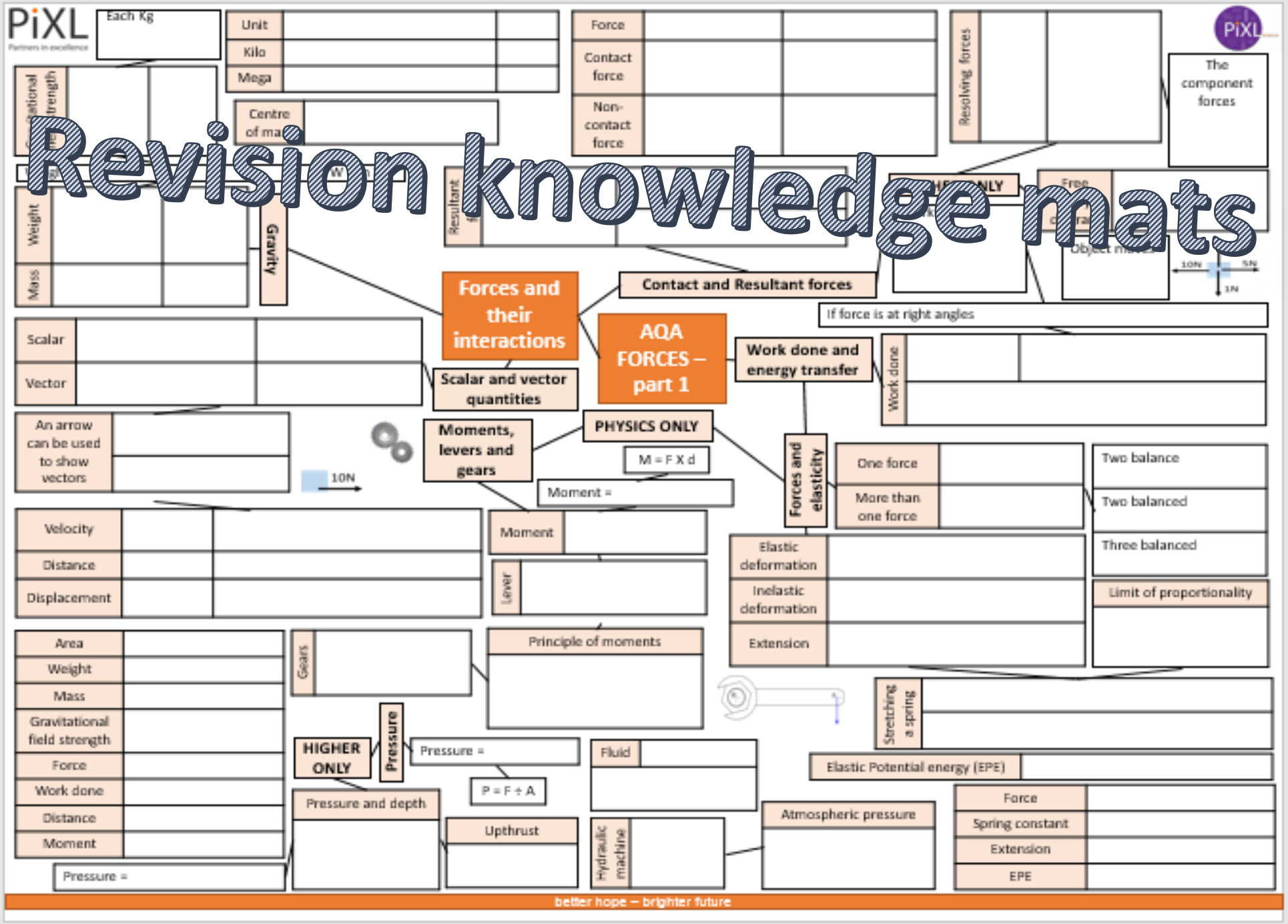
AQA 9-1 exam

Science department sells CGP books at roughly 50% RRP

