



Dear Upper Sixth students,

We hope that you are keeping well and that your in-school assessments have gone well. Whilst you are waiting for the next phase of your education or career to start, we would suggest maintaining some academic activity. Therefore, we have set out below an optional independent work package for each of our A Level courses to be completed after you have finished your internal assessments at the end of May. There are a number of reasons we think it is important to consider doing this:

- To keep your brain active- use it or lose it!
- To give yourself a sense of completion and closure for the courses you have studied
- To make the best possible use of this time to prepare yourself for future study or work
- To negate any missed learning as a result of lockdown and school closures over the past year or so

Please note we will not be asking you to submit anything, but you are welcome to contact the Head of Subject indicated on each page if you would like any guidance.

At the end of the pack, there is some guidance on how best to prepare for university which you may like to follow. If you are not going to university and would like more career advice, please email Miss Mather to book a career appointment with our independent advisor.

We wish you the very best of luck for whatever your next step may be,

The Sixth Form Team



Contents Page

Subject	Page number
Art	4
Biology	5
Business	7
Chemistry	9
Classical Civilisation	11
Computer Science	13
Economics	16
English Literature	18
French	20
Geography	21
German	24
Government and Politics	26
History	28
Italian	30
Law	32
Mathematics and Further Mathematics	35
Music	37
Photography	40
Physical Education	42
Physics	44
Product Design	47



Psychology	49
RS: Philosophy and Ethics	51
Spanish	53
University course preparation	55



Art

Suggested tasks:
Ensure that all work has been submitted, annotated and completed. Ensure there is a clear plan towards what would've been your final piece and links to your chosen artists.
As most of you are going to complete an Art Foundation, investigate the course you will be starting in September. Look through previous students' work/shows. Look at their Instagram sites. Make some notes on what exactly it is that has grabbed your attention and what you would like to learn from them. Think about what parts of the course you want to explore more and how you intend to do this when you start it.
Watch episodes of The Shock of the New . These look at the way Art has been influenced by the world around it, and vice versa. It is an ever changing form that reflects the mood and will of the people at the time. This series is quite old now. Think about how things have changed since then. How has the internet changed the way we see Art? Which artists today capture the 'zeitgeist'?
We are about to start emerging from a really difficult year. People will start to be allowed to use bars and restaurants, they can travel (a bit!), and socialise more. As an artist or photographer, you are in a unique position to document this time. Take images or make sketches as you begin to return to normality. Think about what will interest people about this time in 20 or thirty years time. What will capture the spirit of positivity? Maybe look at images from the end of WW2 to see how those times were captured.
Galleries are beginning to open again. Try and get to see some before you go on to college or university.
I would highly recommend these two local exhibitions: https://www.victoriagal.org.uk/events/kurt-jackson-biodiversity https://americanmuseum.org/whats-on/
Take pictures and notes if you visit, they will help with your further studies!
This was the week we were supposed to have the Art show! If you can, work as a team to put together a 'Virtual Art Show' that can be viewed online. You can share the work with each other, and then think of a way of making a slideshow that can be exported onto YouTube so your work can be viewed by the general public.
Suggested further reading/ watching:



<https://www.martinparrfoundation.org/>
<https://www.bristolmuseums.org.uk/bristol-museum-and-art-gallery/>
<https://www.bristolmuseums.org.uk/m-shed/>

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Biology

Week	Suggested tasks
Week 1	<p>If you are going on to study a course that specifically requires knowledge of the a level biology course, you should take time this week to make sure you have revised all aspects of the course, use the resources on the Beechen Cliff Biology Website and the online text book to help you.</p> <p>In addition, you could have a go at the “cell explorer activity” - https://scopegurdoninstitute.co.uk/digital-toolkit-1-investigate-the-cell-3d-model or read something from the attached reading list!</p>
Week 2	<p>Please have a go at the unified biology paper from 2018 which can be found here https://ocr.org.uk/qualifications/as-and-a-level/biology-a-h020-h420-from-2015/assessment/ then use the markscheme to see how you got on.If there are areas that you struggled with, please use the resources on the Beechen Cliff Biology Website and the online text book to help you improve your knowledge and understanding.</p> <p>In addition, watch something! The TED site has a huge number of talks search for areas of the a level spec you have found particularly interesting or try finding talks that link with the courses you will study in the future.</p>
Week 3	<p>This week, expand your knowledge by having a go at an online course in an area you find interesting.</p> <p>Take an online course from the open university https://www.open.edu/openlearn/free-courses/full-catalogue,</p>



there are loads to choose from, perhaps discuss with a group of your friends and choose one to do that you are all interested in then you can chat about what you are learning. You will get a certificate at the end!

Or you could try [Future learn](#), they also have a wide range of courses to choose from, you could pick something that relates to topics you found interesting at a level, or something that links with the course you are going to study or you might find one of the study skills courses useful to help you prepare for your future studies

Suggested further reading/ watching:

Biology is a vast and fascinating topic not to mention incredibly relevant to our lives, these are just some of the resources available to help point you in the right direction, do email me if you find other resources that you have particularly enjoyed.

There are lots of excellent books to read and websites to visit on this [reading list](#)

<https://www.biointeractive.org/planning-tools/science-news> lots of interesting articles relating to current news

The Cell Explorer

<https://scopegurdoninstitute.co.uk/digital-toolkit-1-investigate-the-cell-3d-model>

The [TED site](#) has a huge number of talks on a wide range of topics, pick a couple of the Biology ones to watch, perhaps you could write a paragraph to summarise what you have learned.

Online courses to study:-

<https://www.open.edu/openlearn/free-courses/full-catalogue>

<https://www.futurelearn.com/courses>

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Business

Suggested tasks:

Select an Open University course to complete.

<https://www.open.edu/openlearn/free-courses/full-catalogue>

There are approx. 100 courses in the 'Money and Business' free courses section. Choose a course in a relevant topic area for your university course or apprenticeship area, click on a course and read the course description and content list. Select an appropriate entry level: introductory, intermediate or advanced, depending on your prior knowledge of the topic area. The hours per course range from as little as 3 hours up to 28 hours. Topics range from undertaking SWOT analysis, to financial planning, to marketing communications and even the business of football.

Work on your Open University course and complete it. If it isn't what you had hoped, select an alternative course complete.

Continue to work through the open university course. Alternatively research alternative courses to find one more suited to your interests or university course.

<https://www.open.edu/openlearn/free-courses/full-catalogue>

Complete your Open University course or start another course if your first course was short.

Alternatively research alternative courses to find one more suited to your interests or university course.

Alternativley:

You can log into your Seneca learning account for Business and complete the Seneca assignments you have not done or redo previously completed assignments to improve them. Perhaps you could complete the topics linked to your for your university course or apprenticeship area.

Suggested further reading/documentaries/Podcasts:

Keep up to date with Business in the news: watch the news regularly, watch newnight.

Go to www.Tutor2u.net and keep up to date with the articles on their blog.

Read articles from the Business pages on the BBC news website

<https://www.bbc.co.uk/news/business>

Watch business related documentaries, there are lots of suggested programmes in these links:

<https://www.eu-startups.com/2020/03/netflix-documentaries-every-entrepreneur-should-see/>

<https://screenrant.com/dirty-money-best-business-documentaries/>

Listen to the best podcasts of 2021:

<https://www.thebalancesmb.com/best-business-podcasts-4176439>

Contact a university you are hoping to attend, ask for a reading list to get a head start on your degree content.



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Chemistry

Suggested tasks:

[Download the the document Transition to Science at University](#)

Week 1 : Watching Week

Play with Smart Materials

Available at : https://www.ted.com/talks/catarina_mota_play_with_smart_materials

Just how small is an atom?

