



CHARTERHOUSE@HOME

SUMMER STUDY GUIDE (REMOVES)



ART

RO4 Mr Bingham's div - I would like you to complete the presentation of your work.

The digital / physical pages should contain the 10 topics we covered.

For each part, 1 to 10, add an artist's work and analyse it. Add your responses to their work and analyse and reflect on it.

See OneNote for examples in RESOURCES/Presentation.

2a. Through an understanding of the concept In(visible), start to develop your own project. Keep thinking about the assessment criteria:

1. Development Research, copy and write about artists

2. Refinement Experiment with media and your ideas,

3. Recording Record everything

4. Response Complete a final artwork.

See RESOURCES/assessment on OneNote.

2b. Or complete the following tasks, referring to OneNote's resources:

1. Through video, experiment and record how things are revealed or hidden.

2. Using tracing paper, layer 3 drawings.

3. Buy cyanotype paper and experiment.

4. Cyanotype with masking fluid and watercolour.

5. Continue with charcoal drawing. Choose your subject - erase & reveal

6. Peel away skins to reveal, and document.

As we have discussed, an in depth version of this is in RESOURCES/Summer Holiday on OneNote. Enjoy the holiday and making art.

RO1 – Miss Pinkney's div. Complete your project from this Quarter

Make sure you have

- A range of observations/ photographs and drawings
- A study in your sketchbook or on paper on an artist that relates to your project or a technique you have used.
- A final or series of final pieces

Upload all your work onto one note.

When you have completed your project you can either continue with the same subject or start a new one. I will put individual advice on One Note in your folders.

Also on One Note I have listed some online courses you may want to do to boost your portfolio.

Observations in terms of drawing and photographs should be your focus so you will have plenty of images to develop and work from when we return to school.

Please keep your art going over the summer and enjoy it.

BIOLOGY

We are particularly pleased with the progress our Removes have made over the Quarter under Charterhouse @Home. Whilst the initial pace through the syllabus was inevitably and deliberately reduced, this has picked up as the programme has been honed and as pupils have responded very positively to it. We have not had the usual practical enrichment but have used on line practical resources to continue to develop scientific method. We have gained some additional teaching time in lieu of activities week. Overall, we are finishing, if anything, slightly ahead of usual schedule which give some contingency for eventualities next year.

The intensity of @Home hashes, plus the occasional internet issue, may have left a few gaps in pupils' OneNote class notebooks. We strongly recommend that this Quarter's work is reviewed and any gaps filled. The hash by hash materials are all in the Content Library of boys' notebooks. Other than this we are not setting any formal additional work for the holidays. The boys have worked hard and deserve a good break.

For those wanting a little bit of extension, we have provided an exercise that builds on the recent study of the nitrogen cycle on Greyhound [HERE](#). The Canadian forests are some of the most productive in the world due to spawning salmon bringing nutrients (fixed nitrogen) from the ocean into the woods. This nitrogen cycle involves salmon, eagles and bears and shows the interconnectivity of ecosystems on a grand scale. There is a video and follow up material on Greyhound. Pupils would also enjoy, and benefit from, reading a popular science book. Bill Bryson's *The Body*, or *A Short History*, are both accessible, fun and packed with good science.

CHEMISTRY

The main objective of the summer work in Chemistry is to consolidate your understanding of all work covered this academic year.

The best way to revise Chemistry, and therefore your summer work, is to:

- 1) **Work through the specification**, line-by-line, developing your knowledge and understanding.

You may at this stage need to look things up to remind yourself of key content or explanations, for which you should use your class notes and/or text book.

Any key facts (such as the formula of a sulphate ion, the rules for solubility of salts or key equations for calculations) should be written down together and kept – you can then memorise these as you would any other facts.

If the line on the specification refers to a skill (such as writing an ionic half-equation or performing a calculation), you should test your ability to do this using some of the practice questions in your text book.

The two key points here are to make this part of the process active (i.e. not simply just reading – use flash cards, mind-maps, notes... whatever you find works best for you) and to not move on to the next specification point until you have mastered it. However, if you have

spent a long time on one point and still find it difficult, make a note of this and seek help with it when you return to school.

Mr Hingston will email to you the specification for the work covered both this year and in the Fourth Form, should you wish to revise the Fourth Form material also.

- 2) Refine your knowledge, understanding and skill (and develop your exam technique) by **practising exam-style questions**.

The key here is to be critical when you review your work using the mark scheme. Take every opportunity you can to learn – even if you got all the marks for a question, there may be improvements you can make to your answer.

There are plenty of questions with answers (as well as notes) available here:
<https://www.physicsandmathstutor.com/chemistry-revision/igcse-edexcel/>

If by the end of the summer there are still areas you are finding difficult, please do talk to your teacher or come along to one of the Chemistry drop-in support sessions

COMPUTER SCIENCE

The advice is for all pupils to review the following topics: The Processor, The Internet and Algorithms and Coding. Further, there is a CIE Exam programming task set for pupils to complete over the summer holidays.

