

# GCSE Mock Examination and Core Subject Information Evening

**Tuesday 7 November 2023**

# This evening...

- Preparation for mocks
  - Nuts and bolts!
  - Revision advice – when, what and how?
- Core subjects
  - English
  - Mathematics
  - Science
- Support from school

# Timeline

Term	Weeks
Term 1	8
Term 2	6½ weeks Mock exams – start halfway through week 4 (last 2 weeks)
Term 3	5½ weeks
Term 4	5½ weeks
Term 5	6½ weeks Timetabled lessons: 4 weeks Celebration day: Friday 3 May GCSE exams start: Thursday 8 May, run for 2 ½ weeks before half term
Term 6	2½ weeks of exams Finish 19 June

# Why do mock examinations matter?

- Chance to revise some of the content and assess effectiveness
- Dress rehearsal in formal setting reduces stress
  - timing and structure
- Indicators for pupils and teachers – how to improve
- Inform progress towards next steps beyond Year 11
- Delivers a message – motivates/warning message
- In the event of a pandemic.....

# Mocks 2023 - details

- Two school weeks: Wed 6 December – Wed 20 December
- Most exams take place in the Sports Hall
- Students in school at all times
- Revision support or independent revision
- Provisional timetable available now (planning)
- Individual seating timetables issued mid-November
- One paper per GCSE, noting:
  - English (Literature and Language)
  - Maths (Calculator and non-calculator)
  - Science (combined or separate)
  - MFL listening (before mock period, in lesson)
  - MFL speaking exams (end of Jan/start of Feb)

<b>Date</b>	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>
Wednesday 6th December	English Language		Computer Science/Cambridge IT
Thursday 7th December	Business Studies		Maths non calculator
Friday 8th December	Sociology		Combined Science/Separate Science Biology
Monday 11th December	Graphic Products/ Resistant Materials	Cope/ Cn, Jp, Sp Reading	Cope/ Cn, Jp, Sp Writing
Tuesday 12th December	History	Drama/ Separate Science Chemistry	PE/ VCERT Health and Fitness
Wednesday 13th December	English Literature		Geography
Thursday 14th December	Food	French Reading	French Writing
Friday 15th December	Art all day	Art all day	Art all day
Monday 18th December	Drama		Combined Science/Separate Science Physics
Tuesday 19th December	Music		Cambridge Health and Social Care
Wednesday 20th December	Maths Calculator		

# Mocks 2023 - details

- Two school weeks: Wed 6 December – Wed 20 December
- Most exams take place in the Sports Hall
- Students in school at all times
- Revision support or independent revision
- Provisional timetable available now (planning)
- Individual seating timetables issued mid November
- One paper per GCSE, noting:
  - English (Literature and Language)
  - Maths (Calculator and non-calculator)
  - Science (combined or separate)
  - MFL listening (before mock period, in lesson)
  - MFL speaking exams (end of Jan/start of Feb)
- **Exam structure for each subject.....**

## Mock Examination Summary Information

### Subject: English Language

	Include:
<b>Paper information - overview</b>	<p><i>One paper which lasts for 1 hour and 45 minutes: <b>English Language Paper 2 – Writers’ Viewpoints and Perspectives:</b></i></p> <p><i>Section A (reading and answering four questions of increasing difficulty based on <b>two</b> extracts from a modern non-fiction text and a 19<sup>th</sup> century non-fiction text); Section B (pupil’s own writing from a viewpoint)</i></p>

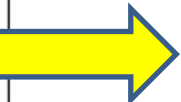
	Include:
<b>Content details</b>	<p><b>English Language Paper 2 Section A: four questions of increasing difficulty based on two non-fiction extracts – one modern, one from the 19<sup>th</sup> century.</b></p> <ul style="list-style-type: none"><li>• <b>Question 1: find four statements about an extract which are true (4 marks)</b></li><li>• <b>Question 2: question on summarising similarities or differences between the two extracts. (8 marks)</b></li><li>• <b>Question 3: question about the effect the language used by the writer has in one of the extracts (12 marks)</b></li><li>• <b>Question 4: comparing how the two texts convey different viewpoints (16 marks)</b></li></ul> <p><b>English Language Paper 2 Section B: viewpoint writing</b></p> <ul style="list-style-type: none"><li>• <b>Question 5: viewpoint writing based on a statement printed in the exam; pupils are required to respond to this statement. No choice of question. (40 marks: 24 marks for content and organisation; 16 marks for spelling, punctuation and grammar)</b></li></ul>



## Mock Examination Summary Information

### Subject: English Language

	Include:
<b>Paper information - overview</b>	<p><i>One paper which lasts for 1 hour and 45 minutes: <b>English Language Paper 2 – Writers’ Viewpoints and Perspectives:</b></i></p> <p><i>Section A (reading and answering four questions of increasing difficulty based on <b>two</b> extracts from a modern non-fiction text and a 19<sup>th</sup> century non-fiction text); Section B (pupil’s own writing from a viewpoint)</i></p>



	Include:
<b>Content details</b>	<p><b>English Language Paper 2 Section A: four questions of increasing difficulty based on two non-fiction extracts – one modern, one from the 19<sup>th</sup> century.</b></p> <ul style="list-style-type: none"><li>• <b>Question 1: find four statements about an extract which are true (4 marks)</b></li><li>• <b>Question 2: question on summarising similarities or differences between the two extracts. (8 marks)</b></li><li>• <b>Question 3: question about the effect the language used by the writer has in one of the extracts (12 marks)</b></li><li>• <b>Question 4: comparing how the two texts convey different viewpoints (16 marks)</b></li></ul> <p><b>English Language Paper 2 Section B: viewpoint writing</b></p> <ul style="list-style-type: none"><li>• <b>Question 5: viewpoint writing based on a statement printed in the exam; pupils are required to respond to this statement. No choice of question. (40 marks: 24 marks for content and organisation; 16 marks for spelling, punctuation and grammar)</b></li></ul>

**Subject: English Language**

	Include:
<b>Paper information - overview</b>	<p><i>One paper which lasts for 1 hour and 45 minutes: <b>English Language Paper 2 – Writers’ Viewpoints and Perspectives:</b></i></p> <p><i>Section A (reading and answering four questions of increasing difficulty based on <b>two</b> extracts from a modern non-fiction text and a 19<sup>th</sup> century non-fiction text); Section B (pupil’s own writing from a viewpoint)</i></p>

# Three Key Questions

1. When?
2. What?
3. How?

**When?**

**Make a revision plan....**

# Revision Timetable

- Starts from Monday 13 November
- 3 week plan for each subject
- **No other homework will be set**
- Started already (science, maths)

We advise:

- 2 sessions each day (45 – 60 minutes) Mon – Thurs
- 5 sessions at the weekend
- More if they can manage it?
- Skeleton plan provided
  - Modelled tomorrow
  - Balance subjects (all subjects)
  - Weight subjects (Science, English)
  - Prioritise if necessary
- Remove all distractions
- Have resources ready in advance

# What?

## Mock Content

- Content selected by departments
- Summary sheet provides brief notes

	Include:
<b>Content details</b>	<p><b>For Section A USA 1919-1948 you could be examined on the following:</b></p> <p>1920s USA including the causes of the boom, economic hardships, women, prejudice and intolerance for political views, racism towards African Americans and prohibition.</p> <p>1930s USA including the causes of the Wall Street Crash, the Great Depression, the 1932 election, the New Deal and opposition to the New Deal.</p> <p>1940s USA including the war economy WW2, the treatment of Japanese and African Americans.</p> <p><b>For Section B Empire 1688-1730 you will be examined on the following:</b></p> <p>Ireland, Scotland, emigration, the trans-Atlantic trade, the East India Company, the British economy and empire and the impact of Empire on British people (working lives, consumer habits, political ideas and racial ideas)</p>

# Detailed Revision Plans


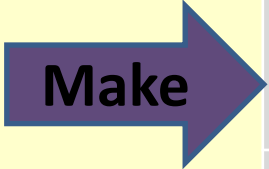
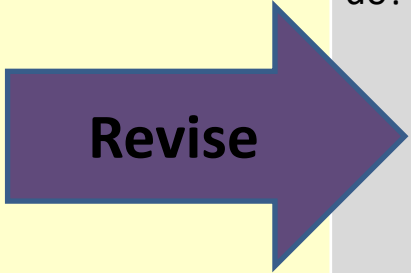
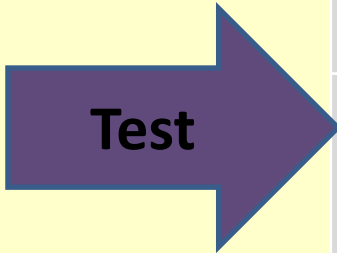
- Week by week
- Content to cover (chunked down)
- Resources



Topic:	Tasks to complete:
<p><b><u>THEME ONE</u></b></p> <p><b>Topic 1.2 Spotting a business opportunity</b></p> <ul style="list-style-type: none"> <li>• Customer needs</li> <li>• The role of market research</li> <li>• Types of market research</li> <li>• Market research data</li> <li>• Market segmentation</li> <li>• Market mapping</li> <li>• The competitive environment</li> </ul>	<p><b>Revision guide:</b> pages 6-14</p> <p><b>GCSE Pod:</b>  <a href="https://members.gcsepod.com/shared/playlists/playlist/1397450">https://members.gcsepod.com/shared/playlists/playlist/1397450</a></p> <p><a href="https://members.gcsepod.com/shared/podcasts/title/11457">https://members.gcsepod.com/shared/podcasts/title/11457</a>            (market maps &amp; competition)</p> <p><b>GCSE Bitesize:</b>            What is a business?  <a href="https://www.bbc.com/education/guides/zrvb9j6/revision">https://www.bbc.com/education/guides/zrvb9j6/revision</a></p> <p>Why set up a business?  <a href="https://www.bbc.com/education/guides/zc3gkqt/revision/1">https://www.bbc.com/education/guides/zc3gkqt/revision/1</a></p> <p>Understanding customer needs, market mapping, segmentation, competition, adding value  <a href="https://www.bbc.com/education/guides/zd4kq6f/revision/1">https://www.bbc.com/education/guides/zd4kq6f/revision/1</a></p>