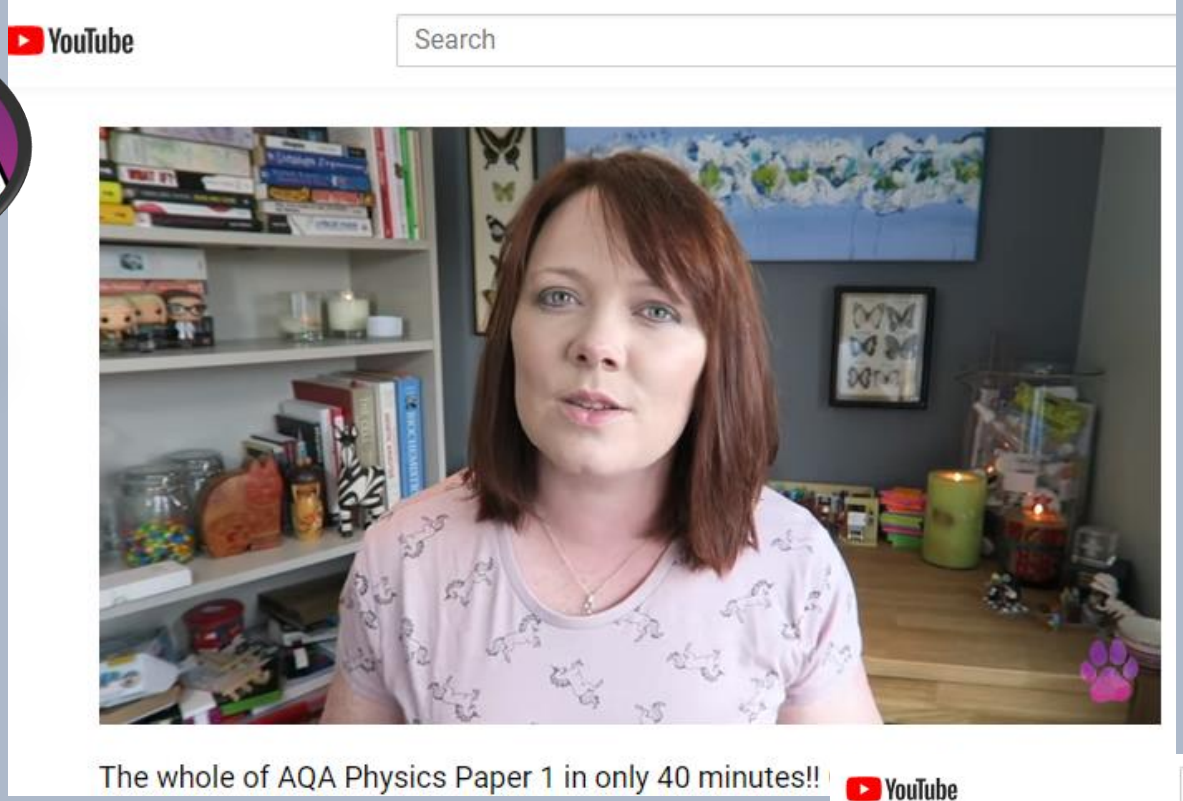


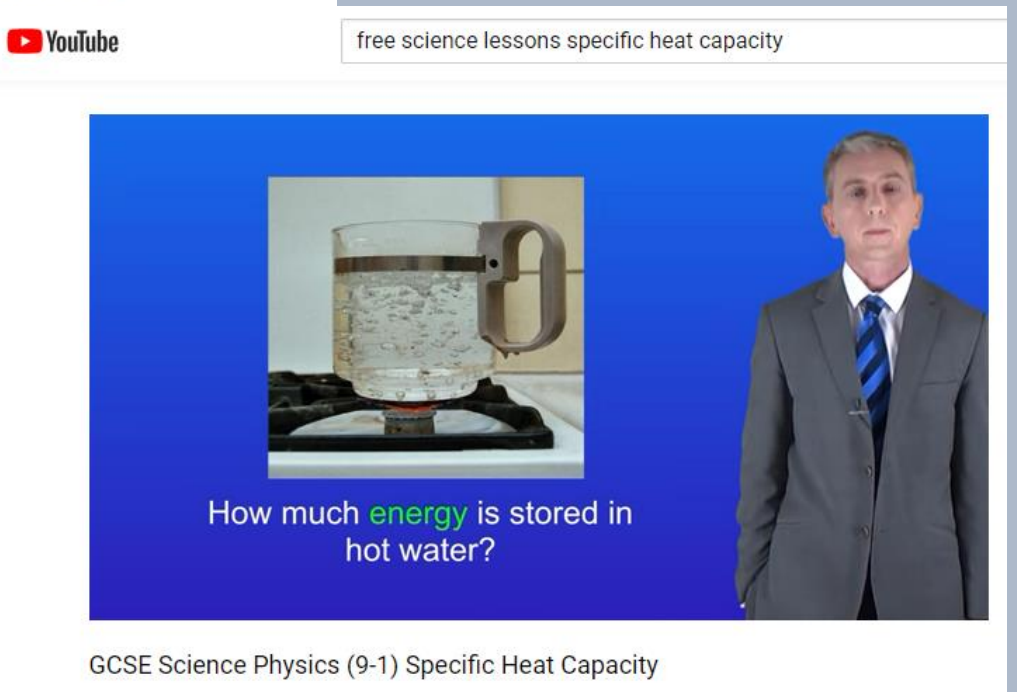
Science Revision Zone ...

