

Year 11 into Year 12 Bridging Tasks

To help you make the best possible start to A Level studies, your teachers have put together some possible tasks you can be doing in preparation for starting Year 12. If you are planning on doing A Level at Fairfax we would strongly recommend that you do this work in preparation. The suggested activities are below. If you have any queries please message your teacher through Show My Homework or email post@fairfax.bham.sch.uk

Subject	Suggested Activities in Preparation For Year 12
Accounting	<p>1. Research the difference between a bookkeeper and an accountant. What does a bookkeeper do? What does an accountant do? Create a summary of your findings. Click the link and watch the video to start your research: https://www.aat.org.uk/career-in-finance/starting-your-career/accounting-or-bookkeeping</p> <p>2. Research the difference between financial accounting and management accounting. Create a summary of your findings. Here is a useful starting point for your research: https://www.fool.com/the-blueprint/managerial-accounting-vs-financial-accounting/</p>
Art	<p>Create a Pinterest board of any artists you are inspired by, this could be any media, any subject matter or genre.</p> <p>Create another Pinterest board with images related to the theme of 'Isolation.' These can be photographs of things to draw from and artists work.</p> <p>Create some sketches or drawings based on the theme of 'Isolation'. These could form part of the initial unit in Year 12. They could be objects in homes or surroundings drawn from first hand observation. Portraits of your family or from found images drawn from secondary sources (photos). They could be little sketches or fully realised drawings, multiple small drawings on a page or larger scale work.</p> <p>Read Terry Barratts Art Criticism: Principles of Interpretation. Versions can be found online.</p>
Biology	<p>Course textbook – Read over what you should know pages to ensure you have the relevant GCSE knowledge for the course AQA Biology: A Level: September 2015. Glenn and Susan Toole. Available at amazon.co.uk</p> <p>Extra-curricular reading list</p> <p>Junk DNA Our DNA is so much more complex than you probably realize, this book will really deepen your understanding of all the work you will do on Genetics. Available at amazon.co.uk</p> <p>Frankenstein's cat Discover how glow in the dark fish are made and more great Biotechnology breakthroughs. Available at amazon.co.uk</p> <p>Video links</p> <p>A New Superweapon in the Fight Against Cancer Available at : http://www.ted.com/talks/paula_hammond_a_new_superweapon_in_the_fight_against_cancer?language=en</p>

Cancer is a very clever, adaptable disease. To defeat it, says medical researcher and educator Paula Hammond, we need a new and powerful mode of attack.

Why Bees are Disappearing

Available at :

http://www.ted.com/talks/marla_spivak_why_bees_are_disappearing?language=en

Honeybees have thrived for 50 million years, each colony 40 to 50,000 individuals coordinated in amazing harmony. So why, seven years ago, did colonies start dying en-masse?

Why Doctors Don't Know About the Drugs They Prescribe

Available at :

http://www.ted.com/talks/ben_goldacre_what_doctors_don_t_know_about_the_drugs_they_prescribe?language=en

When a new drug gets tested, the results of the trials should be published for the rest of the medical world — except much of the time, negative or inconclusive findings go unreported, leaving doctors and researchers in the dark.

Growing New Organs

Available at :

http://www.ted.com/talks/anthony_atala_growing_organs_engineering_tissue?language=en

Anthony Atalla's state-of-the-art lab grows human organs — from muscles to blood vessels to bladders, and more.

Virtual support

At GCSE you learnt how genetic diseases are inherited. In this virtual fly lab you get to breed fruit flies to investigate how different features are passed on.

<https://sciencecourseware.org/vcise/drosophila/Drosophila.php?guestaccess=1>

Probably the best website on Biology....