# Detailed Revision Plans

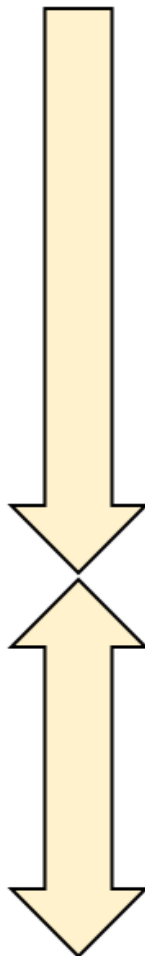
- Week by week
- Content to cover (chunked down)
- Resources
- Strategies.....**How?**

	<p>What should I do?</p> <p><b>10%</b></p>	<ul style="list-style-type: none"> <li>• <b>Gather resources needed to revise:</b> exercise &amp; text books, revision books.</li> <li>• Rag rate topics you need to cover: red, amber, green. Begin with red topics</li> <li>• Create a 3 week revision plan x2 45 mins Mon-Thurs, x5 45 mins weekend</li> <li>• Read through overview sheets to familiarise yourself with the information you need to know.</li> <li>• Identify any knowledge you have missing and get hold of the notes</li> </ul>
	<p>What should I do?</p> <p><b>20%</b></p>	<ul style="list-style-type: none"> <li>• <b>Make resources to revise from:</b> mind maps, flash cards, crib sheets, knowledge organisers, summary sheets etc.</li> <li>• Use mnemonics to help you to remember information.</li> <li>• Write “perfect” exam answers using your notes.</li> </ul>
	<p>What should I do?</p> <p><b>40%</b></p>	<ul style="list-style-type: none"> <li>• <b>Retrieval practice: bring the information to mind.</b> Read the revision notes you’ve made. Cover them, write down key information, check what you missed out. Do this several times.</li> <li>• Ask yourself questions while you are studying about how things work and why. Make links to other topics/knowledge.</li> <li>• Use your flashcards: say the answer or write it down BEFORE turning the flashcard over. Go through each pack of flashcards 3 times getting them all right, on three different occasions/days.</li> <li>• Complete quizzes, revision clocks, label diagrams. Green pen wrong answers.</li> <li>• Revisit your flashcards testing the green pen knowledge you didn’t know.</li> <li>• Revisit topics again on a different day, to help make the knowledge stick.</li> <li>• Work with friends, test each other.</li> </ul>
	<p>What should I do?</p> <p><b>30%</b></p>	<ul style="list-style-type: none"> <li>• <b>Complete quizzes/short exam questions</b> within 24 hours of revising a topic.</li> <li>• <b>Complete longer exam questions</b> within 48-72 hours of revising a topic.</li> <li>• Work in silence, no books open, timed conditions</li> </ul>

# Revision Audit

Name: \_\_\_\_\_

Stage	How do you currently revise?	Yes	No	How could I revise more effectively?
<b>Plan</b> revision	I plan revision in a timetable so it's spaced over several days or weeks			
	I revise in slots of no more than 45 minutes			
<b>Gather</b> what you need	My notes in my exercise books are up to-date, I copy up work if I miss a lesson.			
	I have a copy of the exam board revision books for all my subjects			
	I know where to find the knowledge organisers & content checklists for each unit on the W Drive. I also know where to find quizzes/revision resources for each of my subjects on the W Drive and online.			
	I rag rate the content I need to revise; red amber green and I begin with 'red'.			
	I know the exam boards for my subjects and where to find past papers and mark schemes			
	I have a paper or plastic revision folder for each subject, paper to write on, blank flashcards, highlighters and post it notes			
<b>Make</b> revision resources	I have a blank planner/timetable I use to map out revision sessions			
	I file flashcards I have made in my subject revision folder to reuse			
	I have an account with Quizlet or AnkiApp where I keep online flashcards			
	I make and keep revision notes/mind maps in my subject revision folder			
<b>Revise</b> content	I make my own knowledge organisers and 'perfect' model answers for exam questions.			
	I read my revision notes, cover them up, then write down the key information on blank paper. I check what I missed out and add it in green pen.			
	I ask myself questions whilst studying; how things work and why. I make links to other topics and knowledge, and look up things or ask my teachers if I'm not sure.			
	I complete quizzes, revision clocks, & label diagrams. I green pen wrong answers			
	I revise with flashcards. I say the answer or write it down BEFORE turning the flashcard over. I go through each pack of flashcards 3 times getting them all right, on three different occasions/days. I re revise topics again on a different day, to help to make the knowledge stick.			
<b>Test</b> yourself	I complete quizzes/short exam questions within 24 hours of revising a topic.			
	I complete longer exam questions within 48-72 hours of revising a topic.			
	I work in silence, no books open, timed conditions			





Free apps to support revision



## Learn more, faster.

AnkiApp is a cross-platform mobile and desktop flashcard app.

Study flashcards in your downtime. Make flashcards with text, sound, and images, or download pre-made ones. Studying is super efficient, thanks to the powerful AnkiApp Advanced Spaced Repetition™ (SRS) algorithm. AnkiApp automatically performs backups and syncs to all your devices, via the cloud.



## Green focus.

Flora is a new way to stay off your phone, clear to-do lists, and build positive, life-changing habits. Whenever you want to make progress toward your goals, grow trees in Flora!

Get on App Store

Get on Google Play

Chrome Extension

# Quizlet



[Home](#) [Courses](#) [Assignments](#)

Your courses [Add courses](#)

Search for a course...

Filters Clear all (1)

Price

Free

Free (652)

11+ Comprehension



11+ Maths



## GCSEPod: GCSE Learning and Revision

GCSEPod is proven to help students achieve one grade higher on average than non-users, across 30+ GCSE subjects and all exam boards. Providing the highest- ...

**The school has paid for Y11 membership so you can join GCSEpod. There is also an app for android users. Apple phone users will need to use the website on a device.**

[www.gcsepod.com](http://www.gcsepod.com), click 'Login', then 'New Here? Get Started'.

Go to the app store on your mobile device and search for GCSEPod – it's free to download!

Use your booklet to choose your courses and exam boards

### App overview

Once logged into the app, use the menu to navigate and access the different sections.

#### Dashboard

Shows an overview of upcoming GCSE exams, assignment deadlines and your playlists. Quickly navigate to key areas of the app with ease.

#### My Courses

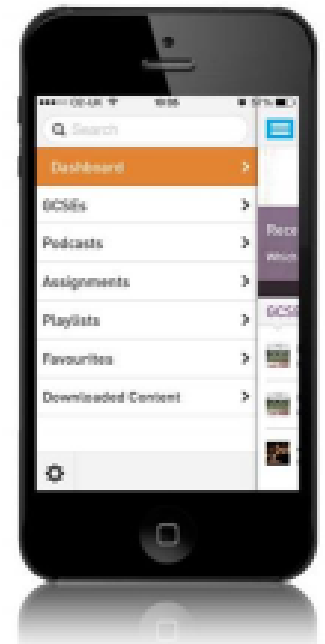
Choose a subject area to view a list of upcoming exams relevant to your school. Select to view a playlist containing all the pods relevant to that exam.

#### Pods

Browse pods by subject and topic area. Once you've chosen a topic, watch the Pods online, star your favourites or download the whole playlist for offline viewing.

#### Playlists

Watch the playlists you've created on the GCSEPod website and access a quick link back to the website where you can create and edit your playlists.



# The Importance of the Core Subjects

- Offer at least 5 GCSEs between them
- Grade 4 requirement
- College and Sixth Form requirements
  - General entry
  - Specific subjects
- Beyond this....

# ENGLISH

*How we can all help*





# **The road to Christmas and to the summer...**

- **What we're doing in the Christmas mocks**
- **The revision plan for the mocks**
- **How the mocks fit into the real exams next summer**
- **Revision resources that are available**
- **Ways you can support your child's revision**

# Just in case you weren't sure...

- We use the AQA exam board for English:



# Just in case you weren't sure...

- English Language and English Literature
- Two exams for each qualification. So...

**ENGLISH  
LANGUAGE**

**ENGLISH  
LITERATURE**

# Just in case you weren't sure...

- English Language and English Literature
- Two exams for each qualification. So...

<b>ENGLISH LANGUAGE</b>	<b>ENGLISH LITERATURE</b>
<b>PAPER 1</b>	<b>PAPER 1</b>

# Just in case you weren't sure...

- English Language and English Literature
- Two exams for each qualification. So...

