



EDEN BOYS' LEADERSHIP ACADEMY
YEAR 11 MOCK EXAMINATIONS
INFORMATION PACK
NOVEMBER/DECEMBER 2022





Eden Boys





Friday 21ST October 2022
25 Rabi Al Awwal 1444 AH

Dear Parent/Guardian,

Assalaamu Alaikum – ‘Peace be upon you’

RE: Year 11 Mock Exams

In preparation for their upcoming GCSE exams in May 2023, all year 11 classes will be completing mock exams starting from **Monday 21st November 2022**.

The majority of the exams will take place in the hall and will mimic the procedures used for real GCSE exams.

The full timetable is enclosed with this letter. Please ensure that you keep this in a prominent place so that you can ensure your son prepares properly for his assessments.

It is important that students spend time revising and preparing for these upcoming exams and, in order to do this, they should be spending **at least 3 hours per night revising**. It is therefore vital that your son prepares thoroughly for these exams.

The full topic lists for revision are attached in this pack. Your son should also make sure that he has all his necessary exercise books/notes and knowledge organisers to hand in order to revise effectively.

On the day of the examinations, your son must ensure that he comes to school properly equipped, and this includes a scientific calculator, at least two black pens, pencils, ruler, protractor, sharpener and eraser.

Your son’s Autumn 2 Report Card will be distributed on the first week back in January 2023. It will include a summary of your child’s attitude to learning, as well as his end of course predicted grade in each of his subjects.

Should you have any questions regarding the assessment process, please contact the school.

Yours sincerely,

Miss F Akthar
ARR





Eden Boys



**FULL TIMETABLE (Monday 28th November-Friday 2nd December)**

Session 1 (8.00am-10.05am)	Session 2 (10.20am -12.20pm)	Session 3 (1pm-3.10pm)
MONDAY 21st November		
French/Arabic Urdu Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu	French/Arabic Urdu Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu	French/Arabic Urdu Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu
Urdu 19 students, French 50 students, Arabic 50 students		
TUESDAY 22nd November		
French/Arabic Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu	French/Arabic Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu	French/Arabic Paper 2 Speaking (Foundation and Higher)- time slot will be assigned 8 students Arabic 8 Students French 8 Students Urdu
Urdu 19 students, French 50 students, Arabic 50 students		
MONDAY 28th November		
English Language Paper 1 (1hr 45mins)	Biology paper 1 (separate science) (1hr 45mins) Biology (combined) paper 1 (1hr 15mins) 119 students Combined papers students -finishing early – in reflection hall to be supervised by LC	Paper 1 - Computer systems 1hr 30 mins Imedia students P5 and 6 revising science
TUESDAY 29th November		
Chemistry paper 1 (separate science) (1hr 45mins) Chemistry (combined) paper 1 (1hr 15mins)	English Language Paper 2 (1hr 45mins)	Geography Paper2 – challenges in the human environment (1 hour) History Paper 2 Paper 2 Health and the People (1 hour) P6 Teachers collect pupils from hall – they will revise for maths in their lesson
WEDNESDAY 30th November		
Maths Paper 1- non-calculator (1hr 30 mins) – 119 students	English Literature paper 2 (1hr 45mins)	Physics paper 1 (separate science) (1hr 45mins) Physics (combined) paper 1 (1hr 15mins) Combined papers students -finishing early – in reflection hall to be supervised by LC





THURSDAY 1st December		
Maths Paper2- calculator (1hr 30 mins)	Paper 2 – Computer Science - Computational thinking, algorithms and programming Rest of students I media - revision for science – in timetabled lessons	Paper 1: Reading and understanding in A - French– 50 minutes Paper 1: Reading and understanding in Arabic – 50 minutes Paper1 Reading and understanding Urdu – 50 minutes Last period – P6 teachers to collect from hall and take back to lesson – revise for maths paper
FRIDAY 2nd December – (Friday Timings apply – sessions adjusted for this		
Session 1 (8.00am-10.05am)	Session 2 (10 am-11.20 am)	Session 2 (11:45 am-1:15pm)
Maths Paper 3- calculator (1hr 30 mins) Have a break after Maths exam – LC to supervise (20 minutes)	Religious Education P1 Islam, Beliefs and practices and Christian beliefs (1hr 10 mins) 15 Minute break - LC to supervise	Geography Paper 1: Living with the Physical Environment (1 hour 30 mins) History Paper 1- Conflict and tension (1hour) When History students complete their exam – they will be dismissed to go home
MONDAY 5th December		
Art and Design Final Piece – 10 Hrs		
TUESDAY 6th December		
Art and Design Final Piece – 10 Hrs		Art students to go back to P5 and P6
WEDNESDAY 7th December		
BTEC Sports – Selected pupils completing Units – 1-3		





RULES FOR MOCK EXAMS

- > You **MUST** have your lanyard – if you do not have it, we will not let you into the exam
- > You **MUST** sit in the correct seating plan. Your name card will be on your desk.
- > You **MUST** be in correct uniform
- > You **MUST** have all your equipment that you will need this could include calculators (without the cover), **BLACK** pens, spare pens, ruler, pencil etc.
- > Your pencil case **MUST** be clear, please only bring in the necessary equipment.
- > If you bring in a water bottle it **MUST** be clear
- > You **MUST** listen to the invigilators instructions at the start
- > You **MUST** read the instructions on the front of the paper and fill in the information accurately
- > You **MUST NOT** have your phone or **ANY** electrical devices on you- that includes smart watches, headphones
- > You **MUST NOT** have any of your notes in your pockets
- > You **MUST NOT** look around the exam room – focus on your own desk and your own work at all times.
- > You **MUST NOT** leave anything of value in your bag including money – hand it to your Head of Year before the exam
- > You **MUST NOT** wear a wrist watch of any kind.

IF...

- > If you are too ill to do your exam you must contact the school as soon as possible
- > If you think there is a problem with your exam paper raise your hand and tell the invigilator – you **MUST** continue with the paper you have been given
- > If you think you see someone else cheating raise your hand and report it to the invigilator
- > If you need to leave the room for the bathroom or if you are feeling unwell raise your hand and tell the invigilator. You will be escorted to the appropriate place.
- > If you think you have finished go back and check your work thoroughly – can you read your writing? Have you checked the spelling and grammar? Have you crossed out anything you do not want to be considered as part of your answer?





Day	9:00 – 10:00	10:00 – 11:00	11:00 – 12:00	12:00 – 1:00	1:00 – 2:35	2:35 – 4:00 <small>(Revision / Intervention)</small>	4:00 – 5:00	5:00 – 6:00	6:00 – 7:00	7:00 – 8:00	8:00 – 9:00	9:00 – 10:00
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												





Revision Method	Always	Sometimes	Never
Reading Through Class Notes			
Using resources on the J Drive			
Using Course Textbooks			
Mind maps / Diagrams			
Making / Re-making Class Notes			
Highlighting / Colour Coding			
Flashcards			
Using a Revision Wall to Display your Learning			
Writing Exam Answers Under Timed Conditions			
Reading Model Answers			
Using Past Exam Questions & Planning Answers			
Marking Your Own Work to a Mark Scheme			
Studying Mark Schemes or Examiners Report			
Working With Other Students in Groups / Pairs			
Comparing Model Answers Against Your Own Work			
Creating Your Own Exam Questions			
Handing in Extra Exam Work for Marking			
One to One Discussions with Teachers / Tutors			

Red = Content Techniques
 Orange = Skills Techniques
 Green = Feedback Techniques

Task:

Answer the questionnaire based on your own revision techniques.

Now plan out what methods you would like to use and for which topic in a specific subject and try it this week to see if it helps.

Revision Tips

1. Make revision ACTIVE

- Write revision notes.
- Read notes out aloud to yourself, or others.
- Record key points onto your iPod, MP3 player, phone.
- Discuss topics with a friend.
- Test yourself.
- Past exam questions.
- Use revision websites.

Just reading through your notes will not do the job, this is a very passive method of revision!

2. **Short bursts of revision (30-40 minutes) are most effective.** Your concentration lapses after about an hour and you need to take a short break (5-10 minutes)
3. **Find a quiet place to revise – your bedroom, school or library –** refuse to be interrupted or distracted.
4. **Make sure you don't just revise the subjects and topics you like. Work in your weaker ones as well.**
5. **Make your own revision notes because you will remember what you have written down more easily.** Stick key notes to cupboards or doors so you can see them everyday.





6. **You will need help at some stage, ask parents, older brothers and sisters, teachers or friends.** Use Teams to communicate with teachers and clarify points as they arise. Use websites specifically designed for revision.
7. **Don't get stressed out! Eat properly and get lots of sleep!**
8. **Believe in yourself and be positive.**

9. Revise with the exam in mind

You and your teachers will both know what you are going to be tested on, it's in the specification! Why not get hold of a copy of this so as you can see what you will need to know. Remember, you know what you don't know, what are you going to do to learn it?

- Use the appropriate past paper questions to help you, your teacher will have lots of these.
- Have a go at writing outline answers, this allows you to explore the key concepts surrounding a topic and allows you to structure an answer more easily.
- Practice in exam conditions (time and setting e.t.c.), this will allow you to experience how much time you actually have and how quickly you will need to work.
- Try the more difficult exam questions to push yourself and test your knowledge. It is no good simply having a go at the answers that you know you can answer! This is the easy way out.

The Revision Power Hour- make your revision EFFECTIVE

1. Choose a past paper question

First, you need to [find a past paper question](#) to answer (and the mark scheme). You'll use Google to do this. **Pro tip:** spend some time printing off all the past paper questions for each subject and filing them neatly so you've got them to hand.

2. Revise

Set a timer and spend 20 minutes revising what you need to know to answer the question you've chosen. This might be anything from [quotes for your closed book English exam](#) to facts for science or Geography. If you're looking for ways to revise here are [6 revision techniques](#) you might like to try. There are another 40 in my book, [The Ten Step Guide to Acing Every Exam You Ever Take](#).

3. Do the question

Set the timer again for 20 minutes and answer the past paper question you chose.

4. Mark your answer

Use the [mark scheme](#) you found in step 1 to mark your work.

This step is crucial. If you really want to excel in your exams you need to be able to think like an examiner. Marking your own work is essential if you're going to do this.

5. Get feedback

If you're unsure of how accurate your marking is or you want to know how you can improve show your work to your teacher. Ask them for feedback on how to improve.





Again, this step is really important if you want to make continuous improvements to your exam technique (and therefore your marks) during the revision period.

What if I run out of past papers?

This can happen if you do a lot of power hours.

However, when you've done that many past papers you're in a great position. By now, you should be able to think like an examiner and it will be easy to invent your own questions.

When you do revision power hours consistently you will soon see your marks and your confidence increase. You'll be walking into all your exams with your head held high, impatient to show off what you can do!


Common Command Words

Command words are the words and phrases used in exams that tell students how they should answer a question.

Balance


Students need to balance a chemical equation.

Revision POWER HOUR




Get the most out of your revision with a power hour. Here's a step-by-step of how to do it.


STEP 01
Choose a past paper question
 Google your subject, level and exam board e.g. "Geography A-Level Past Papers AQA"




STEP 02
Revise
 Spend 20 minutes revising what you need to know to answer your question




STEP 03
Do the question
 Set a timer for 20 minutes and answer the past paper question you chose



STEP 04
Mark your answer
 Using the mark scheme for the past paper mark your answer. This will help you to think like an examiner



STEP 05
Get feedback
 Show your teacher your work. Ask them whether your marking is accurate and how you could improve your answers



lifemoreextraordinary.com





Calculate

Students **should use numbers** given in the question to work out the answer.

Choose

Select from a range of alternatives.

Compare

This requires the student to describe **the similarities and/or differences** between things, not just write about one.

Complete

Answers should be written in the space provided, for example, on a diagram, in spaces in a sentence or in a table.