Available at : https://www.ted.com/talks/just_how_small_is_an_atom

Battling Bad Science

Available at : https://www.ted.com/talks/ben_goldacre_battling_bad_science#t-44279

How Spectroscopy Could Reveal Alien Life

Available at : https://www.ted.com/talks/garik_israelian_what_s_inside_a_star

Week 2 : Reading Week

Read the suggested books of any article concerning Chemistry (see the list below for recommendations)

Periodic Tales: The Curious Lives of the Elements: Hugh Aldersey-Williams

The Science of Everyday Life: Why Teapots Dribble, Toast Burns and Light Bulbs Shine: Marty Jopson

Bad Science: Ben Goldacre

The Disappearing Spoon: Sam Kean

Week 3 : Research Activities:

For each of the following topics you are going to use the resources to produce one page of *notes*.
You can use the Cornell style if you wish but the task is how you summarise effectively information)

Topic 1: Using Plastics in the Body

Available at : <https://www.stem.org.uk/resources/elibrary/resource/382317/using-plastics-body>

Topic 2: Catching a Cheat

Available at:

<https://www.stem.org.uk/system/files/elibrary-resources/2017/03/Catching%20a%20cheat.pdf>

Topic 3: Diamond: More than just a gemstone

Available at:

<https://www.stem.org.uk/system/files/elibraryresources/2017/02/Diamond%20more%20than%20just%20a%20gemstone.pdf>

Open University Course.

<https://www.open.edu/openlearn/free-courses/full-catalogue>

Select : Free courses and scroll down to Science Maths & Technology

Sign up & enrol !

Now the tricky part . . . what to choose ? . . . Click the links . . .

Discovering chemistry

Metals in medicine



The science of alcohol
What is a metal?
What chemical compounds might be present in drinking water?
Understanding antibiotic resistance
Drug development process: combating pain
Introduction to polymers
The molecular world
Iron transport and storage
Birth of a drug
The three-way catalytic converter

Additional reading / watching:

Mary Berry : <http://www.maryberry.co.uk/>

BBC simple recipes <https://www.bbcgoodfood.com/recipes/collection/easy>

Jamie Oliver :

<https://www.jamieoliver.com/recipes/category/books/5-ingredients-quick-easy-food-recipes/>

Head of subject: Richard Stewart

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Classical Civilisation

Suggested tasks:

Listen: In Our Time: [Thucydides](#)

Study: Open Learn: [Getting started on classical Latin 1](#)

Watch: [Ovid not Covid Week 1](#)

Listen: In Our Time: [The Library of Alexandria](#)

Study: Open Learn: [Getting started on classical Latin 2](#)

Watch: [Ovid not Covid Week 2](#)

Listen: In Our Time: [The Delphic Oracle](#)

Study: [Open Learn: Getting started on classical Latin 3](#)

Watch: [Ovid not Covid Week 3](#)

Listen: In Our Time: [Tragedy](#)

Study: Open Learn: [Getting started on classical Latin 4](#)

Watch: [Ovid not Covid Week 4](#)

Listen: In Our Time: [Sparta](#)

Study: Open Learn: [Getting started on classical Latin 5](#)

Watch: [Ovid not Covid Week 5](#)

Listen: In Our Time: [The Amazons](#)

Study: Open Learn: [Getting started on classical Latin 6](#)

Watch: [Ovid not Covid Week 6](#)

Suggested further reading/ watching:

- R. Buxton *Imaginary Greece: the contexts of mythology* (Cambridge, 1994)
- J. Davidson *Courtesans and Fishcakes: the consuming passions of classical Athens*



(London, 1997)

- Gibbon: Decline and Fall of the Roman Empire
- Livy: Histories
- Tacitus: Annals
- Thucydides: History of the Peloponnesian War

Head of subject: Will Saunders

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Computer Science

Suggested tasks:

All the courses can be found at <https://www.open.edu/openlearn/science-maths-technology>

Cyber Security (Level 1: Introductory)

- How can you protect your digital life?
- What are the threats to your online safety?
- What steps can you take to reduce the risk of online threats?
- How can you apply network security and cryptography to mitigate against threats such as malware, viruses, trojans and identity theft?

Complete this OpenLearn course from The Open University.

- [Introduction to cyber security: stay safe online](#)

Analogue versus Digital (Level 1: Introductory)

- How does the computer's binary world of digital entities differ from our analogue world of colour, sound, taste and touch?
- How can visual information, such as pictures, diagrams and moving images be expressed numerically inside a computer?
How can sounds such as speech and music can be represented inside a computer in terms of numbers?

Complete this OpenLearn course from The Open University.

- [Crossing the boundary - analogue universe, digital worlds](#)

Computers and computer systems (Level 2: Intermediate)

- What are the fundamental hardware components that make up a computer's hardware and what is the role of each of these components?
- What's the difference between an operating system and an application program, and what are they used for in a computer?
- What effect has the use of computer technology had on common products, for example kitchen scales or a digital camera?

Complete this OpenLearn course from The Open University.



- [Computers and computer systems](#)

Computational Thinking (Level 2: Intermediate)

- What are the skills that are involved in computational thinking?
- How can you use the concepts of abstraction as modelling and abstraction as encapsulation?
- What is the distinctive nature of computational thinking, when compared with engineering and mathematical thinking?
- What is the range of applications of computational thinking in different disciplines (from biology and physics to economics and sport science)?

Complete this OpenLearn course from The Open University.

- [Introduction to computational thinking](#)

Data and Processes (Level 2: Intermediate)

- In what ways is data stored and processed?
- How do you distinguish between different forms of data?
- How does software handle different forms of data?
- How are data sets manipulated?

Complete this OpenLearn course from The Open University.

- [Data and processes in computing](#)

Software Development (Level 3: Advanced)

- What is the engineering nature of software development?
- What are the key activities in software development and what is the role of modelling?
- How can you apply the key concepts, such as risk and quality, to software development?
- How does the basics of an object-oriented approach help with software development?
- How can you best interact with the published literature on software development?

Complete this OpenLearn course from The Open University.

- [An introduction to software development](#)



Suggested further reading/ watching:

Books:

- Computational Fairy Tales by Jeremy Kubica (<http://computationaltales.blogspot.com/>)
- Computer Science: An Overview by J. Glenn Brookshear
- Code: The Hidden Language of Computer Hardware and Software by Charles Petzold
- Outnumbered: From Facebook and Google to fake news and filter-bubbles – the algorithms that control our lives by David Sumpter
- The Code Book by Simon Singh
- Algorithmic Puzzles by Anany Levitin and Maria Levitin
- But How Do It Know? - The Basic Principles of Computers for Everyone by J Clark Scott

Free, online lectures and courses (<https://academicearth.org/computer-science/>).

Project Euler (<https://projecteuler.net/>) is a series of challenging mathematical/computer programming problems.

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Economics

Suggested tasks

COVID 19

Obviously we are going through unprecedented times at the minute and economic conditions are changing fast.

Task 1 - Write a list of the ways you think Covid-19 is impacting on our economy.

Task 2 - Set up a spreadsheet of all key economic indicators and populate it with all the latest figures. This can be updated on a weekly basis.

Extension - Add columns for other major economies such as Germany, China, USA. It is always good to have perspective.

Oil

Research into the recent performance of the oil market and produce a short report/presentation/mind map using your economic knowledge to explain what is happening in the market and how oil prices can go negative. Strange times indeed.

<https://www.tutor2u.net/economics/blog/oils-amazing-moment-as-crude-prices-fall-below-zero>

Fiscal impacts

Research into and produce a short report/presentation/mind map on the fiscal impacts of Covid-19, looking at how much the Government is spending, borrowing, what is happening to National Debt etc, but also consider the impacts on current tax revenues and future taxes. Again, it would also be useful to see that other countries are doing, and how we compare.

Climate

As you know, we have studied negative externalities in detail. We also know that economics is all about trade-offs. Covid-19 may be bad for the world and UK economies, but it has been great for the environment.

Research into, and produce a PPP or Presi explaining the positive impact the shut down has had on climate change gases and other environmental issues.

Labour market



Research and produce a short report/presentation/mind map on the current UK labour market. Then make a list of the possible short-run and long-run implications of these changes.