Learn Genetics from Utah University has so much that is pitched at an appropriate level for you and has lots of interactive resources to explore, everything from why some people can taste bitter berries to how we clone mice or make glow in the dark jelly fish. <http://learn.genetics.utah.edu/>

A video you definitely want to watch. One of the first topics you will learn about is the amazing structure of the cell. This BBC film shows the fascinating workings of a cell... a touch more detailed than the “fried egg” model you might have seen.

http://www.dailymotion.com/video/xzh0kb_the-hidden-life-of-the-cell_shortfilms

If this link expires – google “BBC hidden life of the cell”

Many Zoos have great websites, especially London Zoo. Read about some of the case studies on conservation, such as the Giant Pangolin, the only mammal with scales. <https://www.zsl.org/conservation> DNA from the beginning is full of interactive animations that tell the story of DNA from its discovery through to advanced year 13 concepts. One to book mark! <http://www.dnaftb.org/>

Business	Access Seneca Learning online, go to Business: Edexcel A Level, and choose and work through topics related to Theme 1: Marketing and People, 1.1 Meeting customer needs
BTEC Business	Research TWO Businesses (ONE profit making e.g. TESCO and ONE non profit making e.g. CANCER RESEARCH, OXFAM), find out: <ul style="list-style-type: none"> - Type of ownership e.g. sole trader, limited company, voluntary - Size of business e.g. number of employees, Turnover, number of stores - Scope of business e.g. local, national, international

	<ul style="list-style-type: none"> - Sector of business e.g. primary, secondary, tertiary - Aims and objectives of both businesses
BTEC Sport	A research task sheet has been uploaded onto the Academy website for you to complete in preparation for the BTEC Sport course.
Chemistry	<ol style="list-style-type: none"> 1. Ensure all aspects of C1 to C10 GCSE Chemistry are thoroughly understood. The objective cover sheet of the GCSE revision packs sent out for revision will also detail how that topic links into A Level content. 2. Concentrate on any weak topics from C1 to C10 so that transition to A level is smoother – basics such as C1 Atomic Structure, C2 Bonding, C3 Quantitative, C7 Organics are good foundations to start with. 3. Further reading and preparation can be made for Year 12 by reviewing and applying knowledge to the following links: <p>https://www.physicsandmathstutor.com/chemistry-revision/a-level-aqa/</p> <p>https://chemrevise.org/revision-guides/</p>
Computer Science	<p>Look at the Teach-ict website for the OCR A level Computer Science theory notes that we teach at A Level.</p> <p>http://teach-ict.com/2016/A_Level_Computing/OCR_H446/OCR_H446_home.html Username: B75 7JT Password: gateway6</p> <p>Sign up to Code Academy and Khan academy to learn how to programme in different languages for free.</p> <p>https://www.codecademy.com/ https://www.khanacademy.org/computing/computer-programming</p>
D&T: Product Design	<p>To prepare for the A Level Design and Technology course you could do some reading. You don't need to read everything on this list but these are some recommended articles or books.</p> <p style="text-align: center;">A-Level Design and Technology: Product Design Reading List</p> <p>AQA Design and Technology: Product Design (7552) Specification http://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552</p> <p>Design & Technology Product Design (published late October 2017) Will Potts, Julia Morrison, Ian Granger, Dave Sumpner A sample is available here: http://filestore.aqa.org.uk/textbooks/sample/as-and-a-level-design-and-technology/AQA-7551-7552-HODDER-SAMPLE.PDF</p> <p>AQA Design and Technology: Product Design (3-D, Design). Nelson Thornes. ISBN 978-0-7487-8257-4 Brian Evans & Will Potts.</p> <p>The Measure of Man and Woman: Human Factors in Design Alvin R. Tilley</p>