Define

Specify the meaning of something.

Describe

Students may be asked to recall some facts, events or process in an accurate way.

Design

Set out how something will be done.

Determine

Use given data or information to obtain an answer.

Draw

To produce, or add to, a diagram.

Estimate

Assign an approximate value.

Evaluate

Students should use the information supplied, as well as their knowledge and understanding, to consider evidence for and against when making a judgement.

Explain

Students should make something clear, or state the reasons for something happening.

Give

Only a short answer is required, not an explanation or a description.

How/ What/ When/ Where/Which/ Who/ Why

These can be used for more direct questions.

Identify

Name or otherwise characterise.

Justify

Use evidence from the information supplied to support an answer.

Label

Provide appropriate names on a diagram.

Measure

Find an item of data for a given quantity.





Name

Only a short answer is required, not an explanation or a description. Often it can be answered with a single word, phrase or sentence.

Plan

Write a method.

Plot

Mark on a graph using data given.

Predict

Give a plausible outcome.

Show

Provide structured evidence to reach a conclusion.

Sketch

Draw approximately.

Suggest

This term is used in questions where students need to apply their knowledge and understanding to a new situation.

Use

The answer must be based on the information given in the question. ***Unless the information given in the question is used, no marks can be given.*** In some cases students might be asked to use their own knowledge and understanding.

Write

Only a short answer is required, not an explanation or a description.

Useful revision websites

<https://senecalearning.com/en-GB/> - all

subjects <https://www.bbc.co.uk/bitesize> - all subjects

<https://quizlet.com/en-gb> - all subjects (free quizzes)

<https://revisionworld.com/gcse-revision> - most subjects <https://studywise.co.uk/> - most subjects

<https://cognitoresources.org/home> - science and maths

<https://www.stairwaylearning.com/> - science and maths (can also be downloaded as an App)

<https://www.primrosekitten.com/collections/gcse> - science

<https://www.examsolutions.net/gcse-maths/> - maths

<https://www.mathsgenie.co.uk/gcse.html> - maths

<https://www.sparknotes.com/> - English Literature (other subjects available)





English REVISION LIST

English Literature: Inspector Calls

Main Topic	I am able to...	Tick when completed
Context: social and historical	Define socialism and link it to the play	
	Define capitalism and link it to the play	
	Explain the significance and impact of the two World Wars on 'An Inspector Calls'	
	Explain what happened to the Titanic and why it is important to understand	
	Explain what the 'Great Depression' was and how it affected the UK	
	Confidently link this context to the play	
Context: the writer	Name the writer of the play	
	Recall key details about the writer's life	
	Explain the writer's key reasons behind writing the play	
	Recall when the play was set and when it was written	
	Confidently link this context to the play	
Plot	Recall where the play is set	
	Recall the key events and plot details of Act 1	
	Recall the key events and plot details of Act 2	
	Recall the key events and plot details of Act 3	
Character: Mr Birling	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	
	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	
Character: Mrs Birling	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	
	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	
Character: Sheila Birling	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	





	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	

Character: Eric Birling	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	
	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	
Character: Gerald Croft	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	
	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	
Character: Inspector Goole	Explain how this character is presented	
	Use key vocabulary to describe the character	
	Recall quotations to support these ideas	
	Explain what each of these quotations means	
	Analyse devices used in each of these quotations	
	Link ideas about character to the key themes of the play	
Themes: Capitalism/ Socialism	Explain what this theme is/means	
	Explain where it is seen in the play	
	Recall relevant quotations to this theme	
	Explain why the writer has used this theme	
Themes: Social Responsibility	Explain what this theme is/means	
	Explain where it is seen in the play	
	Recall relevant quotations to this theme	
	Explain why the writer has used this theme	
Themes: Social Class	Explain what this theme is/means	
	Explain where it is seen in the play	
	Recall relevant quotations to this theme	
	Explain why the writer has used this theme	
Themes: Age/generation gap	Explain what this theme is/means	
	Explain where it is seen in the play	
	Recall relevant quotations to this theme	





	Explain why the writer has used this theme	
Themes: Gender	Explain what this theme is/means	
	Explain where it is seen in the play	
	Recall relevant quotations to this theme	
	Explain why the writer has used this theme	





English REVISION LIST

English Literature: Power and Conflict Poetry

Main Topic	I am able to...	Tick when completed
Ozymandias – Percy Shelley	Explain how Ozymandias was like as a person (label the terminology) (AO1)	
	Explain What has happened to Ozymandias’ statue (AO1)	
	Recall by looking at lines 13 and 14 and explaining that is the area around the ruined statue like. Use quotes to support your comments. (AO1)	
	Explain why the narrator hasn’t actually seen the ruin, and why he is just told about it. What impact does this have on Ozymandias’ power/command? (AO3)	
	Explain what message Shelley is sending about power and control and how long it lasts (AO1/AO3)	
	Explain what form the poet has written in (AO2)	
	Explain what you notice about the rhyme scheme and how this links to decay and the decline of power (AO2)	
	Explain the context of the poem by analysing how it links to: <ul style="list-style-type: none"> • Strength of nature • Critical of government and tyranny • Power doesn’t last/pride comes before a fall 	
London – William Blake	Summarise stanza 1 (AO1) by including a quote, the technique and how this affects the reader (F.I.T) > (AO2)	
	Summarise stanza 2 (AO1) by including a quote, the technique and how this affects the reader (F.I.T) > (AO2)	
	Summarise stanza 3 (AO1) by including a quote, the technique and how this affects the reader (F.I.T) > (AO2)	
	Summarise stanza 4 (AO1) by including a quote, the technique and how this affects the reader (F.I.T) > (AO2)	
	Explain the rhyme & structure of the poem whilst being able to link it back to the theme i.e. control	
	Summarise what influenced the poem and what London was like. (AO3)	
	Explain what message Blake was sending about those in power and their effect on London (AO3)	





The Prelude – William Wordsworth	Explain what influenced the poet (AO3)	
	Summarise lines 1-20 (AO1)	
	List 4 language devices that are used (AO2)	
	Explain what impression is created of the mountain	
	How does Wordsworth feel?	
	Explain what effect nature have over Wordsworth from lines 31 –the end (AO1)	
	Explain how the poem is structured (AO2)	
My Last Duchess Robert Browning	Explain what impression is created of the duchess? (AO1)	
	Summarise what the Duke thinks of her behaviour	
	Explain how the Duke is controlling/possessive using quotations	
	Explain how the Duke is dangerous using quotations	
	Explain how the Duke is arrogant using quotations	
	Explain how the Duke is materialistic using quotations	
	Explain how the Duke is jealous using quotations	
	Summarise the background (AO3)	
	Identify 5 language devices that have been used (AO2)	
	How does the poem link to power and conflict?	
	How is the poem structured and why? (AO2)	
The Charge of the Light Brigade - Alfred Tennyson	Summarise the poem (AO1)	
	Summarise the real Charge of the Light Brigade (AO3)	
	Identify quotes with repetition and its effects	
	Identify quotes with verbs and its effects	
	Identify quotes with metaphors and its effects	
	Identify quotes with rhyme and rhythm and its effects	
	Explain what impression Tennyson creates of war and battle	
	Explain what impression he creates of soldiers	





	Explain how the poem is structured	
	Summarise how the poem links to power and conflict	
Exposure – Wilfred Owen	Select 2 quotes that describes the weather conditions and explain their effect (AO1/2)	
	Explain how the 5 senses affect the reader	
	Explain how the poem’s been structured and why	
	Link the context point below to a quote: <ul style="list-style-type: none"> Owen wrote the poem to describe the experience of being in the trenches during the freezing winter of 1917 	
	Link the context point below to a quote: <ul style="list-style-type: none"> Wilfred Owen was a soldier in WWI and personally experienced what war was like 	
	Link the context point below to a quote: <ul style="list-style-type: none"> He wanted to make people at home aware of the realities of war. 	
Storm on the Island – Seamus Heaney	Summarise lines 1-5 and explain the language devices (AO1/2)	
	Summarise lines 6-10 and explain the language devices (AO1/2)	
	Summarise lines 11-16 and explain the language devices (AO1/2)	
	Summarise lines 16-the end and explain the language devices (AO1/2)	
	Explain how the reaction to the storm changes throughout the poem (AO1)	
	Explain how the poem is about power and conflict?	
	Explain what message Heaney was sending about the power of nature? (AO1)	
	How formal is the poem? Why? (AO2)	
Bayonet Charge – Ted Hughes	Summarise what happens in stanza 1 (AO1); identify/explain the language devices (AO2)	
	Summarise what happens in stanza 2 (AO1); identify/explain the language devices (AO2)	





	Summarise what happens in stanza 3 (AO1); identify/explain the language devices (AO2)	
	Explain how the poem is structured and what the effect is	
	Briefly summarise the context of the poem and include a quote that supports your opinion (AO3)	
	Explain how the poem relates to power and conflict	
Remains – Simon Armitage	Summarise stanzas 1, 2, 3 and 4 (AO1/2)	
	Explain quotes which suggest the violence involved in the death of the looter (AO1/AO2)	
	Summarise stanzas 5, 6, 7, 8. How does the tone change in the second half of the poem? Why? (AO1/2)	
	Give some examples of simple/informal language phrases and explain the overall effect Explain how the speaker feels throughout the poem. Use quotes to support your comments. Ensure you explain why he feels the way he does.	
	Explain What power and conflict is referred to	
	Find some examples of enjambment that have been used for effect and explain them	
	Explain how the poem has been structured and why	
	Explain what message Armitage was sending about war and the effects on the soldiers? How do you feel after reading the poem?	
Poppies – Jane Weir	Summarise the poem (AO1)	
	Select quotes that link to violence/war/injury and explain why they are used (AO1/AO2)	
	Select a quote/s from each stanza to describe how the mother feels (AO1/2)	
	Explain how the son feels	
	Explain what style the poem is written in. Why?	
	Explain why enjambement has been used. Give examples.	
	Summarise how the poem links to power and conflict	
	Summarise Stanza 1 (AO1)	





War Photographer – Carol Ann Duffy	Select 2 quotes that have the greatest impact on the reader (AO1/AO2)	
	Summarise stanza 2 (AO1)	
	Select 2 quotes that have the greatest impact on the reader	
	Summarise Stanza 3 (AO1)	
	Select 2 quotes that have the greatest impact on the reader	
	Summarise stanza 4 (AO1)	
	Select 2 quotes that have the greatest impact on the reader	
	Explain how you think the photographer feels. Select two quotes to support your opinion	
	Explain what message Duffy is sending the reader about war. How does she want the reader to feel? Select two quotes that support your comments (AO1/3)	
	Explain how the poem links to power and conflict	
	Explain how the poem is structured and why	
Tissue –Imtiaz Dharker	Summarise stanzas 1, 2, 3 (AO1/2)	
	Summarise stanzas 4, 5, 7, 6 (AO1/2)	
	Explain the structural devices that have been used (enjambment, change in person, free verse)	
	Explain the tone and message of the poem	
	Explain how the poem links to power	
The Emigree – Carol Rumens	Explain the positive and negative atmosphere in Stanza 1	
	Explain the positive and negative atmosphere in Stanza 2	
	Explain the positive and negative atmosphere in Stanza 3	
	Summarise the poem	
	Explain how the poem is structured and why	
	Explain whether it is power or conflict that is being referred to using quotes	