<b>ENGLISH LANGUAGE</b>	<b>ENGLISH LITERATURE</b>
<b>PAPER 1</b>	<b>PAPER 1</b>
<b>PAPER 2</b>	<b>PAPER 2</b>

# In the Christmas mocks

ENGLISH LANGUAGE	ENGLISH LITERATURE
PAPER 1	PAPER 1
PAPER 2	PAPER 2

# English **Language** Paper 2

- ***Two sections: Section A on reading, Section B on writing.***
- ***All about writers' viewpoints.***
- ***Section A.***
  - *They read two non-fiction texts which express viewpoints about the same subject matter. One of them is modern, one of them is from the 19<sup>th</sup> century.*
  - *They answer four questions which get increasingly more demanding on those two non-fiction texts.*
- ***Section B:***
  - *They write from their own viewpoint in response to a statement given to them.*

# English **Literature** Paper 2

## ***Section A: Lord of the Flies***

*A choice of two questions on either a character or an important theme.*

## ***Section B: Anthology Poetry***

*A single question comparing two of the poems in the anthology they've studied.*

## ***Section C: Unseen Poetry***

*Questions on two poems they wouldn't have seen before.*



# Revision plan

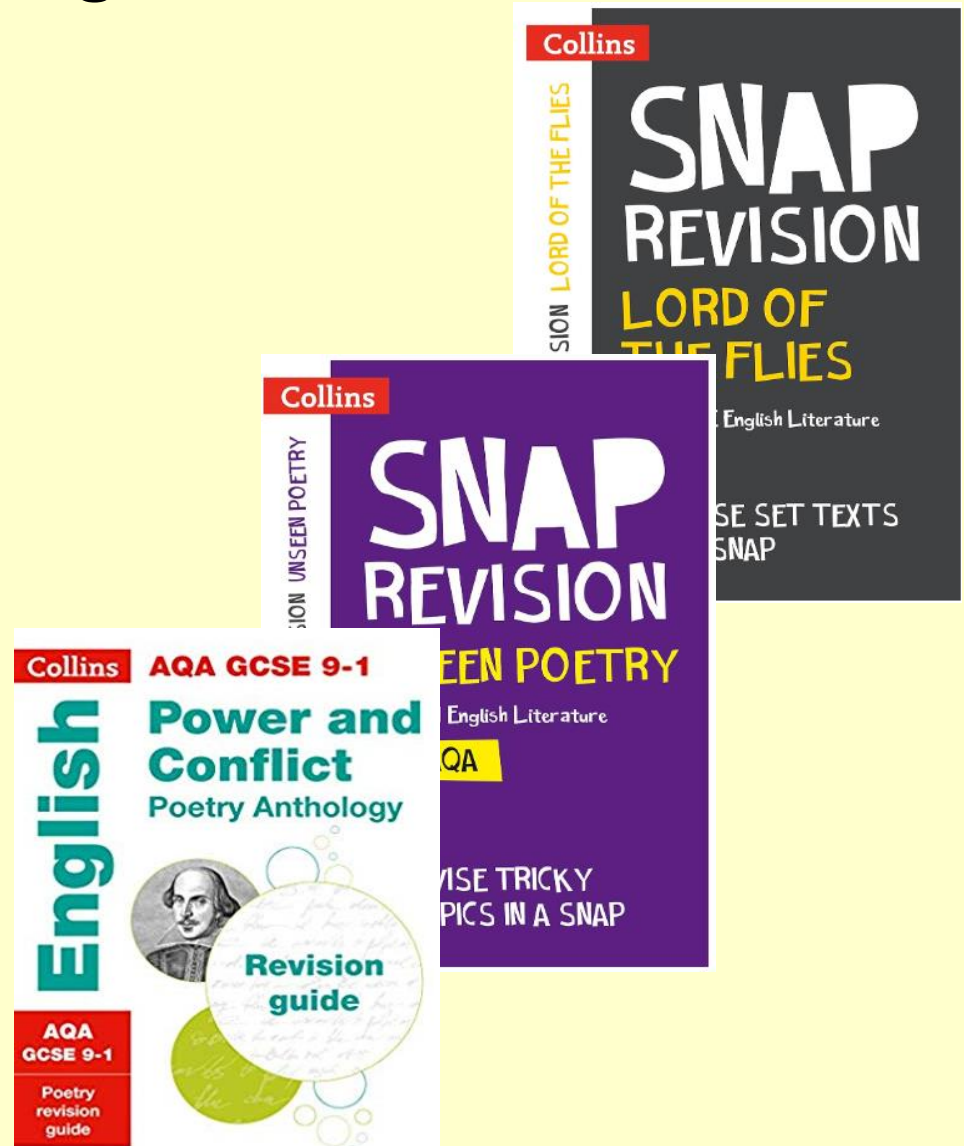
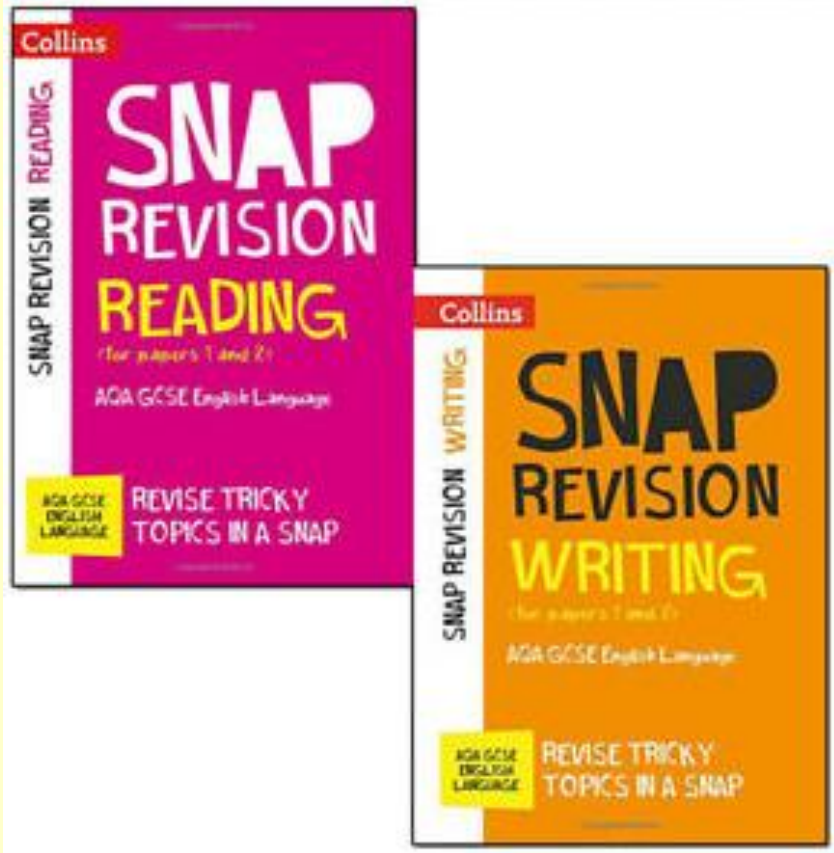
- 4 week revision plan for English starting this week.
- Feature revision homeworks for English Language **AND** English Literature – two separate GCSEs

# **Next steps immediately after the Christmas mocks**

- Feedback and improvement work on their Christmas mocks.
- A longer revision plan put together for the time leading up to the mocks.
- Revision homeworks Snap Revision Guides.
- Pupils will have another go at English Language Paper 2 towards the end of next term.