	<p>John Wiley & Sons; Revised Edition edition (13 Feb 2002) ISBN: 0471099554</p> <p>Invention by Design – How Engineers get from Thought to Thing Henry Petroski Harvard University Press, 1998 ISBN 067446368</p> <p>Small Things Considered: Why there is No Perfect Design Henry Petroski Random House, 2004 ISBN 1400032938</p> <p>Product Design (Portfolio) Paul Rodgers Laurence King (1 Aug 2011) 1856697517</p> <p>Material Innovation: Product Design Andrew H. Dent Thames and Hudson Ltd (12 May 2014) 0500291292</p> <p>Process: 50 Product Designs from Concept to Manufacture Jennifer Hudson Laurence King; 2 edition (25 April 2011) 1856697258</p>
Drama and Theatre	<ol style="list-style-type: none"> 1. Carry out research into Drama practitioners, paying particular attention to Stanislavski and Steven Berkoff. 2. Read as many play texts as possible and reviewing them in essay style format. 3. Research as many different genres and performance companies as they can - developing knowledge of numerous styles of theatre. 4. Watch as many online performances as possible - YOUTUBE has examples of A level style performances. 5. Read the OCR Drama and Theatre specification (accessible on the OCR website) and looking at the course content and assessment criteria.
Economics	<p>Carry out some research on the macroeconomic variables e.g. current interest rates, exchange rates, inflation rate, unemployment rate and economic growth of the UK, USA, China, Russia, India, Brazil, South Africa and Vietnam.</p> <p>Complete a time line for the UK documenting how the macroeconomic variables have changed over the past 15 years and what important news stories have impacted on these variables.</p>
English Language and English	<p>We have been given free access for 90 days to the Cambridge online textbooks - for details regarding how to access these texts, please see the details below:-</p>

Literature	<p>Please Note - All English books have been clubbed together onto one book shelf so you will see A Level English Language and English Literature (Specification A) on the same shelf</p> <ol style="list-style-type: none"> 1- Please use the link here to log in and register, https://www.cambridge.org/gb/education/90-day-trial 2- Use the school name, school postcode (B75 7JT) and school email address. If you have registered recently for a 30 day trial you will have to use another email address, a personal one or other as you cannot have 2 trials running at the same time on one email. 3- Once registered you will be sent a link, with your username and password to the email address used. 4- Please log in. 5- You will be presented with a bookshelf, please be sure to click onto the correct book. 6- Use the home tab top right hand corner to go back to your book shelf. Use the question mark for "how to use" 7 - You can now access all books for 90 days <p>If you can't access the free log in - please email K.Ford@fairfax.bham.sch.uk for support.</p> <p>When you have logged in, take a look through the outline of the Specification and the chapters that guide you through the course - again, if you want support, please email Mrs Ford.</p> <p>In addition, please see the following resources:-</p> <p>English Language:- https://www.aqa.org.uk/subjects/english/as-and-a-level/english-language-7701-7702 A Level English Language - Glossary for Students (available on the Academy website) A Level Knowledge Organiser (available on the Academy website) Write like a literary scholar! (available on the Academy website)</p> <p>English Literature:- https://www.aqa.org.uk/subjects/english/as-and-a-level/english-literature-a-7711-7712 A Level English Literature - Unseen Prose Booklet (available on the Academy website) Write like a literary scholar! (Available on the Academy website) Key Stage Four and Five Reading List (Available on the Academy website)</p>
Food	<p>1. Practise some high skilled practical's – great YouTube tutorials that you can watch.</p> <p>Jointing a chicken Youtube - Jointing a chicken - WJEC Eduqas GCSE Food Preparation and Nutrition</p> <p>How to fillet a seabass – Jamie oliver</p> <p>Making pasta, pastry, bread from scratch all great things you can practice.</p> <p>Making sauces from scratch – Béchamel, Hollandaise, Ragu, Meat sauce, Custard,</p>