Kamikaze – Beatrice Garland	Explain what a kamikaze is and can use a quote from stanza one to support this	
	Select quotes that used effective imagery from stanzas 2-5 (AO2)	
	Select quotes that link to her father’s family/happy memories (AO1/2)	
	Explain how the pilot was treated and why	
	Explain what structural devices have been used i.e. (Enjambment, change in person, free verse)	
	Explain what sort of power and conflict is referred to. Select a quote for each (AO1/3)	
	Explain what the tone and message of the poem is	
Checking Out Me History – John Agard	Explain what the following metaphors suggest about what has happened during Agard’s education	
	Select 2 quotes for Touissant and 2 for Mary Seacole to explain the impression created	
	Explain why Agard has used phonetic spelling (include some examples) (AO2/3)	
	Explain why the following phrases are repeated (AO2) <ul style="list-style-type: none"> •Dem tell me •Dem never tell me 	
	Explain how Agard feels and why. Include quotes to support your answer (AO1/3)	
	Explain what rhyme and rhythm have been used and what is the effect (AO2)	
	Explain how the poem is structured and why	
	Explain the message Agard is sending the reader	
	Explain how the poem links to either power or conflict	





English REVISION LIST

English Literature: Unseen Poetry

Main Topic	I am able to...	Tick when completed
The Reading Box Approach: Unseen Poetry Poems to try this approach with: <ul style="list-style-type: none"> • 'Mother to Son' by Langston Hughes (1922) • 'A Birthday' by Christina Rossetti (1862) 	<u>Reading Boxes: The First Box</u> Read the title, scan over the poem on the page and take in its shape and the white spaces; then read the poem aloud. In the first box, capture initial reactions, likes/dislikes, including notes on what the poem is <i>literally</i> about.	
	<u>Reading Boxes: The Second Box</u> Read the poem for a second time. This second read is about noticing and questioning. Make further notes on this in the second box. Useful questions to ask might be: <i>What questions do you have or what is puzzling you? What do you notice as you read? What patterns or repeats do you notice? (in words/phrases/images/rhyme and rhythm)</i>	
	<u>Reading Boxes: The Third Box</u> Consider what you think the poet is saying and why the poem was written. Jot these thoughts down in the outer box. Useful questions to ask: <i>What is the message of the poem? What does the poem make you think or see something differently? How does the text relate to yourself, other texts you have read or the world/big ideas?</i>	
The Flash Reading Approach: Unseen Poetry Poems to try this approach with: <ul style="list-style-type: none"> • 'Anthem for Doomed Youth' by Wilfred Owen (1920) 	First burst – look at the shape of the poem and the title. Jot down what they notice and think.	
	Second burst – consider the opening and ending of the poem; what do they think?	
	Third burst – scan the poem, what words/phrases/patterns do they notice?	
	Draw a grid and make notes on what I like/dislike/questions and puzzles/patterns (this simple grid -based on an approach pioneered- encourages you to think about a poem, have an opinion and start to justify it in a structured way). This grid can also be used by itself as a way-in to starting to respond to and interrogate a poem.	
The Active Reading Approach: Unseen Poetry Poems to try this approach with:	Consider the meaning(s) of the title	
	Think about first and last lines	
	Pick out three vivid/'stand out' words/phrases	
	Highlight emotive words	





<ul style="list-style-type: none"> • 'Grief' by Kayo Chingonyi • 'The Truth About Monsters' by Nikita Gill • 'In My Country' by Jackie Kay • 'Hadrian's Wall' by Daljit Nagra 	Find examples of imagery	
	Highlight verbs	
	Circle punctuation	
	Highlight structural features	
	Highlight alliteration, assonance, onomatopoeia.	
	Noticing things and consider why it stands out i.e. Patterns emerging, or make connections between a phrase and use of alliteration (for example) and start to see how language and structure are working together to make meanings.	
How to Explore Titles: Unseen Poetry	Make predictions about what poem will be about simply from the title.	
Poems to try this approach with:		
<ul style="list-style-type: none"> • 'In My Country' – Jackie Kay • 'The Voice' – Thomas Hardy • 'A Poison Tree' – William Blake 	Read the poems with the titles removed and then generate a title for each poem after reading and explain choice of title.	
How to Unlock Implied Meanings: Unseen Poetry	Find an image of a tree. What can you see? Write your descriptions of literally what the tree looks like. Then ask what a tree might represent or be a metaphor for (eg life/growth, survival, power etc.) Give a reason for ideas.	
Poems to try this approach with:	Read 'A Poison Tree' by William Blake. Quickly write down a summary of the literal, surface content of the poem.	
'A Poison Tree' – William Blake	Imagine you are the speaker of the poem, write down or explain to each other the story of the poem. Focus on the feelings and the overall message of the poem. What do they think the point being made might be?	
	Explain what might happen if you dwell on a negative emotion rather than dealing with it? Think of as many synonyms for 'anger' as you can, in order to deepen exploration of the ideas being expressed i.e. note 'anger' in the middle of a page and note down as many synonyms around it (note – having a vocabulary for discussing the intent and tone of a poem is important, so taking opportunities to explore the nuances of different words for emotions is a useful strategy to repeat at other times when teaching).	
	Consider the following:	





	<p>'A Poison Tree' is from <i>Songs of Experience</i>, a collection which tends to focus on ideas about humanity after the fall of man. Which of the seven deadly sins might Blake be using 'A Poison Tree' to explore? Try to read 'London' which is also from the same collection.</p> <p>Go back to ideas about a tree. Why might Blake have used the image of a tree to develop his ideas about anger?</p> <p>Compare the poet's portrayal of negative emotions with 'The Truth About Monsters' by Nikita Gill</p>	
Exploring Images and Meanings: Unseen Poetry	Look at an image of a rose growing out of concrete. What can you see? What could this image mean? Why is a rose growing out of concrete surprising and positive as an image?	
Poems to try this approach with:	Explain how imagery is not only visual but can be used figuratively. Think about another image: 'watered shoot'. How much can you say about this image? What happens to a shoot when it is watered? Why does a shoot need water? What does watering a shoot suggest about the person doing the watering?	
<ul style="list-style-type: none"> 'A Birthday' by Christina Rossetti (1862) 'The Rose That Grew Out of Concrete' – Tupac Shakur 	Read 'A Birthday'. Highlight all the positive images. What connects these images? Aim to guide yourself towards the idea that the majority of the images focus on the idea of nature/growth.	
	Look at the first and last line of the poem; together, these summarise the overall point being made. Write for five minutes about the image 'watered shoot', aiming to link it to the overall meaning of the poem.	
	Read 'A Birthday' and the 'Rose That Grew Out of Concrete'. Highlight the positive words/phrases in both. Choose one word or phrase from each poem that sums up the positivity in the poem. Place these side by side on a blank page. Draw a circle around each (see the Venn diagram). Begin by annotating both phrases separately. Then, in the middle of the Venn diagram, note where there are similarities between both images. Write a paragraph comparing the two quotes.	
	Write a sentence explaining: <ul style="list-style-type: none"> why poets might choose to use imagery in their poems how images help the reader to understand ideas in the poem. 	
Exploring Structure and Patterns: Unseen Poetry	Read the title only and predict what the poem may be about.	
Poems to try this approach with:	Read the opening line and the final line. Reflect on i) how these lines could link to the title; ii) how the opening and the ending lines link to each other and iii) what may have taken place in the space between these lines	
<ul style="list-style-type: none"> 'A Poison Tree' by William Blake 	Read the poem in full and explore how the title, opening and ending help to frame and structure the content of the poem. What other aspects of structure do you 'notice' as you read the poem?	





<ul style="list-style-type: none">- First line: 'I was angry with my friend'.- Final line: 'My foe outstretched beneath the tree'.• 'Anthem for Doomed Youth' by Wilfred Owen- First line: 'What passing-bells for these who die as cattle?'- Final line: 'And each slow dusk a drawing down of blinds'.• 'The Rose that Grew from Concrete' by Tupac Shakur- First line: 'Did you hear about the rose that grew?'- Final line: 'when no one else ever cared'.	<p>Read the prose version of the poem 'The Truth About Monsters' by Nikita Gill.</p> <ul style="list-style-type: none">- Decide how many verses and where the line breaks are and to give a rationale for this.- what punctuation (and the accompanying capitalisation) where, and the rationale for using that punctuation- how many verses and the rationale for this- where the line breaks are and the rationale for this.	
---	---	--





English REVISION LIST

Language Paper 1

Topic Title	Key information/ Links	Tick when completed
Question 2 – <i>how does the writer use language?</i>	<ul style="list-style-type: none"> Point, evidence and explain (PEE) – the effects are very important Narrative voice – first person (I), second (you), or third (he, she or they). Simile – when something is described like or as something else: He roared like a lion Metaphor – when a meaning is not literal: He is a lion. Listing/use of three – sometimes for emphasis Rhetorical Questioning – not requiring an answer Senses – sight, sound, touch, smell and taste Onomatopoeia – words that sound as they are spelt: crash, or sometimes called sound imagery Alliteration – words in a sentence with the same initial sound Repetition – words repeated for emphasis or effect Exaggeration/hyperbole – ‘It’s a million times better...’ Identify a variety of sentence lengths and structures and their effect: Personification – giving human qualities Comparative and superlative adjectives – tall, taller, tallest Semantic fields and connotations – words that share or create theme Connotations of words – what are the images that the word brings to mind? Word classes: nouns, verbs, adjectives, adverbs, conjunctions (particularly action verbs – ran, swept etc.) 	
Question 3: <i>how does the writer use structure?</i>	<ul style="list-style-type: none"> Setting, atmosphere, weather – creating a sense of place and time Introduction of character – or more characters as the text progresses Dialogue: usually a discussion between characters or even an internal thought Zooming in and out – perspective/focus Switch in time or place: dream, flash back or forward, change of location or topic Narrative voice (see language) Creation of suspense or tension Cliff-hanger ending or twist in the story Sentence types: but only if related to structure not language! Words: but only if a word indicates a significant change in structure! Contrasts: from happy to sad, dark to light, day to night etc 	
Question 4-	<ul style="list-style-type: none"> Make a clear comment on your opinion 	
Own opinion <i>‘to what extent do you agree or disagree?’</i>	<ul style="list-style-type: none"> Create a quick plan: ideas for and against 	
	<ul style="list-style-type: none"> Argue and counter argue – show awareness of other point of view 	
	<ul style="list-style-type: none"> Writer’s methods: understand that this is also a language question – What do you think? Why do you think this? And How has the writer used ‘methods’/language to make you think this? 	
	<ul style="list-style-type: none"> Quotations: give evidence for your points 	
	<ul style="list-style-type: none"> The difference between descriptive and narrative options: 	





Question 5: Creative writing task.	• Descriptive is written in 3 rd person, narrative will be 1 st person.	
	• Quality rather than quantity! –	
	• Taking hints from the text you have read: this is not the same as copying or cheating, but wisely reading for inspiration	
	• Planning: do you usually do this? It is recommended that you take a few minutes to plan	
	• Use a range of punctuation to guide the reader:	
	• Range of vocabulary for effect: interesting words or more ambitious ones.	
	• A range of sentence types and language devices	
	• Strong opening sentence/paragraph for impact	
	• Include some dialogue: not too much	

English REVISION LIST

Language Paper 2





Topic Title	Key information/ Links	Tick when completed
Question 2: Write a summary	<ul style="list-style-type: none"> • Only make points on the focus of the question • Definition of a summary: ‘a brief statement or account of the main points of something’. • Similarities and/or differences • Comparative conjunctions and phrases: however, similarly, on the other hand, in comparison etc. • Highlight the main points – draw together into a summary using comparative conjunctions • Quotations or evidence from the text 	
Question 3: How does the writer use language to....?	<ul style="list-style-type: none"> • Same as Paper 1, question 2 	
Question 4: The perspectives and attitudes of the writer	<ul style="list-style-type: none"> • Only make points on the focus of the question 	
	<ul style="list-style-type: none"> • Definition of a summary: ‘a brief statement or account of the main points of something’. 	
	<ul style="list-style-type: none"> • Similarities and/or differences 	
	<ul style="list-style-type: none"> • Comparative conjunctions and phrases: however, similarly, on the other hand, in comparison etc. 	
	<ul style="list-style-type: none"> • Highlight the main points – draw together into a summary using comparative conjunctions 	
Question 5: Creative writing (non-fiction)	<ul style="list-style-type: none"> • Form: what are you asked to write? Letter, speech, article, blog, text for a leaflet or some other form. Familiarise yourself with the conventions of these forms of writing 	
	<ul style="list-style-type: none"> • Audience and purpose: show you understand how to write for a specific audience and purpose, for example a speech: “thank you for coming to listen to me today” 	
	<ul style="list-style-type: none"> • Sustain your style: be careful not to end a speech for example with ‘yours faithfully’ – sustain your form to the end! 	
	<ul style="list-style-type: none"> • DAFORREST: this or a similar strategy might help you to include language features into your piece: direct address, alliteration/anecdote, facts, opinions, rhetorical questions, repetition, statistics/simile/senses, tone/tripling etc. 	
	<ul style="list-style-type: none"> • Check your work: you can still gain marks at the end of the exam by checking through. Ensure punctuation is in place that you have included everything you can. 	