The Processor

- [Computer architecture and the fetch-execute cycle](#)
- [Basic Von Neumann](#) model for a computer system and the stored program concept (program instructions and data are stored in main memory and instructions are fetched and executed one after another). Stages of the fetch-execute cycle, including the use of registers and buses.

Resources

- OUP Textbook pages 86-91
- PG Online Presentations (summary of notes): [Link](#)

The Internet

Security Aspects

- [Security Aspects](#) of using the Internet and methods are available to help minimise the risks
- Internet risks associated with malware, including viruses, spyware and hacking
- Anti-virus and other protection software to protect the user from security risks

Internet principles of operation

- [Browsers and Servers](#) - The role of the browser and an Internet Service Provider (ISP)
- [HTTP](#) - Hypertext transfer protocol (http and https) and HTML
- [HTML Structure, Presentation and Behaviour](#)
- [How the internet works](#) - The concepts of MAC address, Internet Protocol (IP) address, Uniform Resource Locator (URL) and cookies

Resources

- OUP Textbook - pages 44-60

- PG Online Presentations (summary of notes): [link](#)

Algorithms and Coding

Theory

- [Variables and Constants](#)
- [Data types](#)
- [Programming Concepts](#)
- [Pseudocode](#)
- [Flowcharts](#)

Programming task for the holiday: [link](#)

- See details in OneNote and Teams for submission etc.

DESIGN AND TECHNOLOGY

1. Removes pupils studying iGCSE Design Technology should start their summer revision by looking over their banco work from the past year. This banco work forms much of the general theory which you will be required to know for the Paper 3 exam. Make sure you especially know the properties of all materials covered.
2. Past exam papers and mark schemes can be found on Greyhound. Try and attempt a paper 1 and a paper 3 timing yourself.
3. Ensure you have completed all the coursework tasks set by NOS in CQ20. Your coursework will constitute 50% of your final mark. The work should include research for your project and preparatory sketches for your design idea.

If you don't have one already, the textbook for the iGCSE course in Design Technology: Resistant materials course can be found:

<https://www.amazon.co.uk/Cambridge-IGCSETM-Technology-Students-Collins/dp/0008293279>

I strongly recommend you have this book before starting in OQ20

You could also glance over the course in more detail at:

<https://www.cambridgeinternational.org/Images/414506-2020-2022-syllabus.pdf>

ENGLISH

Advice for consolidation and revision from CQ 2020

1. Read the notes on the poem you have studied for Songs of Ourselves and transfer annotations to your own copies of the poems. Notes available on Greyhound here:

<https://greyhound.charterhouse.org.uk/english/igcse-english-literature/paper-1-poetry-and-prose/songs-of-ourselves>

2. Read the notes on the non-fiction texts you have studied and transfer annotations to your own copies of the texts. Notes available on Greyhound here:

<https://greyhound.charterhouse.org.uk/english/igcse-english-language>

3. Finish redrafting your piece of imaginative writing coursework if you hadn't finished it before the end of Quarter.

Materials to read and work through in advance of September

1. Buy and read the Penguin Classics copy of *Nineteen Eighty-Four* with the unique ISBN: 978-0141187761. It is important that you read the novel beforehand in order that we can study it in depth. You might also like to listen to the audiobook.
2. Keep up with wider reading, both of fiction, non-fiction (newspapers etc.). All of this helps build valuable skills of comprehension. Attempt the Reading Challenge here:
https://www.charterhouse.org.uk/uploaded/Academic/Charterhouse@Home_Study_Guide_for_web.pdf

FRENCH

The following is a list of suggested websites and activities for you to dip into from time to time over the course of the holidays. We hope you enjoy exploring them.

Bonnes vacances!

- **Speaking questions:**

Please complete questions on the topic areas B and E . You will find the questions [here](#):

- **Vocabulary and grammar through memorise:**

[Topic A](#)

[Topic B](#)

[Topic C](#)

[Topic D](#)

[Topic E](#)

[Verbs to practise regularly](#)

[Most common and tricky words coming up in listening papers](#)

- **Thisislanguage** : please complete the exercises set for you on this site.
- [Languages online](#) : this is a great site for practising topic vocabulary and grammar points.

Suggested areas for you to look at would be:

- Adjectives (in the grammar section)
- Anything on the Perfect Tense (in the grammar section)
- La ville où j'habite (in vocabulary units)

Feel free to dip into any other areas you'd like to explore or consolidate.

- [Le journal des enfants:](#)

This is a newspaper written in simpler French for younger readers. Whilst you may not understand it all, you may be surprised at how much *do* understand.