	<p>2.Theory content that you could research:</p> <p>Food allergies and intolerances Food safety – HACCP Nutrition – Structure and function of nutrients – Protein, Fats, Carbohydrates, Vitamins and minerals, water. Unsatisfactory nutritional intake</p>
Geography	<p>Firstly ensure you keep all your notes and revision materials from GCSE</p> <ul style="list-style-type: none"> • Coast: Make sure you have a full understanding of processes (eg erosion, deposition) and landforms. You can use https://timeforgeography.co.uk/videos_list/coasts/ and should also read attachments (will be on SMH). • Hazards: Consolidate your understanding of plate tectonics https://timeforgeography.co.uk/videos_list/plate-tectonics/ + readings attached (SMH) • Living World: consolidate your understanding of the Living World topic (use your Biology notes too for ecosystems/food chains) https://timeforgeography.co.uk/videos_list/ecosystems/ • Human geography: Revise key concepts such as sustainable development, demographic transition and resource inequality from http://www.coolgeography.co.uk/gcsen/revision_zone.php Read the attachments on SMH • Brush up on your map skills at https://www.youtube.com/playlist?list=PLJp4yCtYcXprknSY_FAUpWG5ZbDwHmfY7 • You might want to look at this website, ‘Developing as a geographer’ section, which has been prepared by another school (we’re all in the same position), but do not use the ‘Preparing for A Level’ section, as we use a different exam board) http://www.geobytes.org.uk/developingasageographer.html <p>There is lots more available – email or comment on SMH if you want more.</p>
Health and Social Care	<p>These are the two units you will cover in year 12. This is reading material but also examination unit, Unit 1 you could make revision cards on key topics.</p> <p>Unit 5 text book (coursework unit – year 12) https://www.pearsonschoolsandcolleges.co.uk/FEAndVocational/HealthAndSocialCare/BTEC/BTECNationalsHealthandSocialCare2016/Samples/Student-Book-1/BTEC-National-in-Health-and-Social-Care-Unit-05-web-ready.pdf</p> <p>Unit 1 text book (exam unit – year 12) https://www.pearsonschoolsandcolleges.co.uk/FEAndVocational/HealthAndSocialCare/BTEC/BTECNationalsHealthandSocialCare2016/Samples/Student-Book-1/BTEC-National-in-Health-and-Social-Care-Unit-01-web-ready.pdf</p>
History	<p>To prepare for A Level History we would recommend that you do some reading around the topics you will be learning about next year:</p> <p>Use these links to gain some knowledge about the Weimar and Nazi Germany.</p> <p>https://spartacus-educational.com/GERweimar.htm https://spartacus-educational.com/GERnazigermany.htm https://books.google.co.uk/books?id=D3SYDwAAQBAJ&printsec=frontcover&dq=</p>

[weimar+germany&hl=en&sa=X&ved=0ahUKEwip7cvJubXoAhWgUxUIHSrcAkQ6AEIKDAA#v=onepage&q=weimar%20germany&f=false](https://www.google.com/search?q=weimar+germany&hl=en&sa=X&ved=0ahUKEwip7cvJubXoAhWgUxUIHSrcAkQ6AEIKDAA#v=onepage&q=weimar%20germany&f=false)

To learn about the Tudors you could:

Read

Useful summaries on the Tudors and the key issues

<https://www.historylearningsite.co.uk/tudor-england/>

There are many excellent Tudor historians now writing historical fiction. This is a great way to introduce yourself to the period, two authors include: Philippa Gregory C J Sansom

At this time, it is better that we do not put additional pressure on the postal system, however you may be able to download some books.

Watch

Henry VII Winter King (Thomas Penn) <https://www.youtube.com/watch?v=-5FsriGn300>

England's Reformation - Three Books That Changed a Nation (2017)

<https://www.youtube.com/watch?v=E1KJSfrSpvg>

Henry VIII Mind of a Tyrant

<https://www.youtube.com/watch?v=0bnGU27B4Do>

Edward IV (Starkey Edward and Mary 1 of 2)

https://www.youtube.com/watch?v=5mRFbmSga_4&list=PLtKIYuksaKPJb3JOM-UAql7n0AoYBbdh2&index=1

Mary I (Starkey Edward and Mary 2 of 2)

<https://www.youtube.com/watch?v=EB8qQpnn7eA&list=PLtKIYuksaKPJb3JOM-UAql7n0AoYBbdh2&index=2>