MATHS FOUNDATION REVISION LIST

Topic Title	Section	Key information, use Corbettmaths for the videos and maths genie for the exam practice	Tick when completed
1.	Number	Place Value	
2.	Number	Rounding	
3.	Number	Properties of numbers	
4.	Number	Ordering Numbers	
5.	Number	Ordering Decimals	
6.	Number	Converting between Fractions Decimals & Percentages	
7.	Number	Equivalent Fractions	
8.	Number	Ordering Fractions	
9.	Number	Arithmetic Problems	
10.	Number	Using a Calculator	
11.	Number	Standard Form	
12.	Number	Arithmetic with fractions	
13.	Ratio & Proportion	Fraction, Percentage and Ratio Problems	
14.	Ratio & Proportion	Percentages	
15.	Ratio & Proportion	Ratio	
16.	Ratio & Proportion	Proportion	
17.	Algebra	Simplifying	
18.	Algebra	Expanding	
19.	Algebra	Factorise	
20.	Algebra	Function Machines	
21.	Algebra	Solving	
22.	Algebra	Substitution	
23.	Algebra	Changing the Subject	
24.	Algebra	Coordinates	
25.	Algebra	Plotting graphs	
26.	Algebra	Gradient	
27.	Algebra	Sequences	
28.	Statistics & Probability	Bar Charts	
29.	Statistics & Probability	Stem & Leaf	
30.	Statistics & Probability	Scatter Graphs	
31.	Statistics & Probability	Averages & Range	





32.	Statistics & Probability	Probability	
33.	Statistics & Probability	Venn Diagrams	
34.	Statistics & Probability	Sets	
35.	Geometry	Area Perimeter	
36.	Geometry	Surface area	
37.	Geometry	Angles	
38.	Geometry	Parts of a Circle	
39.	Geometry	Converting Units	
40.	Geometry	Speed Distance Time	
41.	Geometry	Scale Drawings	
42.	Geometry	Elevations	
43.	Geometry	Transformations	
44.	Geometry	Similar Shapes	
45.	Geometry	Trigonometry	
46.	Geometry	Vectors	





MATHS HIGHER REVISION LIST

Topic Title	Section	Key information, use Corbettmaths for the videos and maths genie for the exam practice	Tick when completed
1.	Number	Arithmetic with Decimals	
2.	Number	Prime Factor Form	
3.	Number	HCF & LCM	
4.	Number	HCF & LCM Worded Problems	
5.	Number	Estimating	
6.	Number	Using a Calculator & Rounding	
7.	Number	Error Intervals	
8.	Number	Bounds	
9.	Number	Standard Form	
10.	Number	Arithmetic with Mixed Number Fractions	
11.	Number	Recurring Decimals to Fractions	
12.	Number	Rules of Indices inc Negative and Fractional Indices	
13.	Number	Simplifying Surds	
14.	Number	Rationalising the denominator	
15.	Ratio Proportion Rates of Change	Percentage Change	
16.	Ratio Proportion Rates of Change	Repeat Percentage Change	
17.	Ratio Proportion Rates of Change	Percentage Problems	
18.	Ratio Proportion Rates of Change	Exchange Rate Problems	
19.	Ratio Proportion Rates of Change	Ratio Problems	
20.	Ratio Proportion Rates of Change	Ratio Fraction Percentage Problems	
21.	Ratio Proportion Rates of Change	Proportion Problems	
22.	Ratio Proportion Rates of Change	Inverse Proportion	
23.	Algebra	Expand & Simplify	
24.	Algebra	Expanding Quadratics	
25.	Algebra	Expanding Cubics	
26.	Algebra	Indices	
27.	Algebra	Solve equations	
28.	Algebra	Factorise	
29.	Algebra	Factorise Quadratics	
30.	Algebra	Substitute into a formula	
31.	Algebra	Rearrange Formulae	
32.	Algebra	Iteration	





33.	Algebra	$Y = mx+c$ Parallel and Perpendicular Lines	
34.	Algebra	Solving Inequalities	
35.	Algebra	Solving Quadratic Inequalities	
36.	Algebra	Representing Inequalities Graphically	
37.	Algebra	Algebraic Fractions	
38.	Algebra	Simultaneous Equations by Elimination	
39.	Algebra	Solve Quadratic Equations	
40.	Algebra	Turning Points and x intercepts	
41.	Algebra	Equation of a Circle	
42.	Algebra	Sketching Graphs	
43.	Algebra	nth term of a quadratic sequence	
44.	Algebra	Functions	
45.	Algebra	Proofs	
46.	Statistics & Probability	Mean/Median Frequency Table/Chart	
47.	Statistics & Probability	Problems involving the mean	
48.	Statistics & Probability	Stem & Leaf Diagrams	
49.	Statistics & Probability	Frequency Polygons	
50.	Statistics & Probability	Scatter Graphs	
51.	Statistics & Probability	Cumulative Frequency & Box plots	
52.	Statistics & Probability	Histograms	
53.	Statistics & Probability	Sample/Relative Frequency	
54.	Statistics & Probability	Probability	
55.	Statistics & Probability	Venn Diagrams	
56.	Geometry	Geometry with Algebra	
57.	Geometry	Circles & Sectors	
58.	Geometry	Pythagoras	
59.	Geometry	Trigonometry	
60.	Geometry	Transformations	
61.	Geometry	Angle Rules	
62.	Geometry	Angle Proofs	
63.	Geometry	Exterior Angles	
64.	Geometry	Construction	
65.	Geometry	Elevations	
66.	Geometry	Surface Area	
67.	Geometry	Volume	





68.	Geometry	Exact Trig Values	
69.	Geometry	Non Right Angle Trigonometry	
70.	Geometry	Area of a Triangle (sin)	
71.	Geometry	Similar 2D & 3D Shapes	
72.	Geometry	Circle Theorems	
73.	Geometry	Sketching Sine, Cosine and Tangent Graphs	
74.	Geometry	Vectors	
75.	Geometry	Speed Distance Time	
76.	Geometry	Distance from a Time Speed Graph (Area under a curve)	





Biology (8461) REVISION LIST - SS separate science (SS)

Paper 1	Topic	Key information/ Links	Tick when completed
	Cell structure and transport	B1 Cell structure and transport B1.1 The world of the microscope B1.2 Animal and plants cells B1.3 Eukaryotic and prokaryotic cells B1.4 Specialisation in animal cells B1.5 Specialisation in plant cells B1.6 Diffusion B1.8 Osmosis in plants B1.9 Active transport B1.10 Exchanging materials	
	Cell division	B2 Cell division B2.1 Cell division B2,2 Growth and differentiation B2.3 Stem cells B2.4 Stem cell dilemmas	
	Organisation and the digestive system	B3 Organisation and the digestive system B3.1 Tissues and organs B3.2 The human digestive system B3.4 Catalysts and enzymes B3.5 Factors affecting enzyme action B3.6 How the digestive system works B3.7 Making digestion efficient	
	Organising animals and plants	B4 Organisation animals and plants B4.1 The blood B4.2 The blood vessels B4.3 The heart B4.4 Helping the heart B4.5 Breathing and gas exchange B4.6 Tissues and organs in plants B4.7 Transport system in plants B4.8 Evaporation B4.9 Factors affecting transpiration	
	Communicable diseases	B5 Communicable diseases B5.1 Health and disease B5.2 Pathogens and disease B5.3 Growing bacteria in the lab B5.4 Preventing bacterial growth B5.5 Preventing infections B5.6 Viral disease B5.7 Bacterial disease B5.8 Disease caused by fungi and protists B5.9 Human defence response B5.10 More about plant disease B5.11 Plant defence responses	





	Preventing and treating diseases	B6 Preventing and treating disease B6.1 Vaccination B6.2 Antibiotics and painkillers B6.3 Discovery B6.4 Developing drugs B6.5 Making monoclonal antibodies (H) B6.6 Uses of monoclonal antibodies (H)	
	Non-communicable diseases	B7 Non-communicable diseases B7.1 Non-communicable disease B7.2 Cancer B7.3 Smoking and the risk of disease B7.4 Diet, exercise, and diseases B7.5 Alcohol and other carcinogens	
	Photosynthesis	B8.1 Photosynthesis B8.2 The rate of photosynthesis B8.3 How plants use glucose B8.4 Making the most of photosynthesis (H)	
	Respiration	B9.1 Aerobic respiration B9.2 The response to exercise B9.3 Anaerobic respiration B9.4 Metabolism and the Liver	

Paper 2	Topic	Key information/ Links	Tick when completed
	The human nervous system	B10.1 Principles of homeostasis B10.2 Structure & function of nervous system B10.3 Reflex actions B10.5 The eye B10.6 Eye problems	
	Hormonal coordination	B11.1 Hormonal control B11.2 Control blood glucose B11.3 Treating diabetes B11.4 Negative feedback (H) B11.5 Human reproduction B11.6 Menstrual cycle (H) B11.7 Artificial control of fertility B11.8 Infertility treatments B11.9 Plant Hormones and responses B11.10 Using plant hormones (H)	
	Homeostasis in action	B12.1 Controlling body temperature B12.2 Removing Waste products B12.3 The human Kidney B12.4 Dialysis – an artificial kidney B12.5 Kidney transplants	
	Genetics & reproduction	B13.1 Types of reproduction B13.2 Cell division in sexual reproduction B13.3 The best of both worlds B13.4 DNA & genome	





		<p>B13.5 DNA structure and protein synthesis</p> <p>B13.6 Gene expression and mutation (H)</p> <p>B13.7 Inheritance in action</p> <p>B13.8 More about genetics</p> <p>B13.9 Inherited disorders</p> <p>B13.10 Screening for genetic disorders</p>	
	Variation and Evolution	<p>B14.1 Variation</p> <p>B14.2 Evolution by natural selection</p> <p>B14.3 Selective breeding</p> <p>B14.4 Genetic engineering</p> <p>B14.5 Cloning</p> <p>B14.6 Adult cell cloning</p> <p>B14.7 Ethics of genetic techniques</p>	
	Genetics and Evolution	<p>B15.1 The history of genetics</p> <p>B15.2 Theories of evolution</p> <p>B15.3 Accepting Darwin's Ideas</p> <p>B15.4 Evolution and speciation</p> <p>B15.5 Evidence for evolution</p> <p>B15.6 Fossils and extinction</p> <p>B15.7 More about Extinction</p> <p>B15.8 Antibiotic-resistant bacteria</p> <p>B15.9 Classification</p>	
	Adaptations, interdependence and competition	<p>B16.1 The importance of communities</p> <p>B16.2 Organisms in their environment</p> <p>B16.3 Distribution and abundance</p> <p>B16.4 Competition in animals</p> <p>B16.5 Competition in plants</p> <p>B16.6 Adapt and survive</p> <p>B16.7 Adaptations in animals</p> <p>B16.8 Adaptations in plants</p>	
	Organising an ecosystem	<p>B17.1 Feeding relationships</p> <p>B17.2 Materials cycling</p> <p>B17.3 The carbon cycle</p> <p>B17.4 Rates of decomposition</p>	
	Biodiversity and Ecosystems	<p>B18.1 The human population explosion</p> <p>B18.2 Land and water pollution</p> <p>B18.3 Air pollution</p> <p>B18.4 Deforestation and peat destruction</p> <p>B18.5 Global warming</p> <p>B18.6 The impact of change</p> <p>B18.7 Maintaining biodiversity</p> <p>B18.8 Trophic levels and biomass</p> <p>B18.9 Biomass transfers</p> <p>B18.10 Factors affecting food security</p> <p>B18.11 Making food production more efficient</p> <p>B18.12 Sustainable food production</p>	





Separate science 8461: Refer to separate science text book

Paper 1

What's assessed

Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Biology paper one topic lists B1 to B9.