- [GCSE Bitesize:](#)

There are some really good video clips about all sorts of topics here. Try topics in the KS2 and KS3 sections.

HISTORY

Please focus on consolidation of the International Relations Course studied this year.

Ensure that you have completed all notes, written and reading assignments that were set during the Charterhouse@home programme and that your **OneNote page is up to date.**

We will be starting the Depth Study on Germany 1918-45 in September, and you will complete your coursework essay (on Germany) in November.

LATIN

1. Vocabulary: work through GCSE vocabulary list alphabetically; there are plenty of Quizlet sets available to help you [including RWTH's lists]
2. Grammar and Syntax – review material covered in Removes; [RWTH div only] do numbers 1-5 of Revision exercises in Chapter 12. Revise noun forms pages 230-32.
3. Literature: read Virgil Aeneid 2 in translation (easy to find on poetryintranslation.com)

GREEK

1. Vocabulary: work through GCSE vocabulary list alphabetically with help of Quizlet [using RWTH's lists]
2. Grammar and Syntax: revision exercises 1-30 on pages 253-267: 1-5 of each exercise. Principal parts of verbs: p. 315-7
3. Literature: read Homer's Iliad Book 3 in preparation for stud

MATHEMATICS

[Revision and consolidation](#)

Charterhouse@home has enabled us to cover at least as much material as if we had been in school as normal and all divisions are well advanced in the IGCSE syllabus. As with any year group facing exams next summer, it is likely that pupils will want to work through some of the areas they found more challenging ahead of next year

In order to identify which areas to work on pupils should look through the topic lists below and rate them with a traffic light system: red for the most challenging topics, amber for topics at an intermediate level, and green for the topics in which they are confident.

Divisions	Topic list
RM/LB, RM/RC, RM/RP	Accelerated divs' topic list

RM/AR, RM/PL, RM/RH, RM/TR	Core divs' topic list
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Following this, pupils should use either the videos and quizzes on [Hegarty Maths](#), the lessons and homeworks on [MyiMaths](#) (username: charterhouse; password: compass59) or the examples and questions in their textbooks to work through their areas for development, starting with the easier amber topics and progressing toward the reds.

Materials to work through before September

In addition to this revision, every pupil is expected to complete two IGCSE skills worksheets. For each division there is one worksheet which should give pupils the practice they need to do the basics brilliantly and another to provide stretch and challenge. These are available at the links below and will also be sent via Greyhound.

Divisions	Practice questions	More challenging questions
RM/LB, RM/RC, RM/RP	Skills sheet 3	Skills sheet 4
RM/AR, RM/PL, RM/RH	Skills sheet 2	Skills sheet 3
RM/PL	Skills sheet 1	Skills sheet 2

Pupils should complete both sheets to the best of their ability, marking them with the answers provided and handing them in to their beaks in September to provide evidence of progress.

Mathematics is a subject in which practice makes perfect and this work should enable pupils to be the best mathematicians they can be.

MUSIC

Online resources

Resources that cover the entire course can be found on the [IGCSE Music](#) pages of Greyhound. Links to specific sets of resources relevant to individual components of the course are given below.

Performing coursework

With performing coursework accounting for 30% of the mark for IGCSE Music, it is very important that students maintain a good practice schedule over the summer.

Consolidation work

It is crucial that all students have a clear grasp of the six musical elements, and associated terminology: [melody](#), [harmony](#), [rhythm](#), [texture](#), [instrumentation](#), and [form](#).

Students should also be working towards the ability to identify certain [compositional devices](#) and [musical genres](#), and associate them with particular [styles of music](#). The Baroque and Classical eras have been covered this year, and students should take the time to consolidate what has been learnt. Listening to relevant repertoire is an essential part of developing the skills necessary for the written paper, and a [listening list](#) can be found on Greyhound.

Students who have not yet taken Grade 5 Theory should be working through the Grade 5 Theory Workbook.

Preparation for next year

For those students who wish to do some extra work in preparation for next year, there are also resources available for both the prescribed work, [Mozart's Piano Concerto No. 21](#), and the prescribed world-music focus, which is music of the [Caribbean](#). There is also the opportunity to get a head start

on the [styles of music](#) we will cover next year: Romantic and twentieth-century styles, as well as music from different cultures.