The future

I think the economic landscape is about to be changed forever following lockdown. Here is a task to get you thinking about what the future may look like.

<https://www.tutor2u.net/economics/blog/year-12-enrichment-task-to-what-extent-does-the-coronavirus-pandemic-give-economies-the-opportunity-to-change-direction>

Suggested further reading/ watching:

- Watch the news at least once a day.
- Read a quality newspaper or website every day.
- Look out for any TV programmes on economics over the next few months.
- Stay abreast of all economic events any which way you can.

Head of subject: Mr Maxwell

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English Literature

Suggested tasks
Use the Cambridge University Virtual Classroom to experience Practical Criticism. The course begins here and uses this glossary . The glossary alone will be excellent preparation for further study.
Developing your understanding of Romantic Poetry: John Keats Lord Byron Samuel Taylor Coleridge
Developing your understanding of Tragedy as a genre: Tragedy lectures
You are likely to cover far more Shakespeare at University. Use this week to read and broaden your knowledge of the plays you are unfamiliar with. Shakespeare
Broadening your understanding of literature: Modernism: Modernism Context 1 Modernism Context 2 Modernism Critical Perspectives 3
The School of Life has a great set of crash courses for literature and political theory. University study will require you to have a secure understanding of seminal thinkers, as well as authors The School of Life
Suggested further reading/ watching: Reading: Very Short Introductions American Literature: Steinbeck- Cannery Row, East of Eden, Of Mice and Men Fitzgerald - The Beautiful and the Damned, Twain- The Adventures of Huckleberry Finn



Lee- To Kill a Mockingbird
Salinger- The Catcher in the Rye
Sinclair- The Jungle
Hemingway- The Sun Also Rises

Inspired by Hamlet:

Hamnet by Maggie O'Farrell
Nutshell by Ian McEwan

Live streaming of plays from the National Theatre

This is now a subscription service. Details here.

<https://www.ntathome.com/checkout/subscribe/purchase>

Non-fiction:

This is Shakespeare by Emma Smith

If you enjoyed The Ferryman:

The Firestarters- Jan Carson
The Milkman-Anna Burns

Open University courses:

[Approaching Plays](#)

[Approaching Poetry](#)

[Approaching Prose Fiction](#)

Podcasts: In Our Time

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French

Suggested tasks:

Suggested further reading/ watching:

Try one of the free Open University online courses - you'll even get a certificate at the end - you choose which ones you want to do, they vary in level of difficulty and duration.

<https://www.open.edu/openlearn/free-courses/full-catalogue>

Watch French films with French subtitles - there are lots on Netflix (Bad Seeds, The Climb, We Are Family) and Amazon Prime (La famille Bélier, Little White Lies). Other good classic film suggestions are 'Les Intouchables', 'Jean de Florette' and 'Manon des Sources' 'La Vie en Rose' 'Amélie'.

There are also lots of great series on Netflix (Call my agent, Le Chalet, Lupin)

Listen to French in order to tune your ear into the language – watch youtube clips about topics you find interesting and watch <https://fr.news.yahoo.com/monde/> for 3 minute news clips in French.

If you use Facebook join **mfl clips with audio & subtitles** and watch the French clips

Read a book - some good suggestions are 'Un Sac de Billes' by Joseph Joffo, L'Etranger by Camus or read another book by Delphine de Vigan. You could even read a French version of your favourite books for example all Harry Potter books are available to buy in French on Amazon!

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Geography

Suggested tasks

Week 1: Course Consolidation. Consider activities 1-3 below:

1. It is important you have full coverage of the specification, even if you are not going to be examined on it. There are two reasons for this. Firstly in case you go for an optional exam in the autumn to try and better your grade and secondly so that you have all the foundational knowledge needed for degree level Geography courses. You need to make sure you are on a level playing field with everyone else and aren't at a disadvantage.

Use the specification link below to check that you have covered everything for the eight units we studied. You want pgs 12-62 but ignore units 2A Glaciation and 4B Diverse Places.

<https://drive.google.com/a/beechncliff.org.uk/file/d/15j8C-bLpZroXOcVc-yTLRv19KmZrJ9ZL/view?usp=sharing>

2. Use Seneca Learn to develop the above and go in to more detail on those topic areas you feel a little unsure about:

<https://app.senecalearning.com/classroom/course/e863f76a-c037-441e-b405-96c1e8649284/section/5f8a85bb-c1a6-42a9-8cab-cf942ddeaf78/session>

3. This is about turning knowledge in to exam applicable and degree level transferable skills. It is one thing having completed the course, but can you apply the learning to challenging exam style questions? This is what really tests whether you have understood it. Use our Past Q topic booklets (link below) to go through unit by unit and check that you understand the material well enough to address questions on it. Can't do a Q? Re visit the content. You're looking for 8 documents half way down on the left.

<http://beechncliffhumanities.weebly.com/a-level-geography-yr-2.html>

Week 2: Audio Visual Feast

Physical Geography

Planning on going to University to study Physical Geography or Geology (or even human Geography as you'll no doubt do some physical in your first year)? Then watching the Earth Story series will give you a REALLY GOOD grounding in basic tectonics and geology. You will have watched a few clips in class but there really is no substitute for watching the whole series. It's where most of what Brewer knows comes from!

Earth Story Disc 1 link to our media server:

<https://drive.google.com/a/beechncliff.org.uk/file/d/1VzV1IJEfhE15SvSCc8OvV9FUVExW>



[LPMg/view?usp=sharing](https://drive.google.com/a/beechncliff.org.uk/file/d/1Z89p-7d_n_Ha0J4bAL2OIIcXblXhIyZc/view?usp=sharing)

Earth Story Disc 2 link to our media server:

https://drive.google.com/a/beechncliff.org.uk/file/d/1Z89p-7d_n_Ha0J4bAL2OIIcXblXhIyZc/view?usp=sharing

Human Geography

1. In class we learned about the annexation of Crimea by Russia. This documentary from the Simon Reeves and the BBC develops this somewhat and makes for fascinating viewing. The third and final leg of Simon's Russian journey takes him from the illegally annexed peninsula of Crimea to the historic Baltic city of St Petersburg. Crimea is part of neighbouring Ukraine but was annexed by Russia in 2014. President Putin's government is investing heavily in the illegally occupied territory - building a huge bridge linking Crimea to Russia.

<https://www.bbc.co.uk/iplayer/episode/b099127q/russia-with-simon-reeve-series-1-episode-3>

2. Tim Marshall discusses Prisoners of Geography on the radio:

<https://www.bbc.co.uk/sounds/play/p07sm1bd>

3. There's some great material here about globalisation and what coronavirus means for it in the future. Pick and choose: <https://www.bbc.co.uk/search?q=globalisation>

Week 3: Getting Uni Ready

Planning on studying Geography at University? Each degree course is very different and it pays to do some research in to what you will actually be learning about in September. They may even have suggested reading lists that you could be getting started with. Find out what units you will be studying or what optional units you could choose to study. Then do some background research in to these topics. Are there books you need to buy? Online journals you need to read?

Going to Uni but studying something else? The same applies...

Week 4: Wider Reading

There are a whole host of Geographical magazines and journals that you can read online or take out a subscription for and have them delivered through your door. Do some research and have a look at the following:

Geographical - The official Magazine of the Royal Geographical Society. View articles for free online or take out a subscription. <https://geographical.co.uk/>

Geography Review: Aimed at A Level Geography students. You can take out an online or paper subscription. You can take out a FREE 7 day trial of the online version so essentially you can read the latest copy for free!

<https://www.hoddereducation.co.uk/subjects/geography/products/16-18/geography-review-emagazine-volume-33,-2019-20>

National Geographic Energy Resource Library: The National Geographic website and magazine are too varied to be helpful really but this fantastic website of theirs is a collation of all of their 'Energy' related stories. Have a rummage.

https://www.nationalgeographic.org/topics/energy/?q=&page=1&per_page=25



And if you're planning on starting a Geography degree in September then you may want to consider taking out a subscription to this one: *Geography* is the Geographical Association's international journal for lecturers, teachers and students in post-16 geography.