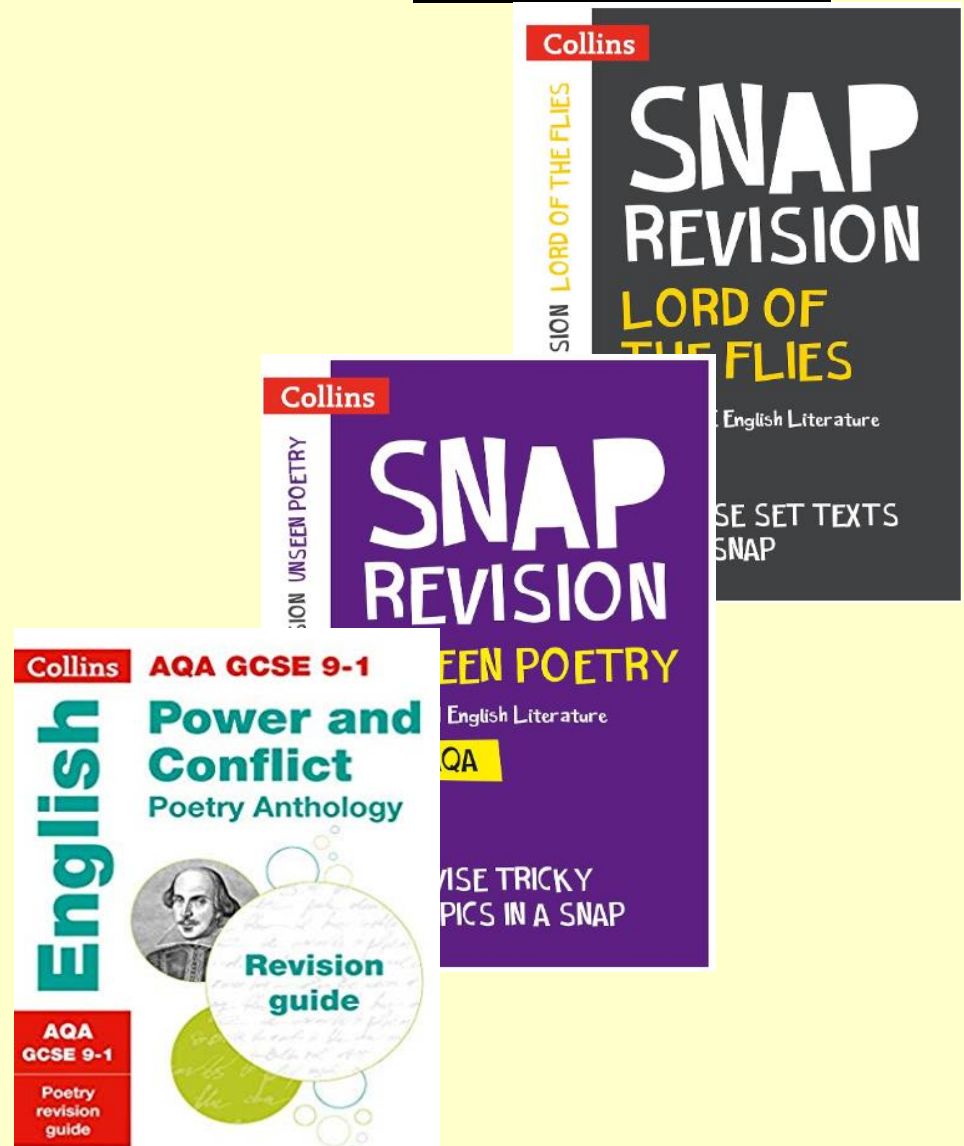
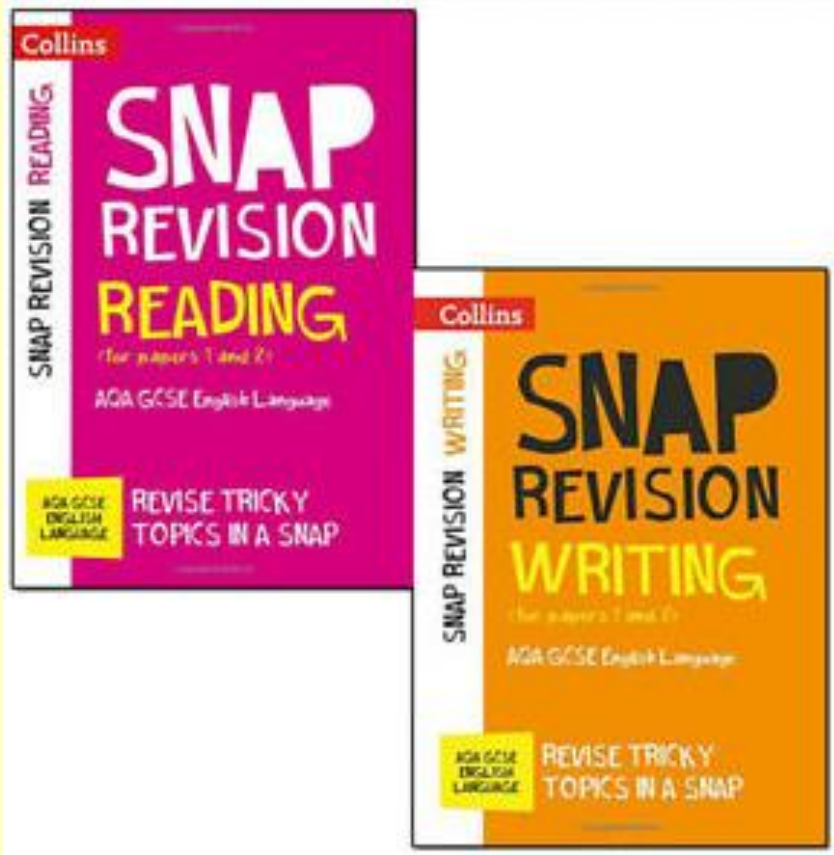
# Support for pupils

- The school are buying in guides for all of Year 11



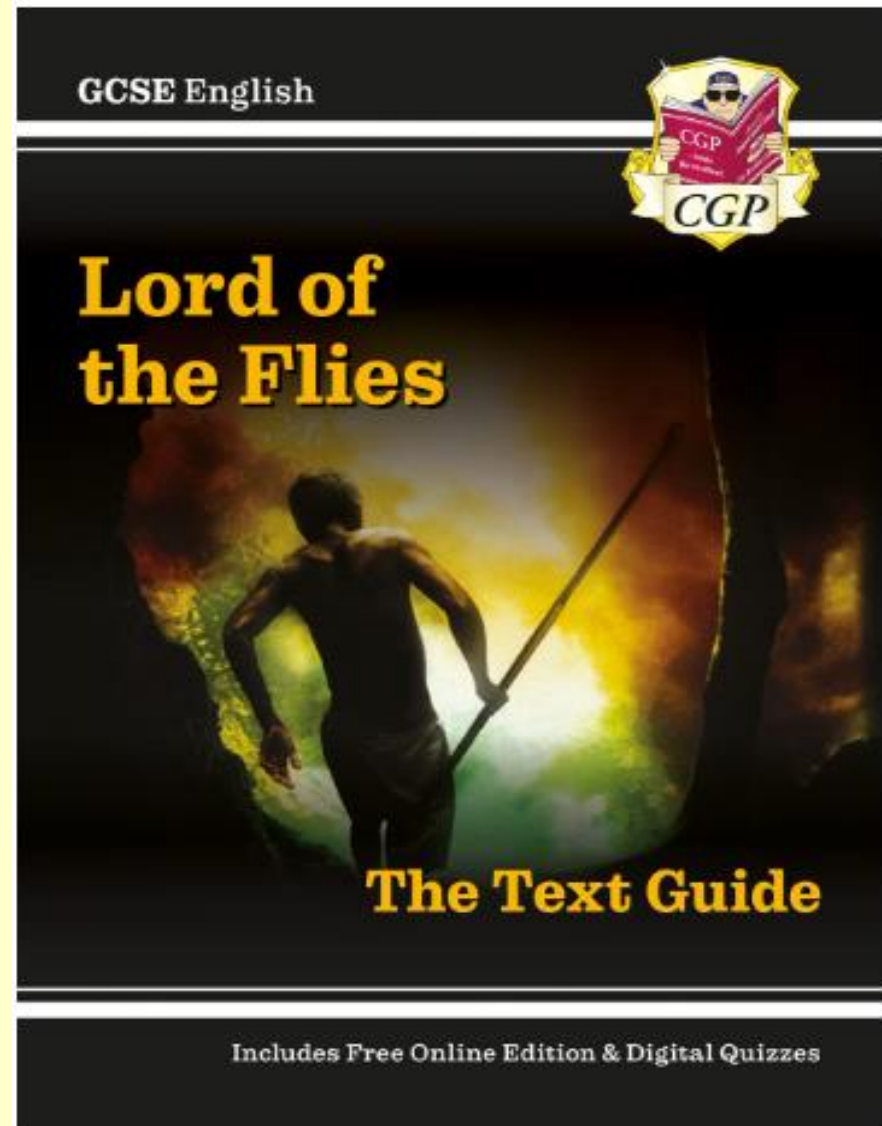
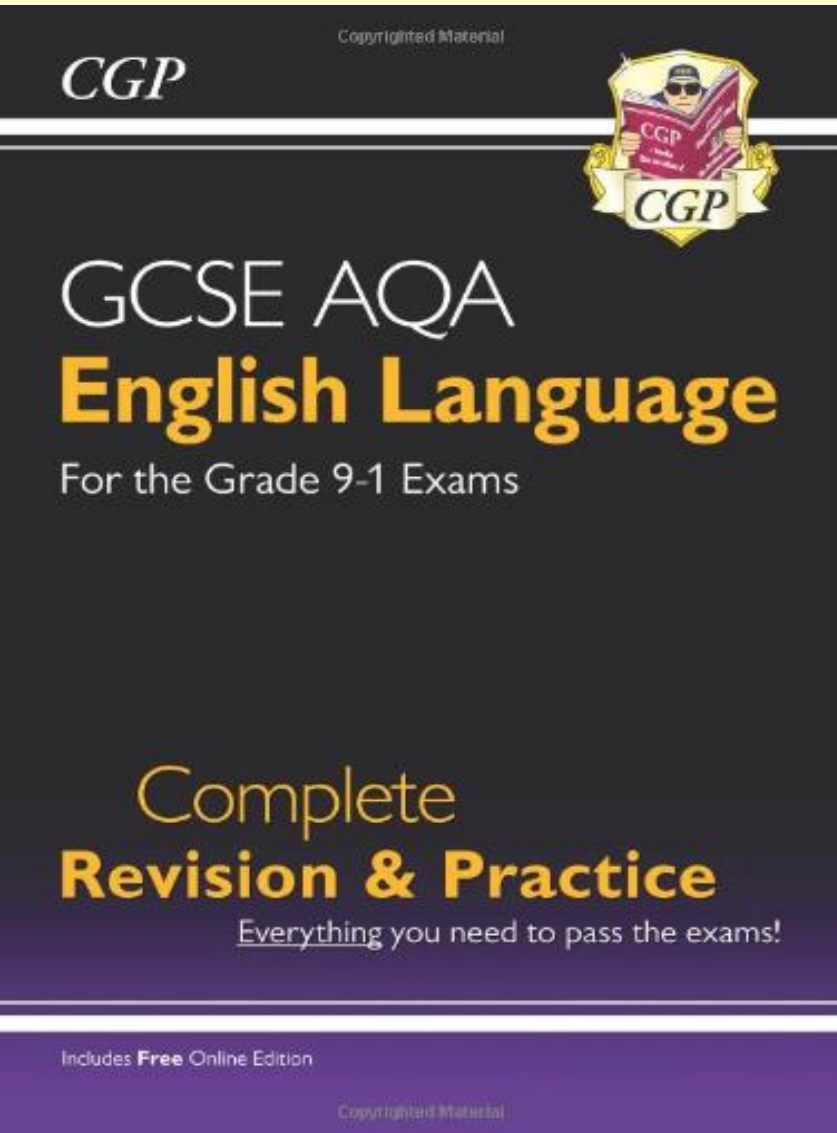
# Support for pupils

- Linked to revision schedule and to homeworks



# Revision Guides

- That doesn't mean you can't buy your own...