Paper 2

What's assessed

Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE





Eden Boys





Biology Combined Science (8464) REVISION LIST

Paper 1	Topic	Key information/ Links	Tick when completed
	Cell structure and transport	B1 Cell structure and transport B1.1 The world of the microscope B1.2 Animal and plants cells B1.3 Eukaryotic and prokaryotic cells B1.4 Specialisation in animal cells B1.5 Specialisation in plant cells B1.6 Diffusion B1.8 Osmosis in plants B1.9 Active transport B1.10 Exchanging materials	
	Cell division	B2 Cell division B2.1 Cell division B2.2 Growth and differentiation B2.3 Stem cells B2.4 Stem cell dilemmas	
	Organisation and the digestive system	B3 Organisation and the digestive system B3.1 Tissues and organs B3.2 The human digestive system B3.4 Catalysts and enzymes B3.5 Factors affecting enzyme action B3.6 How the digestive system works B3.7 Making digestion efficient	
	Organising animals and plants	B4 Organisation animals and plants B4.1 The blood B4.2 The blood vessels B4.3 The heart B4.4 Helping the heart B4.5 Breathing and gas exchange B4.6 Tissues and organs in plants B4.7 Transport system in plants B4.8 Evaporation B4.9 Factors affecting transpiration	
	Communicable diseases	B5 Communicable diseases B5.1 Health and disease B5.2 Pathogens and disease B5.3 Growing bacteria in the lab B5.4 Preventing bacterial growth B5.5 Preventing infections B5.6 Viral disease B5.7 Bacterial disease B5.8 Disease caused by fungi and protists B5.9 Human defence response	





	Preventing and treating diseases	B6 Preventing and treating disease B6.1 Vaccination B6.2 Antibiotics and painkillers B6.3 Discovery B6.4 Developing drugs	
	Non-communicable diseases	B7 Non-communicable diseases B7.1 Non-communicable disease B7.2 Cancer B7.3 Smoking and the risk of disease B7.4 Diet, exercise, and diseases B7.5 Alcohol and other carcinogens	
	Photosynthesis	B8.1 Photosynthesis B8.2 The rate of photosynthesis B8.3 How plants use glucose B8.4 Making the most of photosynthesis (H)	
	Respiration	B9.1 Aerobic respiration B9.2 The response to exercise B9.3 Anaerobic respiration B9.4 Metabolism and the Liver	

Paper 2	Topic	Key information/ Links	Tick when completed
	The human nervous system	B10.1 Principles of homeostasis B10.2 Structure & function of nervous system B10.3 Reflex actions	
	Hormonal coordination	B11.1 Hormonal control B11.2 Control blood glucose B11.3 Treating diabetes B11.4 Negative feedback (H) B11.5 Human reproduction B11.6 Menstrual cycle (H) B11.7 Artificial control of fertility B11.8 Infertility treatments	
	Genetics & reproduction	B12.1 Types of reproduction B12.2 Cell division in sexual reproduction B12.3 DNA & genome B12.4 Inheritance in action B12.5 More about genetics B12.6 Inherited disorders B12.7 Screening for genetic disorders	
	Variation and Evolution	B13.1 Variation B13.2 Evolution by natural selection B13.3 Selective breeding	





		B13.4 Genetic engineering B13.5 Ethics of genetic techniques	
	Genetics and Evolution	B14.1 Evidence of Evolution B14.2 Fossils and extinction B14.3 More about Extinction B14.4 Antibiotic-resistant bacteria B14.5 Classification B14.6 New systems of classification	
	Adaptations, interdependence and competition	B15.1 The importance of communities B15.2 Organisms in their environment B15.3 Distribution and abundance B15.4 Competition in animals B15.5 Competition in plants B15.6 Adapt and survive B15.7 Adaptations in animals B15.8 Adaptations in plants	
	Organising an ecosystem	B16.1 Feeding relationships B16.2 Materials cycling B16.3 The carbon cycle	
	Biodiversity and Ecosystems	B17.1 The human population explosion B17.2 Land and water pollution B17.3 Air pollution B17.4 Deforestation and peat destruction B17.5 Global warming B17.6 Maintaining biodiversity	

Biology Paper 1	Biology Paper 2
What's assessed Biology topics 1–4: Cell Biology; Organisation; Infection and response; and Bioenergetics.	What's assessed Biology topics 5–7: Homeostasis and response; Inheritance, variation and evolution and Ecology.
How it's assessed Written exam: 1 hour 15 minutes 70 marks 16.7% of GCSE	How it's assessed Written exam: 1 hour 15 minutes 70 marks 16.7% of GCSE

PHYSICS (8463) TOPIC LIST

Key: Separate science (SS)

	Topic	Key information/ Links	Tick when completed





SS <u>Energy and energy resources</u>	P1 Conservation and dissipation of energy	P1 Conservation and dissipation of energy P1.1 Changes in Energy Stores P1.2 Conservation of Energy P1.3 Energy and work P1.4 Gravitational and potential energy stores P1.5 Kinetic energy and elastic energy stores P1.6 Energy Dissipation P1.7 Energy and Efficiency (<i>Improving efficiency H</i>) P1.8 Electrical Appliances P1.9 Energy and Power	
SS	P2 Energy Transfer by heating	P2 Energy transfer by heating P2.1 Energy transfer by conduction P2.2 Infrared Radiation P2.3 More about infrared radiation P2.4 Specific Heat Capacity P2.5 Heating and Insulating Buildings	
SS	P3 Energy Resources	P3 Energy Resources P3.1 Energy Demands P3.2 Energy from wind and water P3.3 Power from the Sun and the Earth P3.4 Energy and the Environment P3.5 Big energy issues	
SS <u>Particles at work</u>	P4 Electric Circuits	P4 Electric Circuits P4.1 Electrical charges and fields P4.2 Current and charge P4.3 Potential difference and resistance P4.4 Component Characteristics P4.5 Series Circuits P4.6 Parallel Circuits	
SS	P5 Electricity in the home	P5 Electricity in the home P5.1 Alternating Current P5.2 Cables and Plugs P5.3 Electrical Power and Potential difference P5.4 Electrical currents and energy transfer P5.5 Appliances and efficiency	
SS	P6 Molecules and Matter	P6 Molecules and Matter P6.1 Density P6.2 States of matter P6.3 Changes of state P6.4 Internal Energy P6.5 Specific Latent Heat P6.6 Gas Pressure and temperature P6.7 Gas Pressure and Volume (<i>Pressure in piston H</i>)	
SS	P7 Radioactivity	P7 Radioactivity P7.1 Atoms and radiation P7.2 The discovery of the nucleus P7.3 Changes in the nucleus P7.4 More about alpha, beta and gamma radiation P7.5 Activity and half life	





		P7.6 Nuclear radiation in medicine P7.7 Nuclear fission P7.8 Nuclear fusion P7.9 Nuclear Issues	
SS Forces in Action	P8 Forces in action	P8 Forces in balance P8.1 Vectors and scalars P8.2 Forces between objects P8.3 Resultant forces (<i>Force diagrams H</i>) P8.4 Moments at work P8.5 More about leavers and gears P8.6 Centre of mass P8.7 Moments and equilibrium P8.8 The parallelogram of forces P8.9 Resolution of forces	
SS	P9 Motion	P9 Motion P9.1 Speed and distance-time graphs P9.2 Velocity and acceleration (<i>Velocity of object moving in circles H</i>) P9.3 More about velocity-time graphs (<i>Area under V-T Graph H</i>) P9.4 Analysing motion graphs (<i>A D-T graph for changing speed/tangents H</i>)	
SS	P10 Forces and motion	P10 Forces and motion P10.1 Forces and acceleration (<i>Inertia H</i>) P10.2 Weight and terminal velocity P10.3 Forces and braking (<i>Deceleration H</i>) P10.4 Momentum P10.5 Using conservation of momentum P10.6 Impact forces P10.7 Safety first P10.8 Forces and elasticity.	
SS	P11 Force and Pressure	P11 Force and Pressure P11.1 Pressure and surfaces P11.2 Pressure and liquid at rest P11.3 Atmospheric Pressure (<i>Calculating Pressure H</i>) P11.4 Upthrust and flotation	
SS Waves Electromagnets And space	P12 Wave Properties	P12 Wave Properties P12.1 The nature of waves P12.2 The properties of waves P12.3 Reflection and Refraction P12.4 More about waves P12.5 Sound Waves P12.6 The uses of ultrasound P12.7 Seismic Waves	
SS	P13 Electromagnetic Waves	P13 Electromagnetic waves P13.1 The electromagnetic spectrum P13.2 Light, infrared, microwaves and radio waves P13.3 Communications (<i>More about signals/carrier waves H</i>) P13.4 Ultraviolet waves, X-rays and gamma rays. P13.5 X-rays in medicine (<i>X-ray strength imaging vs therapy H</i>)	
SS	P14	P14 Light	





	Light	P14.1 Reflection of light P14.2 Refraction of light P14.3 Light and colour P14.4 Lenses P14.5 Using lenses	
SS	P15 Electromagnetism	P15 Electromagnetism P15.1 Magnetic Fields P15.2 Magnetic fields of electric currents P15.3 Electromagnets in devices P15.4 The motor effect P15.5 The generator effect P15.6 The alternating-current generator P15.7 Transformers P15.8 Transformers in action	
SS	P16 Space	P16 Space P16.1 Formation of the Solar System P16.2 The life history of a star P16.3 Planets, satellites, and orbits. (<i>Centripetal force/satellites H</i>) P16.4 The expanding universe. P16.5 The beginning and future of the Universe	

SS Physics Paper 1	SS Physics Paper 2
<p>What's Assessed?</p> <p>Energy</p> <p>P1 Conservation and dissipation of energy P1.1 Changes in Energy Stores P1.2 Conservation of Energy P1.3 Energy and work P1.4 Gravitational and potential energy stores P1.5 Kinetic energy and elastic energy stores P1.6 Energy Dissipation P1.7 Energy and Efficiency (<i>Improving efficiency H</i>) P1.8 Electrical Appliances P1.9 Energy and Power</p> <p>P2 Energy transfer by heating P2.1 Energy transfer by conduction P2.2 Infrared Radiation P2.3 More about infrared radiation P2.4 Specific Heat Capacity P2.5 Heating and Insulating Buildings</p> <p>P3 Energy Resources P3.1 Energy Demands P3.2 Energy from wind and water P3.3 Power from the Sun and the Earth P3.4 Energy and the Environment P3.5 Big energy issues</p> <p>Electricity</p>	<p>What's Assessed?</p> <p>Forces</p> <p>P8 Forces in balance P8.1 Vectors and scalars P8.2 Forces between objects P8.3 Resultant forces (<i>Force diagrams H</i>) P8.4 Moments at work P8.5 More about leavers and gears P8.6 Centre of mass P8.7 Moments and equilibrium P8.8 The parallelogram of forces P8.9 Resolution of forces</p> <p>P9 Motion P9.1 Speed and distance-time graphs P9.2 Velocity and acceleration (<i>Velocity of object moving in circles H</i>) P9.3 More about velocity-time graphs (<i>Area under V-T Graph H</i>) P9.4 Analysing motion graphs (<i>A D-T graph for changing speed/tangents H</i>)</p> <p>P10 Forces and motion P10.1 Forces and acceleration (<i>Inertia H</i>) P10.2 Weight and terminal velocity P10.3 Forces and braking (<i>Deceleration H</i>) P10.4 Momentum P10.5 Using conservation of momentum</p>