<https://www.geography.org.uk/Journals/Geography>

Week 5: Ted Talks - All with a Geography theme

TED talks are a great source of Geographical learning. In Oct 2018 the Geographical Magazine collated 8 of the best:

<https://geographical.co.uk/reviews/films/item/2977-ted-talks>

Another good one from Hans Rosling AKA 'The Swede'.

<https://www.youtube.com/watch?v=Sm5xF-UYgdg>

And finally one by Danny Dorling, my old University Lecturer at the University of Sheffield who is now a Professor of Geography at the University of Oxford. What does the world look like when you map it using data? Social geographer Danny Dorling invites us to see the world anew, with his captivating and insightful maps that show Earth as it truly is -- a connected, ever-changing and fascinating place in which we all belong. You'll never look at a map the same way

again. https://www.ted.com/talks/danny_dorling_maps_that_show_us_who_we_are_not_just_where_we_are

Week 6: Factfulness Quiz: And finally a bit of fun...and to test whether you need to go and read the book 'Factfulness' by Hans Rosling. Take the Factfulness Quiz. PS - I got 12/13 on my first attempt:): <https://factfulnessquiz.com/>

When asked simple questions about global trends – why the world's population is increasing; how many young women go to school; how many of us live in poverty – we systematically get the answers wrong. In *Factfulness*, Hans Rosling, together with his two long-time collaborators Anna and Ola, offers a radical new explanation of why this happens, and reveals the ten instincts that distort our perspective. It turns out that the world, for all its imperfections, is in a much better state than we might think. But when we worry about everything all the time instead of embracing a worldview based on facts, we can lose our ability to focus on the things that threaten us most.

Suggested further reading/ watching:

Any of the books or DVDs from our A'Level Geography reading list will both consolidate the A'Level course and put you in good stead for further education. The list can be found here:

<https://drive.google.com/a/beechncliff.org.uk/file/d/1eJ7MOx86Mwpti9ZHwo0zv7dx2dEcekC7/view?usp=sharing>

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German

Suggested tasks:

- Complete all assessments from unit 1 of Kerboodle which have been assigned to you on their website.
- Join the FB group 'mfl clips with audio and subtitles'.
- Have a zoom/houseparty chat with each other in German.
- If you have a kindle, download some German books and the German dictionary and you can click on words that you don't understand.
- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>

- Complete all assessments from unit 2 of Kerboodle which have been assigned to you on their website.
- Choose another book from the AQA German reading list and have a go at reading it. We chose 'Der Besuch der alten Dame' but there were lots of other options.
- Try some slow news at www.newsinslowgerman.com
- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>

- Complete all assessments from unit 3 of Kerboodle which have been assigned to you on their website.
- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>
- Have a zoom/houseparty chat with each other in German.
- Have a look at and join (for free) GermanPod101.com if you like and select your level before exploring the fun, interesting and culturally relevant lessons that are easy to listen to.

- Complete all assessments from unit 4 of Kerboodle which have been assigned to you on their website.
- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>
- Have another look at GermanPod101.com
- <https://youtu.be/zGhOG7-IwR0> another excellent link if you like listening to stories in German. Give it a go.

- Complete all assessments from unit 5 of Kerboodle which have been assigned to you on their website.
- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>
- Have a zoom/houseparty chat with each other in German.

- Complete all assessments from unit 6 of Kerboodle which have been assigned to you



on their website.

- Use this link to watch the actual news from today. It's about half an hour.
<https://www.zdf.de/nachrichten/heute-journal>
- <https://www.youtube.com/watch?v=hBr3k364K80&list=PLYJXC9hVK9ZdUXMrhOTC-kpfIEwJO2c0u&index=2>

The above link is 'Beauty and the Beast' told in German. Hopefully you know the story so you'll be able to understand the whole thing!

Suggested further reading/ watching:

Watch youtube clips in German of topics that interest you. Easy German is a good one to go for...based in Berlin with interviews in German and English with subtitles. Choose any topic you like and it will help keep up your interest and keep you tuned into German but look at the levels and choose an advanced one depending how you feel.

Go to the 'Goethe Institute' website and do a little research into some of the areas that are explored. Most AS and A-level topics are covered and there are hyperlinks taking you off in tangents for all the bits you enjoy.

Listen to as much German music as you can...the lyrics are often full of 'modern day' German as opposed to the slightly old fashioned or formal stuff in textbooks.

If you use Facebook join mfl clips with audio & subtitles and watch the German clips.

If you have Netflix find a series to watch in German with English subtitles - keep doing this regularly.

Watch slow news in German as you will stay abreast of current affairs with language at a manageable pace. There is an app to download for this.

Try one of the free Open University online courses - you'll even get a certificate at the end - you choose which ones you want to do, they vary in level of difficulty and duration.

<https://www.open.edu/openlearn/free-courses/full-catalogue>

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Government and Politics

Suggested tasks: These focus on finishing the areas of the A Level course that we didn't have time to cover or didn't cover in significant depth.

To what extent is the US democratic?

Think about all of the course content we have covered this year and create a table summarising the points on either side of this debate.

You can read and use the following articles and websites to help with your investigation:

<https://www.theguardian.com/us-news/2019/nov/07/is-america-a-democracy-if-so-why-does-it-deny-millions-the-vote>

<https://www.theatlantic.com/magazine/archive/2018/03/america-is-not-a-democracy/550931/>

<https://www.washingtonpost.com/news/volokh-conspiracy/wp/2015/05/13/is-the-united-states-of-america-a-republic-or-a-democracy/>

<https://www.newyorker.com/news/daily-comment/why-democracy-is-on-the-decline-in-the-united-states>

Page 437-440 of the textbook can also help you with this debate

US v UK Comparisons: Part 1

There will be resources uploaded on the three different comparative approaches via Google Classroom- these are the 'rational', 'cultural' and 'structural' approaches. You can also read p442-443 to help with your understanding of these.

Using Component 3, Chapter 6, please create tables comparing similarities and differences between the UK and US on the following topics:

- Constitution
- Legislature
- Executive

US v UK Comparisons: Part 2

Continuing from last week's comparisons, continue to create tables comparing similarities and differences between the UK and US, this week on the following topics:

- Judiciary and civil rights
- Political Parties
- Pressure Groups

Open University Free Course: 'What Is Politics?'

This is a free course offered by the Open University. It is a 15 hour course covering some aspects of politics we have covered in the A Level, but in many places offering a wider view of politics with more global examples.

The course is dedicated primarily to answering the question of what politics is, stating "Although the question might seem rather simple, it elicits various, often contradictory responses. As you will realise, in politics as in much of the humanities and social sciences



definitive answers are difficult to come by. What politics is and equally, who does it, and where it is done are hotly debated and highly contested. This OpenLearn course will introduce you to some of these debates, and their implications for the study and practice of politics.”

<https://www.open.edu/openlearn/society-politics-law/what-politics/content-section-0?active-tab=description-tab>

Suggested further reading/ watching:

There are a huge variety of documentaries currently available online on both the UK and US political system. They are available on BBC iPlayer, take a look!

Head of subject: Kim Mather

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History

Let's think about the History A level material we have studied in two ways; (i) throughout the time periods 1485-1603 and 1945-1991, and (ii) in terms of implications for today and tomorrow.

Suggested tasks

Revisiting the Tudor era -

1. Getting, keeping, delegating and using POLITICAL POWER - what big similarities and differences can you discern in the reigns of the five Tudor monarchs?
2. What were the main drivers of FOREIGN POLICY for the five Tudor monarchs? Again, can you see similarities and differences across the long Tudor century?
3. How successful were the Tudors at developing English economic power through TRADE and EXPLORATION?

Revisiting the Tudor era -

4. How much did RELIGIOUS CHANGES between c.1530 and c.1600 really affect English culture?
5. Was English SOCIETY noticeably different in 1603 from 1485?
6. How MODERN was England by 1603?