# And then the rest of the year...

## Up to Christmas:

- Walking Talking Mocks/revision lessons for English Language Paper 2
- Revision on Lord of the Flies and Poetry for English Literature Paper 2
- The mocks themselves

## After Christmas:

- Feedback and pupil improvements on mocks
- Finishing off our poetry teaching; revision of Lord of the Flies
- February: English Language Paper 1 mock #2 (can they improve upon their summer result...?)
- March: English Literature Paper 1 mock (Macbeth and The Sign of Four)
- After school revision sessions

# How you can support your child in English

## Myth-Busting!

You can't revise for English: especially English Language. It's unseen.  
I'm just going to wing it.



I'm never going to know it. I can't remember anything no matter how many times I've learned it.



I'm really tired.  
I'll just do it tomorrow.



**Kids aren't like this...**





**They're like this...**



# Easy revision tips

## English Language Paper 2:

- Make a scrap book of extracts from a variety of non-fiction texts that express a viewpoint. What are the viewpoints in each of them?
- Practise writing in a style and form that matches one of the extracts in your scrapbook.

## English Literature Paper 2

- Make a bookmark with top 10 quotes
- Summarise the plot or themes in ten sentences/ten words
- What would the characters in the text put on their Instagram feed?

# How you can help: Five Quick Fixes

1. Get them to re-read their Literature texts; ask them to explain the texts to you.
2. Get them to read newspaper or magazine articles that express a viewpoint; ask them to discuss those viewpoints with you.
3. Get them to explain to you what they *think* is in their exams...
4. Get them talking about what they've done in English. Or what they don't understand. Or like. Ask them: why?
5. **Get them to switch auto-correct off on their phones, tablets and laptops...**

“ Little and often is the  
key to revision ”

# After tonight...

- Parents' workshop: the reality of what's in their exams...
- Any questions: [jjones@klbschool.org.uk](mailto:jjones@klbschool.org.uk)

# You can also follow us on



Just search *KLBEnglishDepartment* or follow the links on the school's website

# GCSE MATHEMATICS

- Sophie Coughlan: [scoughlan@klbschool.org.uk](mailto:scoughlan@klbschool.org.uk)
- Syllabus: EdExcel/Pearson

# EXAM STRUCTURE

In the summer:

3 papers: 90 minutes each.

Paper 1: Non-calculator

Papers 2 and 3: Calculator

In December:

2 papers: 90 minutes each.

One non-calculator and one with a calculator



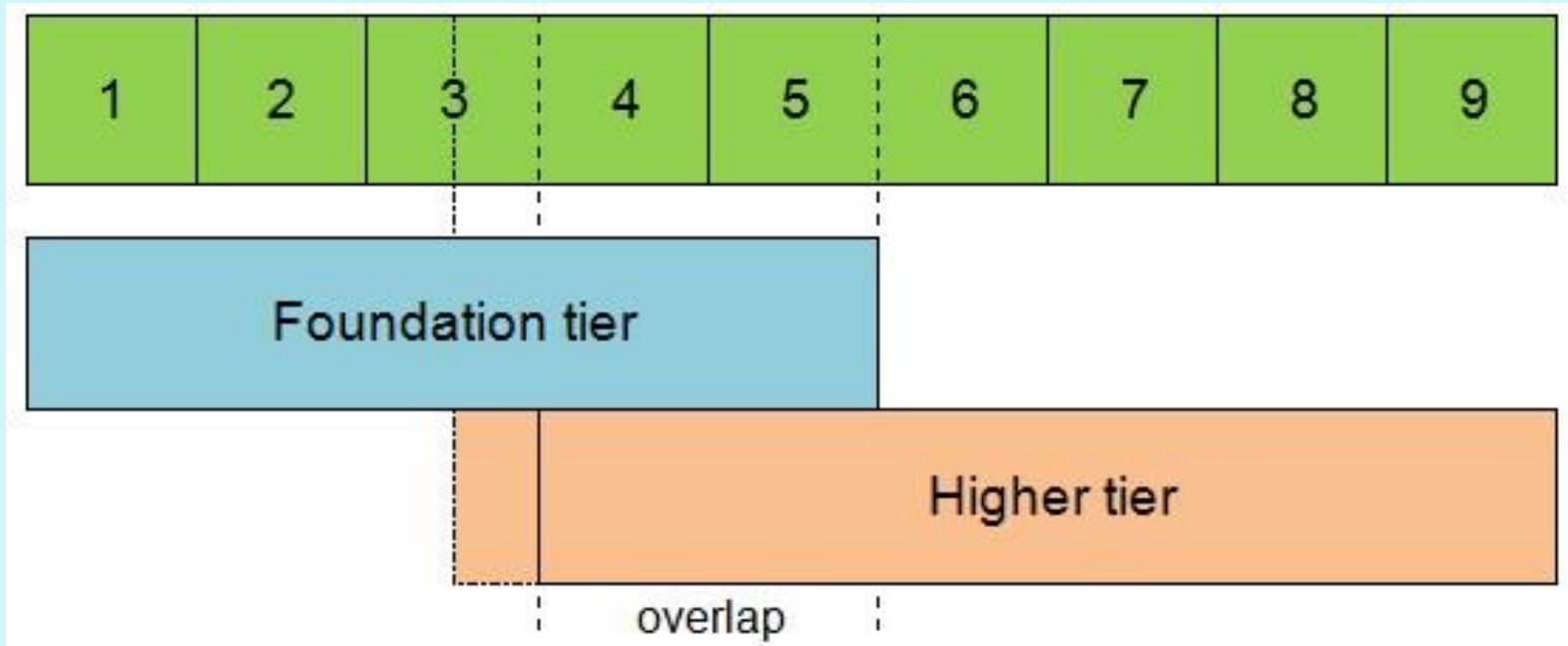


# CONTENT (FOR THE SUMMER)

Tier	Topic area	Weighting
Foundation	Number	22 - 28%
	Algebra	17 - 23%
	Ratio, Proportion and Rates of change	22 - 28%
	Geometry and Measures	12 - 18%
	Statistics & Probability	12 - 18%
Higher	Number	12 - 18%
	Algebra	27 - 33%
	Ratio, Proportion and Rates of change	17 - 23%
	Geometry and Measures	17 - 23%
	Statistics & Probability	12 - 18%

Anything could appear in any paper (in the summer).

# TIER OF ENTRY



# GRADE BOUNDARIES 2023


	Higher	Foundation
9	85%	
8	73%	
7	60%	
6	47%	
5	33%	76%
4	20%	61%
3	13%	41%
2		30%
1		14%

# GRADE BOUNDARIES 2023

	Higher	Foundation
9	85%	
8	73%	
7	60%	
6	47%	
5	33%	76%
4	20%	61%
3	13%	41%
2		30%
1		14%

# GRADE BOUNDARIES 2023

	Higher	Foundation
9	85%	
8	73%	
7	60%	
6	47%	
5	33%	76%
4	20%	61%
3	13%	41%
2		30%
1		14%



“Being good at mathematics  
is not about how many  
answers you know... it’s about  
how you behave when you  
don’t know”

# MATHS AND MINDSET

I cannot do it **yet**

Getting it wrong is part of the learning process

Students don't necessarily have to be able to do everything

# WHAT MATHS REVISION SHOULD LOOK LIKE

Flashcards are suitable for learning facts and formulae, for example:

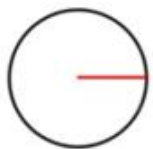
- Volume/area/parts of a circle
- Speed and density
- Trigonometry
- Angle facts and reasons; circle theorems (higher tier only)
- Set notation
- Quadratic formula (higher tier only)



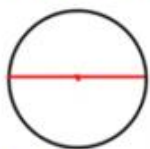
# FROM REVISION PLAN:

- Make a set of flash cards for the parts of a circle and for area/perimeter formulae below, or at least for any that you do not already know.

## Parts of a Circle



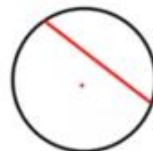
Radius



Diameter



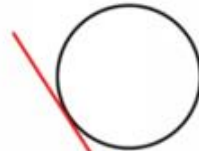
Circumference



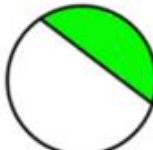
Chord



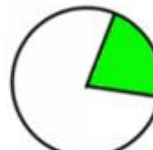
Arc



Tangent



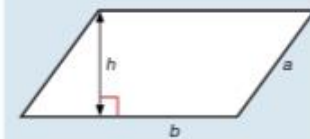
Segment



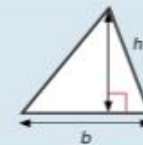
Sector

## Area formulae:

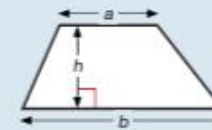
$$\text{Parallelogram} = b \times h$$



$$\text{Triangle} = \frac{1}{2} b \times h$$



$$\text{Trapezium} = \frac{1}{2} (a + b)h$$



## Circles

$$\text{Circumference} = \pi \times \text{diameter}, C = \pi d$$

$$\text{Circumference} = 2 \times \pi \times \text{radius}, C = 2\pi r$$

$$\text{Area of a circle} = \pi \times \text{radius squared } A = \pi r^2$$

# WHAT MATHS REVISION SHOULD LOOK LIKE

Students should spend most of their time *doing maths*.