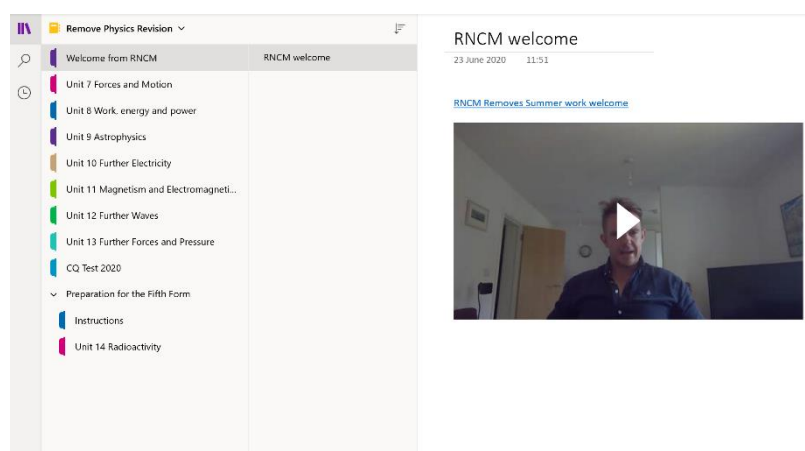
There are also [practice exam questions and listening tests](#) available on Greyhound, and students may like to take the opportunity of the holidays to work on their composition coursework

PHYSICS

The Physics department have prepared a number of resources for you to use and there are a number of tasks you need to complete to be handed in to your beak in September.

You will find the Remove Physics Revision Notebook at the link which follows. Watch the welcome video if you are unsure how to proceed!

https://charterhouse2-my.sharepoint.com/:o:/g/personal/rncm_charterhouse_org_uk/Epmix40QtIVBjFHpXXI2HK4B7U5CO-sy3kqQ7-HuiQf_aw?e=fAfYOz



Upload work and any notes to your section within OneNote (use the same Notebook as you have for hashes during Charterhouse@Home).

These instructions are found in the Notebook with links to the relevant documents included.

Please could you:

1. Look at the checklists for the Removes topics and use the resources in each Section to help you consolidate areas in which your understanding is weak.
2. Have a go at some of these. There are a collection of IGCSE Physics quizzes to test yourself with at this link:
<https://quizizz.com/collection/5ed77146461ae8001b86a197>
3. Complete the following two sheets: [QUESTIONS Radioactivity Equations](#) and complete Questions 3 and 4 from the PPQ pack [PPQs Fission](#). These cover the Fourths material on basic radioactivity and fission. You may find these [NOTES Further Radioactivity](#) helpful.
4. Make your own set of notes on ionising radiation, decay and half-life using the first twenty minutes of this [Video tutorial: Radioactivity](#) as a guide. Use approximately one sheet of A4 to summarise the information.

Bonus Remember you can redo the end-of year MCQ test here, see if you can beat your best score!

<https://quizizz.com/join/quiz/5edf7b03c611af001b0873f5/start?from=soloLinkShare&referrer=5eade6d06bb039001b8114b3>

Have a great summer, any questions feel free to email rncm@charterhouse.org.uk

SPANISH

- You should revise the topics we have covered this year. You can find a detailed list on Onenote. Please contact your beak if you are not sure where to find it.
- To revise vocabulary, you can use www.quizlet.com Search for missalonso and click on the IGCSE topics.
- Go through the grammar covered by using the grammar booklet provided on OneNote. Answers are included so you can mark your own work and check your understanding. You can also use thisislanguages.com to test your grammar.
- Complete the listening and reading papers provided on OneNote. Mark schemes and transcripts are available so you can mark your own work and identify and look up new vocabulary.
- Revision is more efficient if you do little and often. For example, instead of doing the listening paper in one sitting, do one or two exercises and take a bit of time to go through the answers and the transcript to identify, look up and learn new vocabulary.

THEOLOGY, PHILOSOPHY AND ETHICS (EDEXCEL IGCSE)

Over the last year, you have covered well over half of your IGCSE course:

Paper One (Ethics)

- Section 2: Life and Death
- Section 4: Rights, Equality and Social Justice

Paper Two (Religious practice)

- Origins and their Impact on the Community
 - Religious Texts
 - Sources of Authority
 - Founders and Leaders
- Celebration and Pilgrimage
 - Festivals and Celebration: Christmas/Easter
 - Places of Pilgrimage

In the coming year, you have two more topics in Paper One and a further to cover in Paper Two. The most appropriate way to further your study over the summer would be to consolidate and bring together your knowledge into self-prepared revision materials for the topics you have already covered:

For all topics

- Reduce each topic to a comprehensive diagrammatic form (mind-map/flow chart) and make sure you add religious teachings (see resources below) to ensure you are prioritising evidence
- Revise these self-made diagrams by copying them out repeatedly, until it can be done without any sort of aide memoire
- When ready to do so, prepare 2 or 3 practice exam questions under timed conditions. These can be found on the Edexcel website (<https://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-religious-studies-2017.html>)

Resources:

<https://greyhound.charterhouse.org.uk/theology-philosophy-and-ethics/igcse-revision>

Here you will find:

- The syllabus
- Guide to how to answer exam questions
- Summary booklet for Paper Two