Revisiting the Cold War -

1. How much were Truman and Stalin responsible for the development of the global Cold War?
2. How might the Cold War have been different without the Arms Race?
3. Why did the 'hot' bits of the Cold War [ie the actual military conflicts and the proxy wars] not take place in Europe?

Revisiting the Cold War -

4. Would World War 3 and nuclear armageddon really have taken place because of the Cuban crisis in 1962?
5. How similar were American experiences in Vietnam and Soviet experiences in Afghanistan?
6. "The Cold War ended because of jeans, rock music, vodka and Gorby." True or false? Think about greed, individualism, failure and honesty ...

Learning from the past, part 1 -

1. What can we learn from the Tudors about the successful exercise of political power?
2. What are the big warnings from the Tudor era about dramatic and rapid cultural changes?
3. Our syllabus is framed as 'top-down history' [focusing on the actions of the ruling elite]. Would we have a better understanding of late medieval and early modern English history if we had adopted a 'bottom-up' approach [starting from the



experiences and beliefs etc of ordinary people like the butchers and bakers and candlestick-makers]?

Learning from the past, part 2 -

4. Can international relations today be described as a 'Second Cold War'?
5. How far is the global political-economic dynamic today [western capitalist liberal democracy vs eastern state capitalist dictatorship] comparable to the situation immediately after WW2?
6. 'People power' was a decisive factor in ending the Cold War. Is 'people power' strengthened or weakened by social media today?

Suggested further reading/ watching:

To be honest there is such a treasure trove out there, it's impossible to pick and choose. These are all worth your time, however -

https://www.youtube.com/results?search_query=the+school+of+life - some history, mostly philosophy and how to live well today.

<https://www.bbc.co.uk/programmes/p0874r22> [and check out the rest of the series!]

<https://www.bbc.co.uk/programmes/b05nsd2b>

<https://www.bbc.co.uk/iplayer/episode/b0853mvq/six-wives-with-lucy-worsley-episode-1>

Look after yourselves!

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Italian

Suggested tasks
<p>Begin watching the Italian TV series: on Walter Presents (also now showing on All4): 'The Mafia only kills in the Summer'</p> <p>Read a story of your choice from <i>Novelle del Novecento</i>, an anthology (see reading list below)</p> <p>Access 'My Italian Podcast' on Spotify and listen to episode 2 'Sapere vs Conoscere'</p> <p>Use the 'Languages Online' website to practice the PRESENT and FUTURE tenses</p>
<p>Continue with the Italian series 'The Mafia only kills in the Summer'</p> <p>Read another story of your choice in <i>Novelle del Novecento</i></p> <p>Sign up to Lyrics Training (online). Choose an Italian song and practise the exercises to fill in the missing words as the song plays</p> <p>Access the Online ItalianClub.com. Find the listenings section and complete the listening exercise on AMARE LA LETTURA</p> <p>https://onlineitalianclub.com/free-italian-exercises-and-resources/online-italian-course-intermediate-b1/italian-listening-comprehension-exercise-b14/</p>
<p>Continue with the Italian series 'The Mafia only kills in the Summer'</p> <p>Read another story of your choice from <i>Novelle del Novecento</i></p> <p>Use the website 'Languages online' to practise reflexive verbs</p> <p>Access the Online ItalianClub.com. Complete the listening exercise L'Amore ai tempi di Internet'</p> <p>https://onlineitalianclub.com/free-italian-exercises-and-resources/online-italian-course-advanced-c1/italian-listenings-with-transcripts-level-c1-listening-8/</p>
<p>Continue with the Italian series 'The Mafia only kills in the Summer'</p> <p>Read another story of your choice in <i>Novelle del Novecento</i></p>



Access Slow News in Italian on Spotify and listen to a recent news report of your choice

Access the Online Italianclub.com and complete the listening exercise Una Vita Eco Sostenibile

<https://onlineitalianclub.com/free-italian-exercises-and-resources/online-italian-course-proficient-c2/italian-listenings-with-transcripts-level-c2-listening-4/>

Continue with the Italian series 'The Mafia only kills in the Summer'

Read another story of your choice in Novelle del Novecento

Listen to the latest Italian news online on RAI UNO

Develop your range of adjectives in Italian: Podcast: 50 Advanced adjectives in 7 minutes on Spotify

Continue with the Italian series 'The Mafia only kills in the Summer'

Read another story of your choice in Novelle del Novecento

Use the 'Languages Online' website to practise the PERFECT and IMPERFECT tenses

Access the Online Italianclub.com and complete the listening exercise Crisi e Cultura <https://onlineitalianclub.com/free-italian-exercises-and-resources/online-italian-course-proficient-c2/new-free-c2-level-italian-listening-exercises-38/>

Suggested further reading/ watching:

Novelle del Novecento, an anthology, edited by Brian Moloney

Mark Sullivan Beneath a Skarlet Sky

Leonardo Sciascia Porte aperte

Alessandro Baricco Novecento

Carlo Levi Cristo si è fermato a Eboli

Watch an Italian film or series:

Il Postino (Amazon)

Palio (Amazon)

Suburra (series on Netflix)

If you use Facebook join mfl clips with audio & subtitles and watch the Italian clips

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Law

Suggested tasks

The legal implications of new technology

Have a read of Chapter 16 of OCR Law Book 2 and make a list of the advantages and disadvantages of each type of new technology:

- Robots
- Driverless vehicles
- Drones
- CCTV

Extra resources:

- Watch the Boston Dynamics video of 'Atlas: The Next Generation' in operation
- Find videos of Method-2 and IBM Watson
 - *Could these be beneficial to the legal system?*
- Find out about Prime Air - www.dezeen.com/2019/06/06/amazon-prime-air-drone-news/
- Find out about DHL Parcel deliveries to North Sea islands
- Impact of the Data Protection Act and GDPR - www.youtube.com/watch?v=acijNEErf-c
- Facial recognition technology discussion on Law in Action - <https://www.bbc.co.uk/programmes/b0b7fj36>
- Driverless cars - <https://www.bbc.co.uk/programmes/b09v3fdt>

Cyber Crime case studies

Research the cases of Gary McKinnon and Lauri Love, and think about your answers to the following questions about each case:

1. What were they alleged to have done?
2. What charges could they have faced in the USA?
3. What sentence could they have received?
4. What did the Home Secretary decide about their deportation?

Other high profile cyber crimes you could look up:

- WannaCry virus infiltrating the NHS computer system, 2017
- Hackers steal £650 million from global banks, 2015
- JP and Morgan Chase & Co target of giant hacking group, 2015
- Sony Pictures crippled by 'GOP' hackers, 2014
- One billion user accounts stolen from Yahoo, 2013

Wrongful Convictions

This is something not covered in any law course, but is something extremely important to be aware of. Wrongful criminal convictions do happen across the world despite the efforts



of judicial systems. Compare the issues with the US and UK justice systems by researching examples of post-conviction exonerations in the two countries. Which do you think is worse? Why?

Resources:

- www.newstatesman.com/politics/uk/2017/02/rough-justice-who-looking-out-wrong-fully-convicted
- The Innocence Files - documentary on Netflix
- Innocence Project youtube channel - www.youtube.com/user/innocenceproject
- www.youtube.com/watch?v=8O1rEqkIp0U
- www.youtube.com/watch?v=4cw5OKPpe0
- <https://peoplepill.com/people/raphael-rowe/>
- <https://www.independent.co.uk/news/uk/crime/not-innocent-enough-to-be-compensated-barry-george-loses-legal-battle-for-compensation-over-wrongful-8697397.html>

Terrorism, Extremism and the Law

Listen to the programmes below regarding the difficulty in striking the balance between fighting terrorism and protecting civil liberties.

This episode of Law in Action is with the independent reviewer of terrorism legislation, David Anderson QC. <https://www.bbc.co.uk/programmes/b080t882>

This episode is about the secretive state programme called Channel - where suspected extremists are referred. <https://www.bbc.co.uk/programmes/b06qmpr0>

This episode is a discussion of whether extremism should be classed as a crime. <https://www.bbc.co.uk/programmes/b062khlh>

Do you think the law is doing enough to combat extremism?