Watch videos to explain weaker topics, making notes as appropriate.

After watching a video, students should try some questions **and check their answers**.

# CORBETT MATHS

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

Topics are listed in alphabetical order



 Corbettmaths

Welcome Videos and Worksheets Primary 5-a-day More Revision Cards

Videos and Worksheets

**Videos and Worksheets**

**Click here for answers**

2D shapes: names [Video 1](#) [Practice Questions](#) [Textbook Exercise](#)

2D shapes: quadrilaterals [Video 2](#) [Practice Questions](#) [Textbook Exercise](#)

**GCSE Revision Cards**

Available for GCSE Higher or Foundation Tier

Parts of the Circle

# CORBETT MATHS

Find on page circle 3 of 23 < > Options ▾

Angles: tessellations [Video 36](#) [Practice Questions](#) [Textbook Exercise](#)

Angles: triangle [Video 37](#) [Practice Questions](#) [Textbook Exercise](#)

Angles: types of [Video 38](#) [Practice Questions](#) [Textbook Exercise](#)

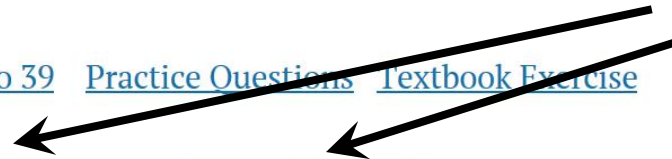
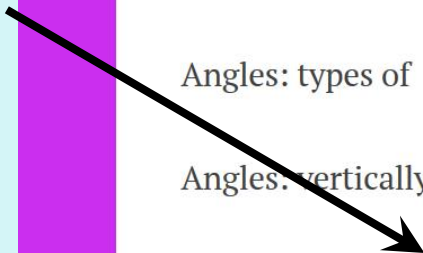
Angles: vertically opposites [Video 39](#) [Practice Questions](#) [Textbook Exercise](#)

Area: **circles** [Video 40](#) [Practice Questions](#) [Textbook Exercise](#)

Area: compound shapes [Video 41](#) [Practice Questions](#) [Textbook Exercise](#)

Video

Questions




# CORBETT MATHS - ANSWERS

Corbett maths

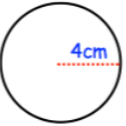

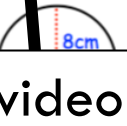
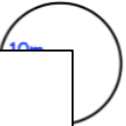
Area of a Circle  
Videos 40, 59 on Corbettmaths

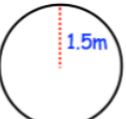
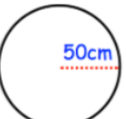
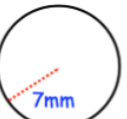

Examples

Workout

Click here  Scan here

Question 1: Calculate the area of the following circles. Give your answers to 1 decimal place.

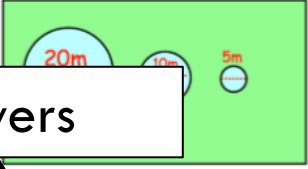
(a)  (b)  (c)  (d) 

(e)  (f)  (g)  (h) 

Links to video

Each packet of grass seed covers 50m<sup>2</sup> and costs £1.75

How much will it cost Mrs Jones to cover the lawn with grass seed?






100m

Question 11: A circular plaque of diameter 6cm is cut from a square piece of metal with length 6cm.

What percentage of the metal is wasted?

Answers

Click here Scan here

# MATHSGENIE

*Maths Genie*

GCSE Revision

GCSE Papers ▼

A Level Revision ▼

A Level Papers

KS2 Revision

Resources



## Download Google Chrome

Chrome automatically updates with the latest security features and fixes.

Google Chrome



# FROM REVISION PLAN:

- Watch a video to re-cap the topic.

If you are **not** confident on basic area and circumference questions then watch this video:

<https://www.youtube.com/watch?v=X3ZyTM78ygk>

If you are already confident with area and circumference of circles watch these two videos:

[Key Skill - Find the area of a simple fraction of a circle. - YouTube](#)

[Key Skill - Find the perimeter of a simple fraction of a circle. - YouTube](#)

[Key Skill - Find the radius of a circle given its area. - YouTube](#)

- Try some questions here: [3-circles-area-and-circumference-ws.pdf \(mathsgenie.co.uk\)](#)  
If you are feeling confident start from Q7.
- Check your solutions here: [3-circles-area-and-circumferenceans.pdf \(mathsgenie.co.uk\)](#)

# USING ANSWERS

It is important that students use answers sensibly.

Looking up answers is not (necessarily) cheating!

It is not helpful if students are practising an incorrect method.



# USING PAPERS

Past papers are really important for preparing students for what to expect in the exams.

They are also good for getting them used to moving between topics.

Important students do not just do the questions that they can do easily anyway – they should be using them **diagnostically**.

# WHAT DO WE MEAN BY EXAM TECHNIQUE?

Read the question properly

Show all your working, on the calculator paper, **at least** what you type into your calculator.

Have you answered the question? Does your answer seem a sensible size? Do you need to include units?

At end: go back through and re-do calculations if time.

If stuck: Would algebra help? Would a diagram help?

Try *something*. Can you do the first step? First mark can be surprisingly easy.

A delivery company has a total of 160 cars and vans.

the number of cars : the number of vans = 3 : 7

Each car and each van uses electricity or diesel or petrol.

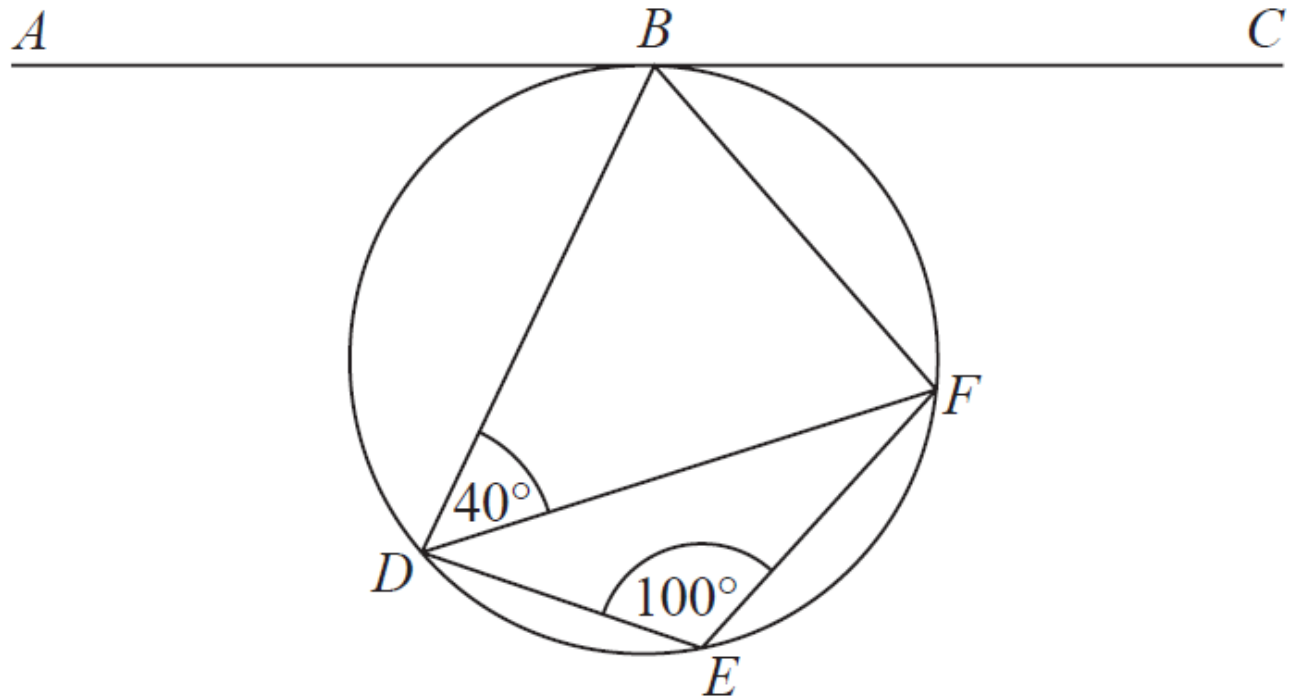
$\frac{1}{8}$  of the cars use electricity.

25% of the cars use diesel.

The rest of the cars use petrol.

Work out the number of cars that use petrol.

You must show all your working.