David Starkey's Four part Elizabeth series

<https://www.youtube.com/watch?v=VQbvaGl4jrg&list=PLpXvpPZf6WzD2OEAHPk2Q3iFH9nBVb69>

<https://www.youtube.com/watch?v=ivX-RkofpqM&list=PLpXvpPZf6WzD2OEAHPk2Q3iFH9nBVb69&index=2>

<https://www.youtube.com/watch?v=d0S6xhuf4hc&list=PLpXvpPZf6WzD2OEAHPk2Q3iFH9nBVb69&index=3>

<https://www.youtube.com/watch?v=Pqq3obA6GpA&list=PLpXvpPZf6WzD2OEAHPk2Q3iFH9nBVb69&index=4>

<https://www.youtube.com/watch?v=Pqq3obA6GpA&list=PLpXvpPZf6WzD2OEAHPk2Q3iFH9nBVb69&index=4>

Kings and Queens of England-the Tudors Summary

https://www.youtube.com/watch?v=efY2d49_s0o

For US Civil Rights you could:

Read

	<p>Martin Luther King, Jr. (Routledge Historical Biographies) Paperback – 11 Jul 2002 by Peter J. Ling</p> <p>Listen to Podcast- Stuff you should know Rosa Parks: Agent of Change https://www.youtube.com/watch?v=TpUViX96aU4&t=7s</p>
ICT	<p>BTEC National Extended Certificate in Information Technology</p> <p>Look at the specification (Units 1, 2, 3 and 6) and other materials on the website below to find out what this course is all about and what careers it could lead you to. https://qualifications.pearson.com/content/demo/en/qualifications/btec-nationals/information-technology-2016.html</p>
Law	<p>Carry out some research into the role of various key people in the justice system. Use the following website and explore both civil and criminal systems. Draw a hierarchy of the courts labelled with the various key personnel in each court and what their role is. https://www.judiciary.uk/about-the-judiciary/the-justice-system/jurisdictions/criminal-jurisdiction/</p> <p>Also research a recent (last 5 years) news story about either a criminal or civil case which has gone to court. Document a summary of the case (5 x key facts – what, where, who etc.) the outcome and why the case was ruled that way – why did the judge make that decision?</p>
Mathematics	<p>Worksheets and Tasks to prepare for A Level Maths have been uploaded onto Show My Homework and are also available on the Academy website.</p>
Physics	<p>A suggested reading list can be found on the Academy website. Each book contains subject content, questions and answers. Teachers would suggest that you start with Head start to A level Physics and move on from there.</p>
Psychology	<p>A list of suggested activities for students who are going to be doing Psychology A Level has been uploaded to the Academy website.</p>
Religion, Philosophy and Ethics	<ol style="list-style-type: none"> 1. Sign up to the free 3 month subscription (card details are not needed) to Ethics Online - www.ethicsonline.co.uk. Watch the videos on the members area and read through the associated teacher notes. 2. Suggested readings: (all available to purchase on Amazon) <ul style="list-style-type: none"> - An Introduction to the Philosophy of Religion, Davies, B. - The Puzzle of Ethics, Vardy, P. - Christianity: An Introduction. McGrath, A. 3. Watch the Harvard online Justice lectures and make notes: http://justiceharvard.org
Sociology	<p>Explore sociological themes by reading and watching the suggestions below:</p>

Books

1984 – By George Orwell.

Gang Leader for a Day; a rogue sociologist crosses the line – by Sudhir Venkatesh.

The Spirit Level – why equality is better for everyone – by Richard Wilkinson and Kate Pickett.

The People – the rise and fall of the working class – by Selina Todd.

Chavs – the demonization of the working class – by Owen Jones.

Documentaries

Stacey Dooley Investigates - BBC

Panorama (the recent special on Amazon is excellent) - BBC

Life and Death Row – BBC

Louis Theroux documentaries – on BBC and Netflix

60 Days In - Netflix

Films

Made in Dagenham

Billy Elliott

Pride

The Social Network

Bowling for Columbine