Human Rights Online Course

Sign up to Amnesty International's free online course called 'Defending Dignity', all about the Universal Declaration of Human Rights and how it has affected the rights of UN citizens. The course has a big focus on equality and anti-discrimination laws.

<https://www.futurelearn.com/courses/the-universal-declaration-of-human-rights>

Suggested further reading/ watching:

Podcasts and radio programmes

- Law in Action
- The Hearing
- Law Pod UK



- RightsUp

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Mathematics and Further Maths

Suggested tasks

I'd keep focusing on any areas of A level that you found tricky, especially calculus. This is absolutely fundamental for any Maths course at University. If you have done Further Maths then I would also focus on Matrices and Complex Numbers. If you haven't met these topics but would like to familiarise yourselves with them, you can do this on the Further Maths Resources at www.mymaths.co.uk

Keep working through the practice A Level papers on our website in order to keep your Maths Brain ticking over!

One thing you're almost certainly going to encounter in a Maths course at University is an element of coding. If you would currently class yourself as an absolute beginner then there is a nice short introductory course to Python here:

<https://www.open.edu/openlearn/science-maths-technology/simple-coding/content-section-0?active-tab=description-tab>

Whatever type of "Mathsy" degree you are planning on following there is likely to be some advice here on what to expect and how to prepare:

<https://nrich.maths.org/university>

See if any of the articles fit the sort of course you are planning on following and take a look at what they have to say.

Plus magazine (<https://plus.maths.org/content/>) is an excellent publication aimed at "Maths minded" teenagers. Frankly you could spend the entire summer reading through their archived articles.

Take a few hours to look through what they offer (and maybe even find something that you can explore in more depth)

Here is a document from Cambridge University filled with questions that they expect undergraduates to work through before starting the course there. Some of it is quite hard but it will be good preparatory work for any Uni Maths course...

<https://www.maths.cam.ac.uk/undergrad/admissions/files/workbook.pdf>

Many University Maths courses are now running modules in Codebreaking and Cryptography. What better place to hone your skills than the National Cipher Challenge:

<https://www.cipherchallenge.org/>

This is actually a "rerun" of the 2003 challenge.



There are numerous websites that will help you with the different ciphers involved, but this is always a good place to start:

https://www.simonsingh.net/The_Black_Chamber/chamberguide.html

Suggested further reading/ watching:

Here is Cambridge University's reading list for undergraduates - if you can get hold of any of them I'm sure they would be excellent preparation for a Maths course at any University:

<https://www.maths.cam.ac.uk/undergrad/admissions/files/reading-list.pdf>

And if you really want a challenge, click here for a load of questions designed to help people preparing for STEP exams. Whether you've done this already or new to it, they are a really good way to get your brain ready for University Maths:

<https://maths.org/step/welcome>

Finally: [Chalkdust](#): A Magazine for the Mathematically Curious
(I suggest you click on the actual magazine)

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Music



Suggested tasks

Following on from last week's work, explore some further wider listening. Use this link to help:

<https://www.rhinegold.co.uk/wp-content/uploads/2015/10/MT1018-scheme-KS5-Edexcel-A-level-Wider-listening.pdf>

Listen to the pieces of music suggested in the document and make notes on how they relate to the A-level set works.

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Research pastiche and select a style that you would be interested in undertaking for a composition project.

Research 'Medieval music' and make notes on the main characteristic features of the period. This should include instruments/voices, melodic and harmonic features, tonality and textures.

Find 3 typical pieces of the era – listen to them and make notes comparing and contrasting the musical features.

Use these links to help:

<https://www.musicnotes.com/now/news/musical-periods-the-history-of-classical-music/>

<https://www.youtube.com/watch?v=4keEyZ7LFq8>

<https://www.musictheoryacademy.com/periods-of-music/medieval-music/>

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Begin thinking about a pastiche composition – compose on your own instrument if you don't have software to complete the task

Research 'Renaissance music' and make notes on the main characteristic features of the period. This should include instruments/voices, melodic and harmonic features, tonality and textures.

Find 3 typical pieces of the era – listen to them and make notes comparing and contrasting the musical features.



Use these links to help:

<https://www.musicnotes.com/now/news/musical-periods-the-history-of-classical-music/>

<https://www.youtube.com/watch?v=z5I6qi9qwRg>

<https://www.musictheoryacademy.com/periods-of-music/renaissance-music/>

<https://alevelmusic.com/4-short-history-of-music/shom-late-renaissance/>

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Continue working on pastiche composition – focus on the overall structure

Research the 'Rococo period'. Make general notes on this interesting input to musical history. In your research include the dates the period covers, some of the composers who are associated with this period and pieces of music.

<https://study.com/academy/lesson/rococo-music-period-style.html>

<https://www.vpr.org/post/timeline-rococo-between-baroque-and-classical#stream/0>

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Continue working on pastiche composition – focus on rhythmic, melodic and harmonic features.

Research 'lesser known' composers throughout music history.

Composers could include Stamitz, CPE Bach, JC Bach, Salieri, Scriabin, and Carl Nielsen.

<https://www.classicfm.com/discover-music/latest/most-underrated-composers/>

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Continue working on pastiche composition – focus on developing ideas from previous



weeks.

Research different 20th century strands in music. You will have already studied impressionism but familiarise yourself with others. These could include: neoclassicism, serialism, expressionism and minimalism.

<https://wmich.edu/mus-gened/mus150/1500%20webbook%20modern%20artmusic/Modern%20ArtMusic.htm>

Maintain a daily practice routine on your instrument(s).

Aural practice – use this link to practice dictation skills.

<https://www.teoria.com/en/exercises/>

Continue working on pastiche composition – focus on performing directions and dynamics

Suggested further reading/ watching:

Advanced theory work Grade 6-8 <https://gb.abrsm.org/en/our-exams/music-theory-exams/>

The Cambridge Music Guide - a useful book covering all aspects of music history

https://books.google.co.uk/books/about/The_Cambridge_Music_Guide.html?id=KO7yTQqryNUC&redir_esc=y

Here is a series of short lectures that you will find interesting:

<https://www.open.edu/openlearn/history-the-arts/culture/music>

https://www.youtube.com/playlist?list=PL11ftdFgjTHhc_7FLmDkVgGCJ3GD2si-l

Finally - just listen to as much music as you can!

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Photography

Suggested tasks



As most of you are going on to study at Foundation. Learn about the methodology of the [Bauhaus Art college](#). Most foundation courses are based on this school. Look into what made the Bauhaus movement so unique, and why it has influence today.

Watch episodes of [The Shock of the New](#). These look at the way Art has been influenced by the world around it, and vice versa. It is an ever changing form that reflects the mood and will of the people at the time. This series is quite old now. Think about how things have changed since then. How has the internet changed the way we see Art? Which artists today capture the 'zeitgeist'?

Remember that colleges and Universities like to know that they are going to be teaching Independent Learners. They like to know that you are going to be the type of student who will go out to take images for the love of it, not just because you have been told to. Get into the habit of having a camera with you all the time when you go out. Consider documenting the positivity we will all experience as things start to return to normal. This will be a unique opportunity in our lives that we might never see again. Document it!

I would strongly recommend making a 'virtual gallery' of your work. There are plenty of free websites that you can import your onto, such as Weebly, and this is a great way to show off your work both here and abroad. It gives you a chance to display your work in high quality and to be able to talk about your work with confidence. These of course can be updated as you do more work in the future.

Back up your work! You have all worked really hard over the past two years, and may well make use of the images you have taken again in the future. At the very least, it will be really nostalgic looking back at your work in the years to come, so losing it would be tragic. Make sure that you have copied and stored your work in at least two different places. (Not on the same computer!). I would suggest an external hard drive and save the images as JPEG and TIFF files.