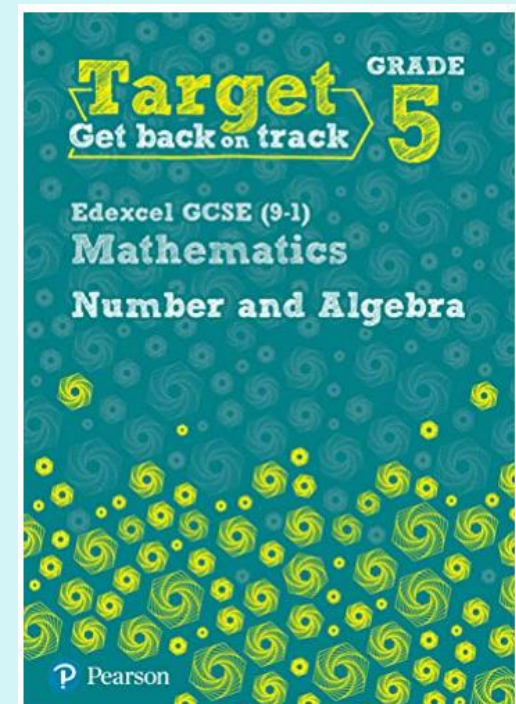
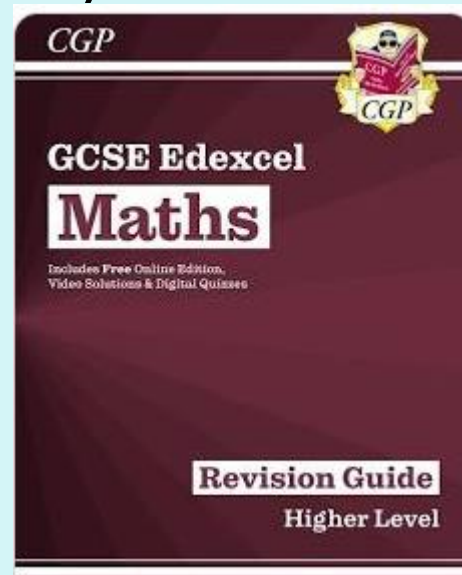
Points  $B$ ,  $D$ ,  $E$  and  $F$  lie on a circle.  
 $ABC$  is the tangent to the circle at  $B$ .

Find the size of angle  $ABD$ .

You must give a reason for each stage of your working.

# RESOURCES

- Other websites: DrFrost, MathsPad, OakAcademy, include 'GCSE' if searching for a video on YouTube.
- Higher/Foundation revision guides and 'target' workbooks aimed at grades 3, 5, 7, 9 are available to buy from school.
- Drop-in on Thursdays after school in M2





# Science

Combined Science: AQA Trilogy

Separate Sciences:

AQA Biology, Chemistry, Physics

Richard Shaw

[rshaw@klbschool.org.uk](mailto:rshaw@klbschool.org.uk)

# Science GCSEs summer 2023

- Combined Science
  - 2 GCSE Grades
  - AQA Trilogy Course
  - Summer 6 x 1hr 15 exams
  - Bio 1 Bio 2 Chem 1 Chem 2 Phys 1 Phys 2
- Separate Science
  - 3 GCSE Subjects
  - 3 independent grades
  - Top two sets
  - Summer 2 x 1hr 45 exams for each of Bio, Chem, Phys



# GCSEs --> Mocks

- Multiple choice, structured, closed short answer, open response questions.
- Subject content
  - Bio, Chem, Phys knowledge
    - Recall of knowledge 40%
    - Application of knowledge 40%
    - Analyse and interpret information 20%



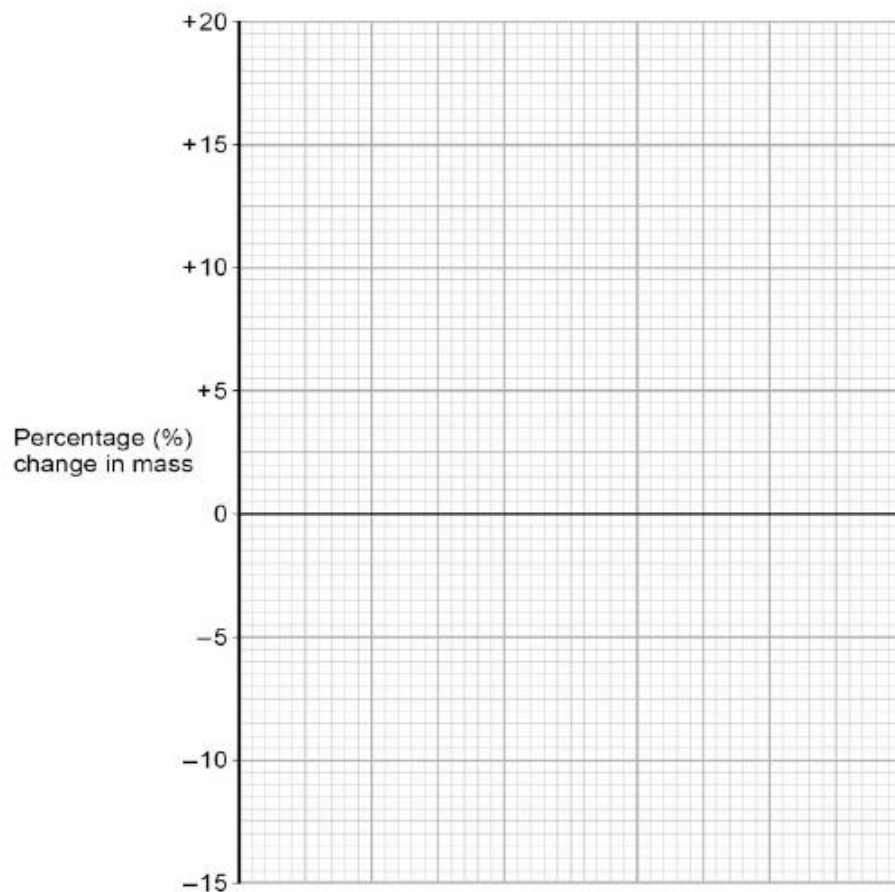
# GCSEs --> Mocks

- Multiple choice, structured, closed short answer, open response questions.
- Subject content
  - Bio, Chem, Phys knowledge
    - Recall of knowledge - \* 40%
    - Application of knowledge \* 40%
    - Analyse and interpret information \* 20%
- Science skills & required practicals \*

# Questions on required practicals

(c) Complete the graph using data from the table above.

- Choose a suitable scale and label for the x-axis.
- Plot the percentage (%) change in mass.
- Draw a line of best fit.



(d) Use your graph to estimate the concentration of the solution inside the potato cells.

Concentration = \_\_\_\_\_ mol dm<sup>-3</sup>

(e) The results in the table above show the percentage change in mass of the potato cylinders.

(4)

(1)



4. This question is about making copper salts.

The figure below shows the apparatus given to a student.



Stirring rod



Spatula



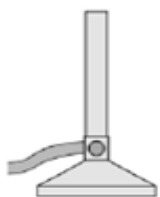
Beaker



Filter funnel  
and paper



Evaporating  
basin



Bunsen burner



Tripod, gauze and mat



Conical flask

Outline a safe plan the student could use to make pure, dry, crystals of the soluble salt copper sulfate from the insoluble metal oxide and dilute acid.

---

---

---

---

---

---

---

---

---

---

# Science Mocks

Combined Science	<b>Paper 1</b> <i>1 hr (roughly 60 marks)</i>	<b>Paper 2</b> <i>1 hr (roughly 60 marks)</i>

Separate Science	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>

# Summer Science Grading

9  
8  
7  
6  
5  
4  
3  
2  
1

For Science at KLB

---

- Separate Sciences
- Biology total mark
  - B1 exam mark
  - B2 exam mark
- Same for Chemistry and Physics
- Example result
  - Biology 7
  - Chemistry 6
  - Physics 8



# Combined Science

- Science Double GCSE

9  
8  
7  
6  
5  
4  
3  
2  
1

- Combined Science
- Total mark added from
  - B1 exam mark
  - B2 exam mark
  - C1 exam mark
  - C2 exam mark
  - P1 exam mark
  - P2 exam mark



# Combined Science

- Science Double Grading

9 9

8 8

7 7

6 6

5 5

4 4

3 3

2 2

1 1

- Combined Science
- Total mark added from
  - B1 exam mark
  - B2 exam mark
  - C1 exam mark
  - C2 exam mark
  - P1 exam mark
  - P2 exam mark





# Combined Science

9 9

8 8

7 7

6 6

5 5

4 4

3 3

2 2

1 1

- Combined Science
- Total mark added from
  - B1 exam mark
  - B2 exam mark
  - C1 exam mark
  - C2 exam mark
  - P1 exam mark
  - P2 exam mark



# Combined Science

9 9  
9 8  
8 8  
8 7  
7 7  
7 6  
6 6  
6 5  
5 5  
5 4  
4 4  
4 3  
3 3  
3 2  
2 2  
2 1  
1 1

- Combined Science
- Total mark added from
  - B1 exam mark
  - B2 exam mark
  - C1 exam mark
  - C2 exam mark
  - P1 exam mark
  - P2 exam mark
- Example results
  - Combined Science 6, 5
  - or
  - Combined Science 3, 3