P4 Electric Circuits

- P4.1 Electrical charges and fields
- P4.2 Current and charge
- P4.3 Potential difference and resistance
- P4.4 Component Characteristics
- P4.5 Series Circuits
- P4.6 Parallel Circuits

P5 Electricity in the home

- P5.1 Alternating Current
- P5.2 Cables and Plugs
- P5.3 Electrical Power and Potential difference
- P5.4 Electrical currents and energy transfer
- P5.5 Appliances and efficiency

Particle model of matter

P6 Molecules and Matter

- P6.1 Density
- P6.2 States of matter
- P6.3 Changes of state
- P6.4 Internal Energy
- P6.5 Specific Latent Heat
- P6.6 Gas Pressure and temperature
- P6.7 Gas Pressure and Volume (*Pressure in piston H*)

Atomic Structure

P7 Radioactivity

- P7.1 Atoms and radiation
- P7.2 The discovery of the nucleus
- P7.3 Changes in the nucleus
- P7.4 More about alpha, beta and gamma radiation
- P7.5 Activity and half life
- P7.6 Nuclear radiation in medicine
- P7.7 Nuclear fission
- P7.8 Nuclear fusion
- P7.9 Nuclear Issues

P10.6 Impact forces

- P10.7 Safety first**
- P10.8 Forces and elasticity.

P11 Force and Pressure

- P11.1 Pressure and surfaces
- P11.2 Pressure and liquid at rest**
- P11.3 Atmospheric Pressure (*Calculating Pressure H*)
- P11.4 Upthrust and flotation**

Waves

- P12 Wave Properties
- P12.1 The nature of waves
- P12.2 The properties of waves
- P12.3 Reflection and Refraction**
- P12.4 More about waves
- P12.5 Sound Waves**
- P12.6 The uses of ultrasound**
- P12.7 Seismic Waves**

P14 Light

- P14.1 Reflection of light
- P14.2 Refraction of light
- P14.3 Light and colour
- P14.4 Lenses
- P14.5 Using lenses

Magnetism and electromagnetism

P13 Electromagnetic waves

- P13.1 The electromagnetic spectrum
- P13.2 Light, infrared, microwaves and radio waves
- P13.3 Communications (*More about signals/carrier waves H*)
- P13.4 Ultraviolet waves, X-rays and gamma rays.
- P13.5 X-rays in medicine (*X-ray strength imaging vs therapy H*)

P15 Electromagnetism

- P15.1 Magnetic Fields
- P15.2 Magnetic fields of electric currents
- P15.3 Electromagnets in devices
- P15.4 The motor effect**
- P15.5 The generator effect**
- P15.6 The alternating-current generator**
- P15.7 Transformers**
- P15.8 Transformers in action**

Space Physics

P16 Space

- P16.1 Formation of the Solar System
- P16.2 The life history of a star





	P16.3 Planets, satellites, and orbits. (<i>Centripetal force/satellites H</i>) P16.4 The expanding universe. P16.5 The beginning and future of the Universe
<u>How it's Assessed?</u> Written Exam: 1 hour and 45 mins 100 marks 50% of GCSE	<u>How it's Assessed?</u> Written Exam: 1 hour and 45 mins 100 marks 50% of GCSE





PHYSICS TOPIC LIST

Key: Physics Combined science (8464)

	Topic	Key information/ Links	Tick when completed
CS <u>Energy and Energy Resources</u>	P1 Conservation and dissipation of energy	P1 Conservation and dissipation of energy P1.1 Changes in Energy Stores P1.2 Conservation of Energy P1.3 Energy and work P1.4 Gravitational and potential energy stores P1.5 Kinetic energy and elastic energy stores P1.6 Energy Dissipation P1.7 Energy and Efficiency (<i>Improving efficiency H</i>) P1.8 Electrical Appliances P1.9 Energy and Power	
CS	P2 Energy Transfer by heating	P2 Energy transfer by heating P2.1 Energy transfer by conduction P2.2 Specific Heat Capacity P2.3 Heating and Insulating Buildings	
CS	P3. Energy Resources	P3 Energy Resources P3.1 Energy Demands P3.2 Energy from wind and water P3.3 Power from the Sun and the Earth P3.4 Energy and the Environment P3.5 Big energy issues	
CS <u>Particles at work</u>	P4 Electric Circuits	P4 Electric Circuits P4.1 Current and Charge P4.2 Potential difference and resistance P4.3 Component Characteristics P4.4 Series Circuits P4.5 Parallel Circuits	
CS	P5 Electricity in the home	P5 Electricity in the home P5.1 Alternating Current P5.2 Cables and Plugs P5.3 Electrical Power and Potential difference P5.4 Electrical currents and energy transfer P5.5 Appliances and efficiency	
CS	P6 Molecules and Matter	P6 Molecules and Matter P6.1 Density P6.2 States of matter P6.3 Changes of state P6.4 Internal Energy P6.5 Specific Latent Heat P6.6 Gas Pressure and temperature	
CS	P7 Radioactivity	P7 Radioactivity P7.1 Atoms and radiation P7.2 The discovery of the nucleus	





		P7.3 Changes in the nucleus P7.4 More about alpha, beta and gamma radiation P7.5 Activity and half life	
CS <u>Forces in action</u>	P8 Forces in action	P8 Forces in balance P8.1 Vectors and scalars P8.2 Forces between objects P8.3 Resultant forces (<i>Force diagrams H</i>) P8.4 Centre of mass P8.5 The parallelogram of forces (H) P8.6 Resolution of forces (H)	
CS	P.9 Motion	P9 Motion P9.1 Speed and distance-time graphs P9.2 Velocity and acceleration (<i>Velocity of object moving in circles H</i>) P9.3 More about velocity-time graphs (<i>Area under V-T Graph H</i>) P9.4 Analysing motion graphs (<i>A D-T graph for changing speed/tangents H</i>)	
CS	P10. Forces and motion	P10 Forces and motion P10.1 Forces and acceleration (<i>Inertia H</i>) P10.2 Weight and terminal velocity P10.3 Forces and braking (<i>Deceleration H</i>) P10.4 Momentum P10.5 Forces and Elasticity	
CS <u>Waves and Electromagnets</u>	P11 Wave Properties	P11 Wave Properties P11.1 The nature of waves P11.2 The properties of waves P11.3 Reflection and Refraction P1.4 More about waves	
CS	P12 Electromagnetic Waves	P12 Electromagnetic Waves P12.1 The electromagnetic spectrum P12.2 Light, Infra-red, microwaves and radiowaves P12.3 Communication (<i>More about signals/carrier waves H</i>) P12.4 Ultraviolet waves, X-rays and radiowaves P12.5 X- rays in medicine (<i>X-ray strength imaging vs therapy H</i>)	
CS	P13 Electromagnetism	P13 Electromagnetism P13.1 Magnetic Fields P13.2 Magnetic fields of electric currents. P13.3 The motor effect.	

CS Physics Paper 1	CS Physics Paper 2
<u>What's Assessed?</u> <u>Energy</u> P1 Conservation and dissipation of energy P1.1 Changes in Energy Stores P1.2 Conservation of Energy P1.3 Energy and work	<u>What's Assessed?</u> <u>Forces</u> P8 Forces in balance P8.1 Vectors and scalars P8.2 Forces between objects P8.3 Resultant forces (<i>Force diagrams H</i>)





<p>P1.4 Gravitational and potential energy stores P1.5 Kinetic energy and elastic energy stores P1.6 Energy Dissipation P1.7 Energy and Efficiency <i>(Improving efficiency H)</i> P1.8 Electrical Appliances P1.9 Energy and Power</p> <p>P2 Energy transfer by heating P2.1 Energy transfer by conduction P2.2 Specific Heat Capacity P2.3 Heating and Insulating Buildings</p> <p>P3 Energy Resources P3.1 Energy Demands P3.2 Energy from wind and water P3.3 Power from the Sun and the Earth P3.4 Energy and the Environment P3.5 Big energy issues</p> <p>Electricity</p> <p>P4 Electric Circuits P4.1 Current and Charge P4.2 Potential difference and resistance P4.3 Component Characteristics P4.4 Series Circuits P4.5 Parallel Circuits</p> <p>P5 Electricity in the home P5.1 Alternating Current P5.2 Cables and Plugs P5.3 Electrical Power and Potential difference P5.4 Electrical currents and energy transfer P5.5 Appliances and efficiency</p> <p>Particle Model of Matter</p> <p>P6 Molecules and Matter P6.1 Density P6.2 States of matter P6.3 Changes of state P6.4 Internal Energy P6.5 Specific Latent Heat P6.6 Gas Pressure and temperature</p> <p>Atomic Structure</p> <p>P7 Radioactivity P7.1 Atoms and radiation P7.2 The discovery of the nucleus P7.3 Changes in the nucleus P7.4 More about alpha, beta and gamma radiation P7.5 Activity and half life</p>	<p>P8.4 Centre of mass P8.5 The parallelogram of forces (H) P8.6 Resolution of forces (H)</p> <p>P9 Motion P9.1 Speed and distance-time graphs P9.2 Velocity and acceleration <i>(Velocity of object moving in circles H)</i> P9.3 More about velocity-time graphs <i>(Area under V-T Graph H)</i> P9.4 Analysing motion graphs <i>(A D-T graph for changing speed/tangents H)</i></p> <p>P10 Forces and motion P10.1 Forces and acceleration P10.2 Weight and terminal velocity P10.3 Forces and braking <i>(Deceleration H)</i> P10.4 Momentum P10.5 Forces and Elasticity</p> <p>Waves</p> <p>P11 Wave Properties P11.1 The nature of waves P11.2 The properties of waves P11.3 Reflection and Refraction P1.4 More about waves</p> <p>Magnetism and electromagnetism</p> <p>P12 Electromagnetic Waves P12.1 The electromagnetic spectrum P12.2 Light, Infra-red, microwaves and radiowaves P12.3 Communication <i>(More about signals/carrier waves H)</i> P12.4 Ultraviolet waves, X-rays and radiowaves P12.5 X- rays in medicine <i>(X-ray strength imaging vs therapy H)</i></p> <p>P13 Electromagnetism P13.1 Magnetic Fields P13.2 Magnetic fields of electric currents. P13.3 The motor effect.</p>
<p>How it's assessed Written Exam: 1 hour and 15 mins</p>	<p>How it's assessed Written Exam: 1 hour and 15 mins</p>





70 marks 16.7% of GCSE	70 marks 16.7% of GCSE
---------------------------	---------------------------