Keep up to date with current Exhibitions. Although we are still not able to visit some galleries in the flesh, most galleries are now starting to open again. Some local ones definitely worth a look are:

<https://www.victoriagal.org.uk/events/kurt-jackson-biodiversity>



<https://americanmuseum.org/whats-on/>

<https://www.martinparrfoundation.org/>

<https://www.bristolmuseums.org.uk/bristol-museum-and-art-gallery/>

<https://www.bristolmuseums.org.uk/m-shed/>

Suggested further reading/ watching:

We are about to start emerging from a really difficult year. People will start to be allowed to use bars and restaurants, they can travel (a bit!), and socialise more. As an artist or photographer, you are in a unique position to document this time. Take images or make sketches as you begin to return to normality. Think about what will interest people about this time in 20 or thirty years time. What will capture the spirit of positivity? [Maybe look at images from the end of WW2 to see how those times were captured.](#)

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Physical Education



Suggested tasks:

You are still enrolled onto 'The Everlearner' and have an account. This account gives you free access (until the end of July) to the whole A-level Physical Education course, so please use it to revisit topics, particularly those which might relate to your future FE course.

To login you can do it one of two ways:

1.

- Check your school email account and locate an email entitled 'noreply@theeverlearner'.
- Accurately copy your username and password.
- Type 'the everlearner' into your internet browser.
- Login using the details provided.
- Once in click on 'Dashboard' and then click on 'Physical Education'

2.

- Type 'theeverlearner' into your web browser.
- Click on 'Login'
- For the username type in your school email address. Then click 'Forgotten Password'
- Open your school email account and there should be an email 'noreply@theeverlearner'. Click on it and follow the instructions to reset your password.
- Go back to the Everlearner login. Type in your email address and new password.
- You should now have access. Click on 'Dashboard' at the top of the page and it should bring up Physical Education. Click on it and away you go!

You can test your knowledge and understanding as you go through using the testing/assessment system that provides you with automatic feedback of your results.

Follow the link to access a student guide of how to navigate the resource:

https://drive.google.com/open?id=1v4EBqVWUgGpTOTHicoBr2NEnol_2by8j

Suggested further reading/ watching:

The link below provides you with access to 'PE Review' articles covering many of the course topics:

<https://drive.google.com/open?id=1iZrYVJa-jUyo6rTfUOPNd10EFS0ghYw4>

The link below provides activity ideas, recommended reading, sports movies and documentaries:

https://drive.google.com/open?id=1tOOviBj_OcUZZ99FxiHj2mX3pGomLEJV



Further reading ideas:

Bounce - Matthew Syed, 2010, published by Fourth Estate

Outliers - Malcom Gladwell, 2009, published by Penguin Group

Legacy - James Kerr, 2013, published by Constable

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Physics



Why physics?

A physics degree lets you explore the world at all scales – from the tiny Planck scale to the scale of the entire universe. It provides you with tools and techniques to make predictions and solve complex problems. And it introduces you to the sometimes beautiful, sometimes downright ugly truths that govern the world around us. In essence, studying physics gives you a deep understanding of how the world works.

With this knowledge, many students go on to take a postgraduate course, where you would study and hopefully explain some of the many mysteries of physics that we still don't understand. But if that doesn't appeal, don't worry, because the tools and skills picked up during your degree are prized in well-paid and rewarding roles in virtually any other industry. Physics can take you anywhere.

For example, you might want to transfer the technical knowledge you built up during your degree to developing robots or renewable technology. Or you could use your computer programming skills in VFX or game development. You might even want to apply your problem-solving abilities to complex challenges in a completely different field, like law or finance.

Where do you think choosing physics could take you?

Could it be to a game studio, designing the next Minecraft? Or to the Met Office, creating computer models to predict climate change? Perhaps into education, to inspire the next generation? Or to a hospital, using physics to help to save lives?

There are thousands of exciting, rewarding physics-related careers to choose from – picking just one is hard. We've talked to people working in some of those industries to



help you understand what their jobs involve, and to see what a future with physics could look like.

The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland, inspiring people to develop their knowledge, understanding and enjoyment of physics.

Here is the link for careers in Physics after studying it at University:

<https://www.iop.org/careers-physics/your-future-with-physics/career-paths>

Watch the following videos:

YouTube: Jim al-Kahili (inspirational Professor from the University of Surrey who has made MANY TV shows & books):

<https://www.youtube.com/watch?v=Gtp51eZkwoI> "Shock & Awe : The Story of Electricity"

Watch the following videos: Jim al-Kahili:

<https://www.youtube.com/watch?v=abhyT2geLSI> "Order and Disorder: What is Energy? (Jim Al-Khalili) | Science Documentary | Science"

Brain Cox: ["The Universe Explained, Brain Cox, History Documentary, Ep 1, YouTube"](#)

Watch the following videos: Jim al-Kahili:

https://www.youtube.com/watch?v=f_4nYgrDJvc The Secret Of Quantum Physics: Einstein's Nightmare (Jim Al-Khalili) | Science Documentary | Science

Watch the following videos: Brain Cox: Youtube:

[The Best Documentary Ever - Brian Cox Particle Physics Lecture at CERN](#)

Jim al-Kahili: Youtube: [The Secret Life Of Chaos: Chaos Theory \(Jim Al-Khalili\) | Science Documentary | Science](#)

Watch the following video:

Stephen Hawking: Youtube: [Into The Universe With Stephen Hawking The Story of Everything](#)

Suggested further reading/ watching:

Radio 4 Weekly Podcasts on Science - usually fantastic

IOP:

Sustainable building design



How can we use physics to make buildings more efficient? Find out about some of the behind-the-scenes technology that helps to make the IOP's home in King's Cross an energy-efficient, sustainable building:

<https://www.iop.org/explore-physics/sustainable-building-design>

Head of subject: Marcus COOPER

Email address: mcooper@beechencliff.org.uk

Product Design



Suggested tasks

People Centred Design

Designed products surround us all and range from bus tickets to buildings. This free course, People-centred designing, focuses firmly on usability and the increasingly important phenomenon of people-centred design. It aims to inform consumers of design (i.e., all of us) about this crucial characteristic of design. In addition to stimulating interest in areas of concern for producers of design, the course might also provide an introduction to engineering, manufacturing and business studies.

<https://www.open.edu/openlearn/science-maths-technology/engineering-and-technology/design-and-innovation/design/people-centred-designing/content-section-0?active-tab=description-tab>

Manufacturing

How are designs turned into products? What resources, materials and methods are used and what set of activities goes under the heading of 'manufacturing'? This free course will introduce manufacturing as a system and will describe some of the many different ways of making products. We will illustrate how the required properties of the materials in a product influence the choice of manufacturing process used.

<https://www.open.edu/openlearn/science-maths-technology/design-innovation/manufacturing/content-section-0?active-tab=description-tab>

Engineering & Materials

Toys and engineering materials, introduces engineering in context. It explores the variation in materials and composite materials, and provides real-life examples of material use in the manufacture of toys, and how the development of materials over time has influenced design.

<https://www.open.edu/openlearn/science-maths-technology/toys-and-engineering-materials/content-section-0?active-tab=description-tab>

Design Thinking

Are you ever frustrated with something that you thought you could design better? This free course, Design thinking, will show you how to structure your natural creativity to come up with solutions to all kinds of problems, and have fun in the process too!

<https://www.open.edu/openlearn/science-maths-technology/design-innovation/design-thinking/content-section-0?active-tab=description-tab>

Introduction to Design Engineering

An introduction to design engineering, looks at the way in which engineers use ideas and approaches from the discipline of design thinking to inform their work. The complexity that people bring to design problems is introduced, along with some basic methods of dealing with such complexity.