Revision knowledge mats



Revision videos





Primrose Kitten

Free Science Lessons

SENECA BETA

Chemistry: AQA GCSE Higher

- 1.1 Atoms & Elements
  - 1.1.1 Elements & Compounds
  - 1.1.2 Chemical Reactions & Equations
  - 1.1.3 Mixtures
  - 1.1.4 Model of the Atom
  - 1.1.5 Atom Size & Number
  - 1.1.6 Isotopes
  - 1.1.7 Periodic Table
  - 1.1.8 Noble Gases & Halogens
  - 1.1.9 Alkali Metals
  - 1.1.10 Transition Metals
- 2 Chemical Bonding
- 3 (

Share Free Teacher CPD Course

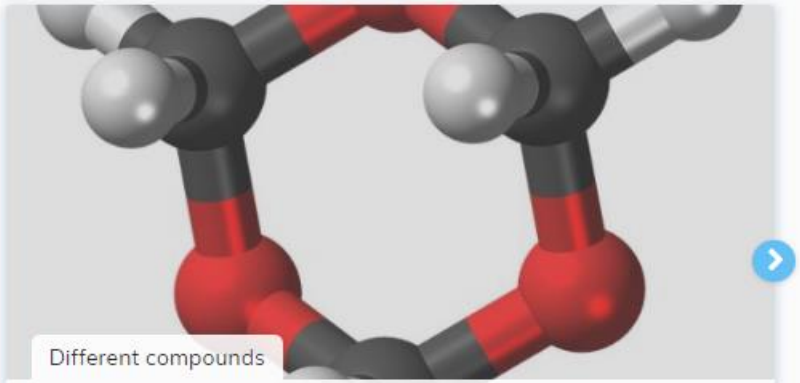
Fe is the chemical symbol for the element iron.

New

1 / 3

Compounds

Atoms of different elements can be combined together to create compounds. Compounds have formulae that are made by combining the chemical symbols of the elements that combine to make them.



Different compounds

- Combining different atoms creates different compounds. There are a lot of combinations that can be created.
- A compound contains at least 2 different elements.

Feedback?

Typing Speed: x1.0

Continue

Seneca - website

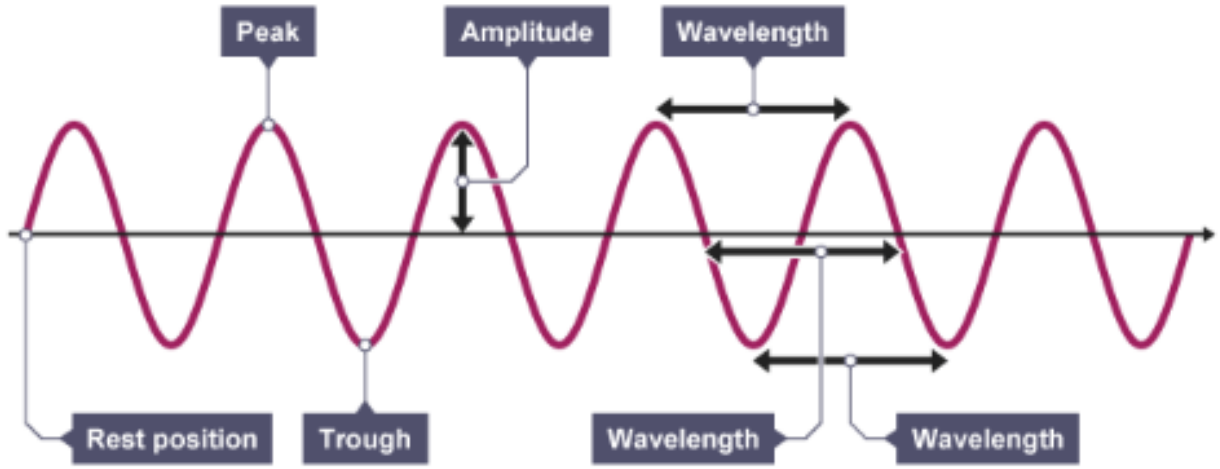
BBC Bitesize

Parts of a wave

Waves are described using the following terms:

- **rest position** - the undisturbed position of particles or fields when they are not vibrating
- **displacement** - the distance that a certain point in the medium has moved from its rest position
- **peak** - the highest point above the rest position
- **trough** - the lowest point below the rest position
- **amplitude** - the maximum displacement of a point of a wave from its rest position
- **wavelength** - distance covered by a full cycle of the wave, usually measured from peak to peak, or trough to trough
- **time period** - the time taken for a full cycle of the wave, usually measured from peak to peak, or trough to trough
- **frequency** - the number of waves passing a point each second

Diagram of a wave



Science Revision Zone ...