CHEMISTRY Separate Science (8462) TOPIC LIST

Refer to Chemistry separate science text book

	Topic	Key information/ Links	Tick when completed
<u>Atoms, bonding and moles</u>	C1 Atomic Structure	C1.1 Atoms C1.2 Chemical Equations C1.3 Separating Mixtures C1.4 Fractional Distillation and Paper Chromatography C1.5 History of the Atom C1.6 Structure of the Atom C1.7 Ions, Atoms and Isotopes C1.8 Electronic Structure	
	C2 The Periodic Table	C2.1 Development of the Periodic Table C2.2 Electronic Structures and the Periodic Table C2.3 Group 1 – the Alkali Metals C2.4 Group 7 – the Halogens C2.5 Explaining Trends C2.6 The transition metals	
	C3 Structure and Bonding	C3.1 States of Matter C3.2 Atoms into Ions C3.3 Ionic Bonding C3.4 Giant Ionic Lattices C3.5 Covalent Bonding C3.6 Structure of Simple Molecules C3.7 Giant Covalent Structures C3.8 Fullerenes and Graphene C3.9 Bonding in Metals C3.10 Giant Metallic Structures C3.11 Nanoparticles C3.12 Application of nanoparticles	
	C4 Chemical Equations	C4.1 Relative Masses and Moles C4.2 Equations and Calculations (HT only) C4.3 From Masses to Balanced Equations (HT only) C4.4 The yield of chemical reaction C4.5 Atom economy C4.6 Expressing Concentrations C4.7 Titrations C4.8 titration calculations (HT only) C4.9 Volume of gases (HT only)	
	C5 Chemical Changes	C5.1 The Reactivity Series C5.2 Displacement Reactions C5.3 Extracting Metals	





<u>Chemical Reactions and Energy Changes</u>		C5.4 Salts from Metals C5.5 Salts from Insoluble Bases C5.6 Making More Salts C5.7 Neutralisation and pH Scale C5.8 Strong and Weak Acids (HT only)	
	C6 Electrolysis	C6.1 Introduction to Electrolysis C6.2 Changes at the Electrode C6.3 The Extraction of Aluminium C6.4 Electrolysis of Aqueous Solutions	
	C7 Energy Changes	C7.1 Exothermic and Endothermic Reactions C7.2 Using Energy Transfers from Reactions C7.3 Reaction Profiles C7.4 Bond Energy Calculations (HT only) C7.5 Chemical cells and batteries C7.6 Fuel cells	
		Paper one ends C1-C7	
		Paper 2 C8-C15	
<u>Rates, Equilibrium and Organic Chemistry</u>	C8 Rates and Equilibrium	C8.1 Rate of Reaction C8.2 Collision Theory and Surface Area C8.3 The Effect of Temperature C8.4 The Effect of Concentration and Pressure C8.5 The Effect of Catalysts C8.6 Reversible Reactions C8.7 Energy and Reversible Reactions C8.8 Dynamic Equilibrium C8.9 Altering Conditions (HT only)	
	C9 Crude Oil and Fuels	C9.1 Hydrocarbons C9.2 Fractional Distillation of Oil C9.3 Burning Hydrocarbon Fuels C9.4 Cracking Hydrocarbons	
	C10 Organic reactions	C10.1 Reactions of the alkenes C10.2 Structure of alcohols, carboxylic acids, and esters C10.3 Reactions and uses of alcohols C10.4 Carboxylic acids and esters	
	C11 Polymers	C11.1 Addition polymerisation C11.2 Condensation polymerisation (HT only) C11.3 Natural polymers C11.4 DNA	
<u>Analysis and Earth's Resources</u>	C12 Chemical Analysis	C12.1 Pure Substances and Mixtures C12.2 Analysing Chromatograms. C12.3 Testing for Gases C12.4 Tests for positive ions C12.5 Tests for negative ions C12.6 Instrumental analysis	





	C13 The Earth's atmosphere	C13.1 History of our Atmosphere C13.2 Our Evolving Atmosphere C13.3 Greenhouse Gases C13.4 Global Climate Changes C13.5 Atmospheric Pollutants	
	C14 The Earth's resources	C14.1 Finite and Renewable Resources C14.2 Water Safe to Drink C14.3 Treating Waste Water C14.4 Extracting Metals from Ores (HT only) C14.5 Life Cycle Assessments C14.6 Reduce, Reuse and Recycle	
	C15 Using our resources	C15.1 Rusting C15.2 Useful alloys C15.3 The properties of polymers C15.4 Glass, ceramics, and composites C15.5 Making fertilisers in the lab C15.6 The economics of the Haber process (HT only) C15.7 Making fertilisers in lab C15.8 Making fertilisers in industry	

Chemistry 8462

Paper 1 C1-C7

Paper 1:**What's assessed**

Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Paper 2 C8 to C15

Paper 2:**What's assessed**



Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE





CHEMISTRY combined science (8464) TOPIC LIST

Key: Combined science (CS) refer to combined science text book

	Topic	Key information/ Links	Tick when completed
CS <u>Atoms, bonding and moles</u>	C1 Atomic Structure	C1.1 Atoms C1.2 Chemical Equations C1.3 Separating Mixtures C1.4 Fractional Distillation and Paper Chromatography C1.5 History of the Atom C1.6 Structure of the Atom C1.7 Ions, Atoms and Isotopes C1.8 Electronic Structure	
CS	C2 The Periodic Table	C2.1 Development of the Periodic Table C2.2 Electronic Structures and the Periodic Table C2.3 Group 1 – the Alkali Metals C2.4 Group 7 – the Halogens C2.5 Explaining Trends	
CS	C3 Structure and Bonding	C3.1 States of Matter C3.2 Atoms into Ions C3.3 Ionic Bonding C3.4 Giant Ionic Lattices C3.5 Covalent Bonding C3.6 Structure of Simple Molecules C3.7 Giant Covalent Structures C3.8 Fullerenes and Graphene C3.9 Bonding in Metals C3.10 Giant Metallic Structures	
CS	C4 Chemical Equations	C4.1 Relative Masses and Moles C4.2 Equations and Calculations (HT only) C4.3 From Masses to Balanced Equations (HT only) C4.4 Expressing Concentrations	
CS <u>Chemical Reactions and Energy Changes</u>	C5 Chemical Changes	C5.1 The Reactivity Series C5.2 Displacement Reactions C5.3 Extracting Metals C5.4 Salts from Metals C5.5 Salts from Insoluble Bases C5.6 Making More Salts C5.7 Neutralisation and pH Scale C5.8 Strong and Weak Acids (HT only)	
CS	C6	C6.1 Introduction to Electrolysis	





	Electrolysis	C6.2 Changes at the Electrode C6.3 The Extraction of Aluminium C6.4 Electrolysis of Aqueous Solutions	
CS	C7 Energy Changes	C7.1 Exothermic and Endothermic Reactions C7.2 Using Energy Transfers from Reactions C7.3 Reaction Profiles C7.4 Bond Energy Calculations (HT only)	
CS <u>Rates, Equilibrium and Organic Chemistry</u>	C8 Rates and Equilibrium	C8.1 Rate of Reaction C8.2 Collision Theory and Surface Area C8.3 The Effect of Temperature C8.4 The Effect of Concentration and Pressure C8.5 The Effect of Catalysts C8.6 Reversible Reactions C8.7 Energy and Reversible Reactions C8.8 Dynamic Equilibrium C8.9 Altering Conditions (HT only)	
CS	C9 Crude Oil and Fuels	C9.1 Hydrocarbons C9.2 Fractional Distillation of Oil C9.3 Burning Hydrocarbon Fuels C9.4 Cracking Hydrocarbons	
CS <u>Analysis and Earth's Resources</u>	C10 Chemical Analysis	C10.1 Pure Substances and Mixtures C10.2 Analysing Chromatograms. C10.3 Testing for Gases	
CS	C11 The Earth's atmosphere	C11.1 History of our Atmosphere C11.2 Our Evolving Atmosphere C11.3 Greenhouse Gases C11.4 Global Climate Changes C11.5 Atmospheric Pollutants	
CS	C12	C12.1 Finite and Renewable Resources C12.2 Water Safe to Drink C12.3 Treating Waste Water C12.4 Extracting Metals from Ores (HT only) C12.5 Life Cycle Assessments C12.6 Reduce, Reuse and Recycle	

CS CHEMISTRY PAPER ONE

What's assessed – see topics above:

- C1
- C2
- C3
- C4

CS CHEMISTRY PAPER TWO

What's assessed – see topics above:

- C8
- C9
- C10
- C11





<ul style="list-style-type: none">• C5• C6• C7	<ul style="list-style-type: none">• C12
<u>How it's assessed</u> Written Exam: 1 hour and 15 mins 70 marks 16.7% of GCSE	<u>How it's assessed</u> Written Exam: 1 hour and 15 mins 70 marks 16.7% of GCSE





History REVISION LIST

Topic Title	Key information/ Links	Tick when completed
1. Medieval Medicine	<p>Surgery and anatomy- What types of doctors were there and how did they operate What was the main disease- What caused it and how did people try to deal with it. What factors were helping or hindering medicine at the time?</p> <p>Who were the key individuals and what did they discover/do? Hippocrates, Galen</p>	
2. Renaissance Medicine	<p>Surgery and anatomy- What types of doctors were there and how did they operate What was the main disease- What caused it and how did people try to deal with it. What factors were helping or hindering medicine at the time</p> <p>Who were the key individuals and what did they discover/do? Harvey, Pare, Vesalius, Hunter.</p>	
3. Industrial revolution medicine	<p>Surgery and anatomy- What types of doctors were there and how did they operate What was the main disease- What caused it and how did people try to deal with it. What factors were helping or hindering medicine at the time</p> <p>Who were the key individuals and what did they discover/do? Jenner Pasteur, Koch, Erlich, Lister, Semmelweis.</p>	
4. Modern Medicine	<p>Surgery and anatomy- What types of doctors were there and how did they operate What was the main disease- What caused it and how did people try to deal with it. What factors were helping or hindering medicine at the time (Big focus on both world wars)</p> <p>Who were the key individuals and what did they discover/do? Bevan, Beveridge, Lloyd George (liberal reforms) Harold Gillies, Fleming, Florey and Chan.</p>	
5. Conflict and Tension: Treaty of Versailles and league of nations	<p>What did the big three want and how satisfied were they. What were the reactions to the treaty including the German reaction. What were the terms of the treaty of Versailles.</p> <p>What was the membership and structure of the league. What were the strengths and weaknesses? How was the league successful in 1920?</p>	

Geography REVISION LIST





Topic Title	Key information/ Links	Tick when completed
1. The Challenge of Natural Hazards	Tectonic Hazards – plates, cause/effect/response of earthquakes, Chile, and Nepal case studies.	
	Weather Hazards – cause/effect/response of tropical storms. Typhoon Haiyan. UK weather.	
	Climate Change – causes, mitigation, and adaptation.	
2. The Living World	Ecosystems – roles, interdependence, change, and a small-scale ecosystem case study: Epping Forest.	
	Tropical Rainforests – Distribution, characteristics, adaptations, deforestation, and sustainable management.	
	Hot Deserts – Characteristics, opportunities for, and challenges of development, desertification, and reducing desertification.	
3. Physical Landscapes of the UK	An overview of the location of major upland/lowland areas and river systems.	
	Coastal Landscapes – processes of erosion, deposition, and transportation. Landforms. Management strategies.	
	River Landscapes – processes of erosion, deposition, and transportation. Landforms. Management strategies.	
4. Urban Issues and Challenges	The global pattern of urban change. Factors affecting the rate of urbanisation – migration (push–pull theory), natural increase. The emergence of megacities.	
	Rio de Janeiro – location and importance. How urban change has created opportunities and challenges.	
	Birmingham – location and importance. Impacts of national and international migration on the growth and character of the city. How urban change has created opportunities and challenges.	
	Sustainable urban living.	
5. The Changing Economic World	Different ways of classifying parts of the world according to their level of economic development and quality of life and different economic and social measures of development. Link between stages of the Demographic Transition Model and the level of development. Causes of uneven development: physical, economic and historical.	
	Nigeria – location and importance. Changing industrial structure, TNC's, and the impacts of aid. Environmental impacts of economic development. Quality of life.	
	Economic change in the UK. Post-industrial economy. Science and business parks. Environmental impacts of industry. Changing rural landscapes in the UK. Changing transport infrastructure. The north-south divide. The UK in the wider world.	