<https://www.open.edu/openlearn/science-maths-technology/engineering-technology/introduction-design-engineering/content-section-0?active-tab=description-tab>



Suggested further reading/ watching:
Unpack IKEA - BBC iPlayer

Head of subject: Mr Simmons

Email address: psimmons@beechencliff.org.uk



Suggested tasks:

You could do as many of these as you choose;

- Complete additional recaps/revision of sections of the A level course using Seneca (no specific assignments set, you choose which topics/sections of topics), you could even look at some of the options that we didn't study during our course.
- Try one of the free Open University online courses - you'll even get a certificate at the end - you choose which ones you want to do, they vary in level of difficulty and duration. <https://www.open.edu/openlearn/free-courses/full-catalogue> Psychology is in the box at the top; Health, Sports and Psychology
 - The link below is to their 24 hour course on forensic psychology including using videos of real witnesses and from cameras that go behind the scenes of a police investigation, it'll bring together the forensics and memory topics! It won't be a repetition of what we have done in school, more taking a different approach/angle on it.
<https://www.open.edu/openlearn/health-sports-psychology/forensic-psychology/content-section-overview-0?active-tab=description-tab>
 - There are also courses on studying more generally as part of your preparation for university.
Essay writing -
<https://www.open.edu/openlearn/education-development/essay-and-report-writing-skills/content-section-0?active-tab=description-tab>
Reading and note taking -
<https://www.open.edu/openlearn/society-politics-law/sociology/reading-and-note-taking-preparation-study/content-section-0?active-tab=description-tab>

Suggested further reading/ watching:

Try looking at the BPS digest website for easy to understand summaries of current psychological research (this is where the articles of the week that I posted on google classroom all year were coming from). <https://digest.bps.org.uk/>

There are some excellent psychology podcasts out there too;

<https://gretchenrubin.com/podcasts/>

<https://www.apa.org/research/action/speaking-of-psychology/index>

<https://samharris.org/podcast/>

<https://www.bbc.co.uk/programmes/b006qxx9/episodes/downloads>

On the University of Bath website, you will find the Outreach resource hub

(<https://www.bath.ac.uk/topics/outreach-resource-hub/>) with specifically tailored information for year 12/13 students who are currently engaging with the University application process. It contains information about the HE application process, skills talks, student experience and experience videos for a variety of courses (including psychology),



info about student finance and more. Information is not specific to psychology or University of Bath courses. This could also be a useful resource for you to look at if you have some time and are planning on going to University.

Head of subject: Miss H. Fisher

Email address: hfisher@beechencliff.org.uk



Suggested tasks

Artificial intelligence

- 1.. Read Alan Turing's article on AI, published in 1950
<https://academic.oup.com/mind/article/LIX/236/433/986238>
2. Listen to the podcast on BBC Sounds 'Beyond Belief – Artificial Intelligence, with Ernie Rea (released on 6.4.15) <https://www.bbc.co.uk/programmes/b05pmrtp>
3. Write an essay on whether AI is a positive or dangerous phenomenon. Include your own evaluation.

The moral responsibility of children

1. What do we mean by 'moral agency?'
2. Do you think we can classify children as moral agent? Why / why not?
3. Research and summarise Lawrence Kohlberg's theory on moral development.
4. What are the main criticisms to Kohlberg's theory? Do you agree?

Philosophy and religion

1. Watch the following TED talk
https://www.ted.com/talks/dan_dennett_let_s_teach_religion_all_religion_in_schools
2. Do you agree that religion should be taught in schools?
3. How is the right to hold religious beliefs protected by law?
4. Listen to the BBC Sounds podcast Moral Maze- The Tolerance of Intolerance (released on October 2019). What happens when religion impacts other parts of the child's education?

Justice

1. Watch the following YouTube video
<https://www.youtube.com/watch?v=H0CTHVCKm90>
2. Do some further research into John Rawls' theory of justice. Summarise it and the main criticisms.
3. What are the main theories of justice in relation to punishment and wrongdoing? Which do you find the most convincing?
4. Watch the film The Shawshank Redemption. What issues of justice are being raised?



Philosophy of mind- Brain in a vat

1. Watch this short video on Descartes 'cognito' theory
<https://www.open.edu/openlearn/history-the-arts/culture/philosophy/concepts/rene-descartes-i-think-therefore-i-am>
2. What is the difference between a priori knowledge and a posteriori knowledge?
3. Watch the film 'The Matrix'
4. Considering what you've just watched, read through the following 'brain in a vat' explanation <https://www.iep.utm.edu/brainvat/>

Reading and note taking

Try this open university course to help you understand how to read different texts effectively and take notes.

<https://www.open.edu/openlearn/society-politics-law/sociology/reading-and-note-taking-preparation-study/content-section-0?active-tab=description-tab>

Suggested further reading/ watching:

There is a brilliant range of Open University courses (free) - try to choose a range of topic areas, and once you have completed courses be sure to add them to your CV:

<https://www.open.edu/openlearn/free-courses/full-catalogue>

Work through the recommended books/films list which was set on Google Classroom and is also available on the RPE homepage on the BCS website (password is bcs)

Head of subject: Miss P Netto

Email address: pnetto@beechencliff.org.uk

Spanish



Suggested tasks

- Join the FB group 'mfl clips with audio and subtitles'
 - If you have a kindle, download some Spanish books and the Spanish dictionary and you can click on words that you don't understand
-
- Find a new Spanish series on netflix to watch and watch with Spanish subtitles instead of English if you can.
-
- If you enjoyed El coronel no tiene quien le escriba try the obra maestra by García Márquez - *Cien años de soledad* - this is where it all started ...
 - [Gabriel García Márquez hablando sobre literatura y cine](#)
 - If you didn't like the magic realism try any of the books by Carlos Ruíz Zafón set in Barcelona. *La sombra del viento* is the first.
-
- Watch the level 2B videos on videoele.com to keep up your standard of Spanish
-
- Watch El espinazo del diablo and other films by Guillermo del Toro
[Exclusiva | Entrevista con Guillermo del Toro](#)

Suggested further reading/ watching:

The films and books on our syllabus are a good example of what you might study at university if you are going to continue with Spanish:

Films on the the AQA set list:

El laberinto del fauno Guillermo del Toro (2006)
Ocho apellidos vascos Emilio Martínez-Lázaro (2014)
María, llena eres de gracia Joshua Marston (2004)
Volver Pedro Almodóvar (2006)
Abel Diego Luna (2010)
Las 13 rosas Emilio Martínez-Lázaro (2007)

If you prefer reading, the set list from AQA is:

Federico García Lorca La casa de Bernarda Alba
Gabriel García Márquez Crónica de una muerte anunciada
Laura Esquivel Como agua para chocolate
Ramón J. Sender Réquiem por un campesino español
Carlos Ruiz Zafón La sombra del viento
Isabel Allende La casa de los espíritus



Gustavo Adolfo Bécquer Rimas
Fernando Fernán-Gómez Las bicicletas son para el verano
Luis de Castresana El otro árbol de Guernica
Gabriel García Márquez El coronel no tiene quien le escriba

Head of subject: Kate Marshall

Email address: kmarshall@beechencliff.org.uk



University course preparation

Preparing academically for university study can be daunting. The teaching and learning style is often totally different from that of sixth form. The University of East Anglia have created a free online course called 'Preparing for University' that explores and develops key skills that you will need to thrive in a university learning environment. Topics include questioning, independent study and reading skills, analysis of literature, referencing and structuring your thoughts and ideas at university level. Please visit www.futurelearn.com/courses/preparing-for-uni to join the course.

Although you may not yet know the exact reading list for the first year of your course yet there are other ways to prepare for the start of your degree. You can search online for suggested reading and resources for your chosen degree subject and follow the guidance of other universities if you can't find a list specific to your course. For example, the University of Oxford has extensive lists of resources for different subjects; visit www.ox.ac.uk/admissions/undergraduate/courses/suggested-reading-and-resources for a look at their suggestions. The University of Warwick also has some good suggestions if you search for their 'summer reading' pages.

You could also get ahead of the game by looking up the modules you will be studying in your first year by looking at the course content section of the university page for your chosen degree course. Having found the specific topics, you could then begin reading around these subjects online, ready for the start of term.