QUESTION:	**What is a radioactive substance?**
Sources:	**Website –** 1. https://www.youtube.com/watch?v=V-UtgheMNNU 2. http://www.darvill.clara.net/nucrad/types.htm

1. **A radioactive substance contains unstable nuclei that become stable by emitting radiation.**
2. **There are three main types of radiation – alpha, α, beta, β and gamma, γ.**
3. **Radioactive decay is random – it cannot be predicted.**
4. **All radioactive sources emit alpha, beta and gamma radiation.**
5. **A Geiger counter is used to measure the amount of radioactivity given off by a substance.**

The Risks of Radiation Therapy

News article: https://www.cheatsheet.com/health-fitness/these-popular-cancer-treatments-have-the-most-dangerous-side-effects.html/?a=viewall
NHS article: http://www.nhs.uk/Conditions/Radiotherapy/Pages/Introduction.aspx
Discussion article: https://health.usnews.com/health-news/patient-advice/articles/2015/05/22/radiation-evolving-choices-in-cancer-treatment
Real article: http://www.cancerresearchuk.org/about-cancer/cancer-in-general/treatment/radiotherapy/follow-up/long-term-side-effects

Task 1:
You need to produce a 1 page essay on the risks surrounding radiation therapy.

Essay section	Activity
Introduction	What is radiation therapy? What is radiation therapy used to treat?
Describe	Describe how radiation therapy would be conducted using a specific type of tumor, e.g. brain, breast, liver.
Explore	Explore the risk associated with having radiation therapy.
Evaluate	Evaluate whether the benefit outweighs the risk for the patient.

Compare nuclear fission and nuclear fusion, their role in generating energy and their long-term futures.

Background
Both fission and fusion are nuclear reactions that produce energy, but that is where their similarities end. Fission is the splitting of a heavy, unstable nucleus into two lighter nuclei, and fusion is the process where two light nuclei combine together releasing vast amounts of energy. Both have a place in the energy generation industry but, where is it?

Source articles
http://www.passmyexams.co.uk/GCSE/physics/nuclear-fusion.html
http://www.passmyexams.co.uk/GCSE/physics/nuclear-fission.html
http://www.gcsescience.com/prad37-nuclear-power-moderator-control-rod.htm
http://www.passmyexams.co.uk/GCSE/physics/nuclear-reactor.html
https://www.youtube.com/watch?v=LekacMuM12Y
https://www.youtube.com/watch?v=mZsaaturR6E
http://www.bbc.co.uk/schools/gcsebitesize/science/ocr_gateway_pre_2011/living_future/3_fuels_for_power3.shtml
http://www.bbc.co.uk/education/clips/zvmcd2p
http://www.world-nuclear.org/information-library/current-and-future-generation/outline-history-of-nuclear-energy.aspx
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4678124/

Use other sources as necessary.

Task:
Produce a scientific poster on the role of nuclear fission and nuclear fusion in the generation of energy.

Session 1

Click on the session 1 button and write the answers in your revision exercise book. If you are unsure of the facts in the topic go through the knowledge test questions and then mark it using the knowledge test answers.

Session 1

Knowledge test questions

Knowledge test answers

Required Practical

Click on the required practical button. Write details about the practical. Including : Method, Variables, Equipment, Diagram, Results Table, How you use your results and a Conclusion.

Required Practical - Microscope

Required Practical - Osmosis

Optional - Above and Beyond

If you want to really test yourself complete the shorter questions below to show real understanding.

Above and Beyond Foundation

Above and Beyond Higher

your teachers

hanks and happy new year!

GCSE Revision

Plan & Organise

- Timetable your revision
- Break topics into chunks

Active Learning

- Flashcards, mind maps, quizzes
- Teach someone else

Mix It Up

- Rotate subjects/topics
- Avoid long single-subject sessions

Past Papers

- Practice under exam conditions
- Check answers with mark schemes

GCSE Revision

Focus on Weaknesses

- Track progress & target gaps

Take Care of Yourself

- Sleep, exercise, breaks, healthy food

Minimise Distractions

- Quiet study space
- Limit social media

Use Support

- Ask teachers
- Attend school revision sessions

Reward Progress

- Celebrate small achievements