Computer Science Paper 1

Topic	Key information	Tick when completed





Architecture of the CPU	<input type="checkbox"/> the purpose of the CPU	
	<input type="checkbox"/> the fetch-execute cycle	
	<input type="checkbox"/> common CPU components and their function:	
	<input type="checkbox"/> ALU (Arithmetic Logic Unit)	
	<input type="checkbox"/> CU (Control Unit)	
	<input type="checkbox"/> Cache	
	<input type="checkbox"/> Registers	
	<input type="checkbox"/> Von Neumann architecture:	
	<input type="checkbox"/> MAR (Memory Address Register)	
	<input type="checkbox"/> MDR (Memory Data Register)	
	<input type="checkbox"/> Program Counter	
	<input type="checkbox"/> Accumulator	
CPU Performance	<input type="checkbox"/> how common characteristics of CPUs affect their performance:	
	<input type="checkbox"/> Clock speed	
	<input type="checkbox"/> Cache size	
	<input type="checkbox"/> Number of Cores	
Primary storage (Memory)	<input type="checkbox"/> The need for primary storage	
	<input type="checkbox"/> The difference between RAM and ROM	
	<input type="checkbox"/> The purpose of ROM in a computer system	
	<input type="checkbox"/> The purpose of RAM in a computer system	
	<input type="checkbox"/> Virtual memory	
Secondary storage	<input type="checkbox"/> The need for secondary storage	
	<input type="checkbox"/> Common types of storage:	
	<input type="checkbox"/> Optical	
	<input type="checkbox"/> Magnetic	
	<input type="checkbox"/> Solid state	
	<input type="checkbox"/> Suitable storage devices and storage media for a given application	
	<input type="checkbox"/> The advantages and disadvantages of different storage devices and storage media relating to these characteristics:	
	<input type="checkbox"/> Capacity	
	<input type="checkbox"/> Speed	
	<input type="checkbox"/> Portability	
	<input type="checkbox"/> Durability	
	<input type="checkbox"/> Reliability	





	<ul style="list-style-type: none"> ○ Cost 	
Units	<input type="checkbox"/> The units of data storage:	
	<ul style="list-style-type: none"> ○ Bit 	
	<ul style="list-style-type: none"> ○ Nibble (4 bits) 	
	<ul style="list-style-type: none"> ○ Byte (8 bits) 	
	<ul style="list-style-type: none"> ○ Kilobyte (1000 bytes or 1 KB) 	
	<ul style="list-style-type: none"> ○ Megabyte (1,000 KB) 	
	<ul style="list-style-type: none"> ○ Gigabyte (1,000 MB) 	
	<ul style="list-style-type: none"> ○ Terabyte (1,000 GB) 	
	<ul style="list-style-type: none"> ○ Petabyte (1,000 TB) 	
	<input type="checkbox"/> How data needs to be converted into a binary format to be processed by a computer.	
<input type="checkbox"/> Data capacity and calculation of data capacity requirements		
Data storage	Numbers	
	<input type="checkbox"/> How to convert positive denary whole numbers to binary numbers (up to and including 8 bits) and vice versa	
	<input type="checkbox"/> How to add two binary integers together (up to and including 8 bits) and explain overflow errors which may occur	
	<input type="checkbox"/> How to convert positive denary whole numbers into 2-digit hexadecimal numbers and vice versa	
	<input type="checkbox"/> How to convert from binary to hexadecimal equivalents and vice versa	
	<input type="checkbox"/> Binary shifts	
	Characters	
	<input type="checkbox"/> The use of binary codes to represent characters	
	<input type="checkbox"/> The term 'character-set'	
	<input type="checkbox"/> The relationship between the number of bits per character in a character set, and the number of characters which can be represented, e.g.:	
	<ul style="list-style-type: none"> ○ ASCII 	
	<ul style="list-style-type: none"> ○ Unicode 	
	Images	
	<input type="checkbox"/> How an image is represented as a series of pixels, represented in binary	
	<input type="checkbox"/> Metadata	
	<input type="checkbox"/> The effect of colour depth and resolution on:	
	<ul style="list-style-type: none"> ○ The quality of the image 	
	<ul style="list-style-type: none"> ○ The size of an image file 	
	Sound	





	<input type="checkbox"/> How sound can be sampled and stored in digital form	
	<input type="checkbox"/> The effect of sample rate, duration and bit depth on:	
	<input type="radio"/> The playback quality	
	<input type="radio"/> The size of a sound file	
Compression	<input type="checkbox"/> The need for compression	
	<input type="checkbox"/> Types of compression:	
	<input type="radio"/> Lossy	
	<input type="radio"/> Lossless	
Networks and topologies	<input type="checkbox"/> Types of networks:	
	<input type="radio"/> LAN (Local Area Network)	
	<input type="radio"/> WAN (Wide Area Network)	
	<input type="checkbox"/> Factors that affect the performance of networks	
	<input type="checkbox"/> The different roles of computers in a client-server and a peer-to-peer network	
	<input type="checkbox"/> The hardware needed to connect stand-alone computers into a Local Area Network:	
	<input type="radio"/> Wireless access points	
	<input type="radio"/> Routers	
	<input type="radio"/> Switches	
	<input type="radio"/> NIC (Network Interface Controller/Card)	
	<input type="radio"/> Transmission media	
	<input type="checkbox"/> The Internet as a worldwide collection of computer networks:	
	<input type="radio"/> DNS (Domain Name Server)	
	<input type="radio"/> Hosting	
	<input type="radio"/> The Cloud	
	<input type="radio"/> Webservers and Clients	
<input type="checkbox"/> Star and Mesh network topologies		
Wired and wireless networks, protocols and layers	<input type="checkbox"/> Modes of connection:	
	<input type="radio"/> Wired	
	<input type="bullet"/> Ethernet	
	<input type="radio"/> Wireless	
	<input type="bullet"/> Wi-Fi	
	<input type="bullet"/> Bluetooth	
	<input type="checkbox"/> Encryption	
<input type="checkbox"/> IP addressing and MAC addressing		





	<input type="checkbox"/> Standards	
	<input type="checkbox"/> Common protocols including:	
	<input type="checkbox"/> TCP/IP (Transmission Control Protocol/Internet Protocol)	
	<input type="checkbox"/> HTTP (Hyper Text Transfer Protocol)	
	<input type="checkbox"/> HTTPS (Hyper Text Transfer Protocol Secure)	
	<input type="checkbox"/> FTP (File Transfer Protocol)	
	<input type="checkbox"/> POP (Post Office Protocol)	
	<input type="checkbox"/> IMAP (Internet Message Access Protocol)	
	<input type="checkbox"/> SMTP (Simple Mail Transfer Protocol)	
	<input type="checkbox"/> The concept of layers	
Threats to computer systems and networks	<input type="checkbox"/> Forms of attack	
	<input type="checkbox"/> Malware	
	<input type="checkbox"/> Social engineering, e.g. phishing, people as the 'weak point'	
	<input type="checkbox"/> Brute-force attacks	
	<input type="checkbox"/> Denial of service attacks	
	<input type="checkbox"/> Data interception and theft	
	<input type="checkbox"/> The concept of SQL injection	
Identifying and preventing vulnerabilities	<input type="checkbox"/> Common prevention methods:	
	<input type="checkbox"/> Penetration Testing	
	<input type="checkbox"/> Anti-malware software	
	<input type="checkbox"/> Firewalls	
	<input type="checkbox"/> User access levels	
	<input type="checkbox"/> Passwords	
	<input type="checkbox"/> Encryption	
	<input type="checkbox"/> Physical Security	
Ethical, legal, cultural and environmental impact	<input type="checkbox"/> Impacts of digital technology on wider society including:	
	<input type="checkbox"/> Ethical issues	
	<input type="checkbox"/> Legal issues	
	<input type="checkbox"/> Cultural issues	
	<input type="checkbox"/> Environmental issues	
	<input type="checkbox"/> Privacy issues	

Computer Science Paper 2

Topic	Key information
-------	-----------------





Computational thinking	<input type="checkbox"/> Principles of computational thinking
	<input type="radio"/> Abstraction
	<input type="radio"/> Decomposition
	<input type="radio"/> Algorithmic Thinking.
Designing, creating and refining algorithms	<input type="checkbox"/> Identify the inputs, processes, and outputs for a problem
	<input type="checkbox"/> Structure diagrams
	<input type="checkbox"/> Create, interpret, correct, complete, and refine algorithms using:
	<input type="radio"/> Pseudocode
	<input type="radio"/> Flowcharts
	<input type="radio"/> Reference language/high-level programming language
	<input type="checkbox"/> Identify common errors
<input type="checkbox"/> Trace tables	
Searching and sorting algorithms	<input type="checkbox"/> Standard searching algorithms:
	<input type="radio"/> Binary search
	<input type="radio"/> Linear search
	<input type="checkbox"/> Standard sorting algorithms:
	<input type="radio"/> Bubble sort
	<input type="radio"/> Merge sort
<input type="radio"/> Insertion sort	
Programming fundamentals	<input type="checkbox"/> The use of variables, constants, operators, inputs, outputs and assignments
	<input type="checkbox"/> The use of the three basic programming constructs used to control the flow of a program:
	<input type="radio"/> Sequence
	<input type="radio"/> Selection
	<input type="radio"/> Iteration (count- and condition- controlled loops)
	<input type="checkbox"/> The common arithmetic operators
	<input type="checkbox"/> The common Boolean operators AND, OR, NOT
Data types	<input type="checkbox"/> The use of data types:
	<input type="radio"/> Integer
	<input type="radio"/> Real
	<input type="radio"/> Boolean
	<input type="radio"/> Character and string
	<input type="radio"/> Casting
Additional programming techniques	<input type="checkbox"/> The use of basic string manipulation
	<input type="checkbox"/> The use of basic file handling operations:
	<input type="radio"/> Open
	<input type="radio"/> Read
	<input type="radio"/> Write





	<ul style="list-style-type: none"> ○ Close <input type="checkbox"/> The use of records to store data <input type="checkbox"/> The use of SQL to search for data <input type="checkbox"/> The use of arrays (or equivalent) when solving problems, including both one-dimensional (1D) and two-dimensional (2D) arrays <input type="checkbox"/> How to use sub programs (functions and procedures) to produce structured code <input type="checkbox"/> Random number generation
Defensive design	<ul style="list-style-type: none"> <input type="checkbox"/> Defensive design considerations: <ul style="list-style-type: none"> ○ Anticipating misuse ○ Authentication <input type="checkbox"/> Input validation <input type="checkbox"/> Maintainability: <ul style="list-style-type: none"> ○ Use of sub programs ○ Naming conventions ○ Indentation ○ Commenting
Testing	<ul style="list-style-type: none"> <input type="checkbox"/> The purpose of testing <input type="checkbox"/> Types of testing: <ul style="list-style-type: none"> ○ Iterative ○ Final/terminal <input type="checkbox"/> Identify syntax and logic errors <input type="checkbox"/> Selecting and using suitable test data: <ul style="list-style-type: none"> ○ Normal ○ Boundary ○ Invalid ○ Erroneous <input type="checkbox"/> Refining algorithms
Boolean logic	<ul style="list-style-type: none"> <input type="checkbox"/> Simple logic diagrams using the operations AND, OR and NOT <input type="checkbox"/> Truth tables <input type="checkbox"/> Combining Boolean operators using AND, OR and NOT <input type="checkbox"/> Applying logical operators in truth tables to solve problems
Languages	<ul style="list-style-type: none"> <input type="checkbox"/> Characteristics and purpose of different levels of programming language: <ul style="list-style-type: none"> ○ High-level languages ○ Low-level languages <input type="checkbox"/> The purpose of translators <input type="checkbox"/> The characteristics of a compiler and an interpreter
	<ul style="list-style-type: none"> <input type="checkbox"/> Common tools and facilities available in an integrated development environment (IDE):





The Integrated Development Environment (IDE)	<input type="radio"/> Editors
	<input type="radio"/> Error diagnostics
	<input type="radio"/> Run-time environment
	<input type="radio"/> Translators