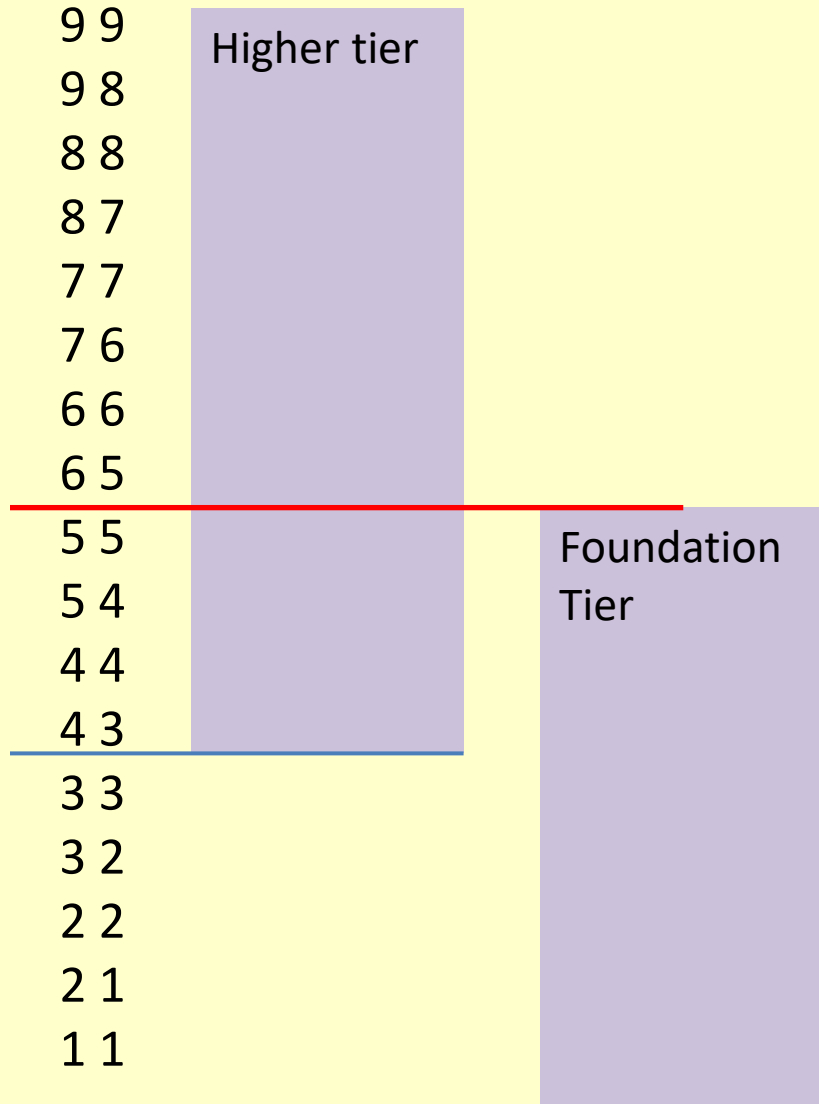
# Why does this matter now?

- Future planning:
- Science A Level KLB entrance criteria:

6,5 for Combined to do any A-Level

99	
98	
88	
87	
77	A
76	
66	B
65	
55	Low B / high C
54	
44	C
43	
33	
32	
22	
21	
11	

# Science Tier of entry



- Higher Foundation tier
- Vital to get this right
- Science it is much easier to get a 5 5 or 4 4 on the Foundation paper
- Tier for summer vs tier for mocks
- A-Level must do higher tier (6 5)

- Mocks will help inform tier decision for the summer (hints of 6)
- Revision effort allows for an informed discussion
- Informed position:
  - Did my revision techniques work?
  - Where are my strengths and weaknesses?
  - Analysis of revised topics vs non-revised

# Mock revision planning

- Revision plan

Week Starts	Biology	Chemistry	Physics
	✓	✓	✓
8 <sup>th</sup> Nov	<b>Biology Paper 1</b> Photosynthesis (50-51) <b>RP: Photosynthesis</b>	<b>Chemistry Paper 2</b> Atomic Structure (96 and 105)	
15 <sup>th</sup> Nov		<b>Chemistry Paper 2</b> Covalent bonds, simple molecules and giant covalent structures (116-119)	<b>Physics Paper 1</b> Energy transfers & stores (167-168). Kinetic & potential energy (169) Power (172) Wasted energy & efficiency (173-174)
22 <sup>nd</sup> Nov		<b>Chemistry Paper 1</b> Rate of reactions (138-143) <b>RP: Measuring rates of reaction x2</b>	
29 <sup>th</sup> Nov	<b>Biology Paper 2</b> Circulatory System (30-32) Cardiovascular disease (33, 34)		<b>Physics Paper 2</b> Springs and elasticity (206-207) <b>RP: Springs/Hooke's Law</b>
28 <sup>th</sup> Nov	Re-cap the required practical	Re-cap the required practical	Re-cap the required practical
4 <sup>th</sup> Dec	Mock fortnight Begins: Paper 1 (1 hour) Paper 2 (1 hour)		

## Summer typical revision plan

<b>Biology</b>		<b>Chemistry</b>		<b>Physics</b>	
	✓		✓		✓
Cells (11) Cell Differentiation and Specialisation (14) Microscopy (12-13) Chromosomes and Mitosis (15) Stem Cells (16) Diffusion (17)		Atoms, Elements, Compounds (96-98) Chemical Equations (99) The History of the Atom (103) Electronic Structure (104) Ions, Ionic bonding, Ionic Compounds (112-114)		Circuit symbols Electrical resistance, (179-182) <b>RP: Electrical resistance</b>	
Cell Organisation (24) Investigating Enzymes, Enzymes & Digestion, Food Tests (25-29) <b>RP: Enzymes</b> <b>RP: Food Tests</b>		Covalent Bonding, Simple Molecular Substances, Polymers and Giant Covalent Structures, Allotropes of Carbon (115-118) Metallic Bonding (119)		I-V characteristics, series and parallel circuits (182 - 185) <b>RP I-V characteristics</b>	
The Lungs (30) The Circulatory System (31-33) Cardiovascular Disease (34-35)		Acids and Bases, Strong Acids and Weak Acids, Reactions of Acids (129-131) <b>RP: Making Salts</b>		Domestic electricity and the national grid (186-189)	
Photosynthesis (50-53) Respiration (54-55) Exercise (56) <b>RP: Photosynthesis</b>		Reactivity Series (132) Separating Metals from Metal Oxides (133) Redox Reactions (134)		Background radiation, alpha, beta and gamma radiations (195-197) Half-life, uses and dangers (198-199)	



# Science Support resources

- Revision plan (with revision guide pages)
- Weekly Exam Question work
- Quizlet sets
- Focus-elearning website for required pracs.





+ expand all

- collapse all

## Introduction

## AQA →

Microscopy

Microbiology

Osmosis in potato chips

Effect of pH on enzymes

Food tests

Photosynthesis →

Reaction time

Field work

Decay of milk

Plant responses to light

## Combined science

## Edexcel

## Combined science

## OCR

## WJEC (eduqas)

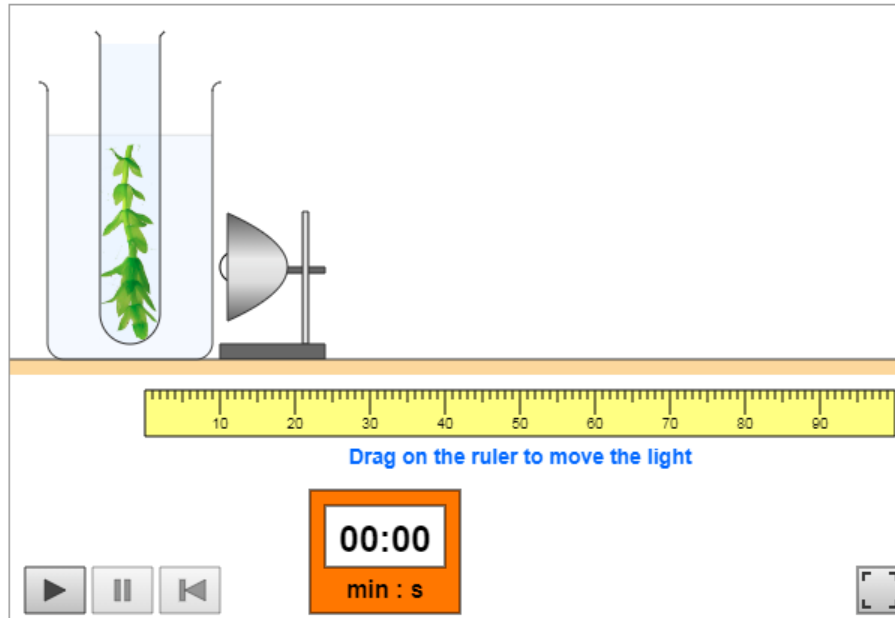
## WJEC

## Photosynthesis

Search this resource ▾

Search keywords..

Search

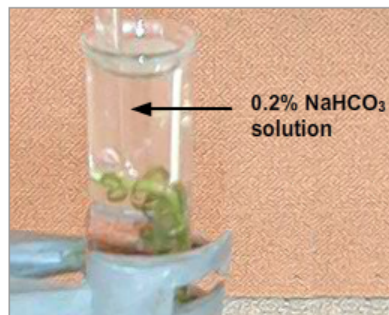


## Experiment

## Method

## Results

## Analysis



This experiment investigates how light intensity affect photosynthesis.

Pond weed is placed in a test tube containing 0.2% sodium hydrogen carbonate solution. This acts as a source of  $\text{CO}_2$

When a strong light is shown on the pondweed, photosynthesis produces small bubbles of oxygen gas. The rate of photosynthesis is found by counting the number of bubbles formed in 1 minute.

The light intensity is varied by changing the position of the lamp

# Support resources

- Revision plan & Weekly Exam questions
- Quizlet sets
- Focus: e-learning website for required practicals
- You Tube videos of required practicals
- Monday & Tuesday Lunchtime drop in S2
- Practice question bank
- All put on Classcharts weekly!



## And finally.....

- Weekend: link to all resources will be emailed
- Presentation on Year 11 Parents' Page of website
- Monthly newsletter
- GCSE Pod and Quizlet
- Success Lounge: Monday – Thursday 2.50 - 4.30pm
  
- Jan 2024 →
  - Reports and Parents' Evening
  - Revision techniques focus sessions
  - Parents' GCSE revision session (interactive!)
  - Students' GCSE revision session
  
- Supporting students together

**Thank you!**