

Nottingham Academy Sixth Form

Bridging the gap between Year 11
and Sixth Form

Support and guidance in getting
ready for your next steps in your
chosen subject areas...





Bridging the Gap: BIOLOGY

Useful websites to use:

<https://www.sciencelearn.org.nz/embeds/12-which-microscope>
<https://www.youtube.com/watch?v=3LIZBn7bS4s>
<https://www.khanacademy.org/science/high-school-biology/hs-cells/hs-introduction-to-cells/a/microscopy>
<https://www.stem.org.uk/big-picture/resource-collection>

Useful links/articles to watch and read:

<https://www.citethisforme.com/harvard-referencing>
<https://www.youtube.com/watch?v=8cHiJO5by8c>
<https://www.ocr.org.uk/Images/171736-specification-accredited-a-level-gce-biology-a-h420.pdf>

Useful things to research:

Some research and tasks to compliment the modules of Year 1 in Biology A Level

Module 1: Harvard Referencing format

Module 2: Advantages and disadvantages of different types of microscopes

Module 3: Exchange surfaces – the need and features of specialist exchange surface

Module 4: Summarise random and non random types of sampling of biodiversity

Some tasks to complete before September:

Task 1 : Understanding Harvard Referencing.

One of the requirements of the Practical Endorsement is that learners demonstrate that they can correctly cite sources of information. Produce a 'made up' reference list to ensure you are competent on how to set it out – see link above to help.

Task 2: Understanding microscopes and magnification

Q: Compare and contrast the magnification, resolution, function, advantages and disadvantages for compound, scanning electron, transmission electron and confocal laser scanning microscopes.

Task 3: Understanding the need for specialised exchange surfaces

Q: Explain why single celled organisms can survive using diffusion alone?

Task 4: Understanding biodiversity investigations

Plan an investigation to quantify species of biodiversity of; plants affected by change in altitude and on a slope.





Bridging the Gap: BUSINESS



Useful websites to use:

Summary Brochure – Level 3 Business

<https://www.ocr.org.uk/qualifications/cambridge-technical/business/#level-3>

Units covered 1, 2, 4, 5 and 8.

Useful links/ articles to watch and read:

Business Text Book

[Amazon link](#)

Cambridge Technicals Level 3 Business Paperback – 30 Sept. 2016

by [Tess Bayley](#) (Author), [Karen Tullett](#) (Author), [Leanna Oliver](#) (Author), [Dianne Wainwright](#) (Author)

Useful things to research:

Why Study Business?

<https://www.hult.edu/blog/reasons-to-study-business/>

<https://www.topuniversities.com/courses/business>



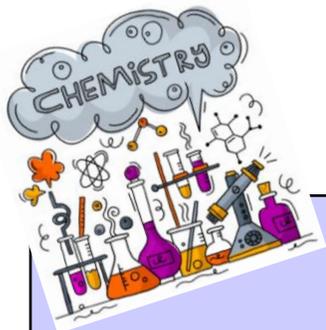
Some tasks to complete before September:

First Unit is Customers and Communication

Choose a business and research how they interact with their customers

Website, Leaflets, newsletter, social media, face to face

<https://www.glion.edu/magazine/communication-skills-customer-service/>



Bridging the Gap: CHEMISTRY



Useful websites to use:

www.creative-chemistry.co.uk

www.chemguide.co.uk

www.bbc.co.uk/schools/cgsebitesize/chemistry

www.rsc.co.uk

<https://phet.colorado.edu>

Useful links/ articles to watch and read:

Try 'Head Start to A-Level Chemistry' (Buy online at: <https://www.cgpbooks.co.uk/>, only £4.95!).

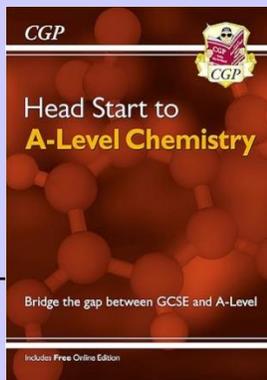
Subscribe to 'New Scientist' (magazine)

Worth a read:

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

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

Sam Kean: The Disappearing Spoon.



Useful things to research:

How to Harvard reference

Electronegative Atoms & Chemical Bonding

Stoichiometry & Mole Concept

Molecules Skeletal Representation Model

How to Conduct Chemical Experiment



Some tasks to complete before September:

Y11 to Y12 Transition Booklet

Access the booklet [here](#)



Bridging the Gap: CHILDCARE

Useful websites to use:

- BTEC Level 3 Children's Play, Learning and Development
- Development Matters in the Early Years Foundation Stage (EYFS)
- www.nurseryworld.magazine.co.uk
- www.ofsted.gov.uk – Ofsted: Information about EYFS Ofsted requirements
- www.foundationyears.org.uk/eyfs-statutory-framework - EYFS documentation: information and guidance on using the EYFS

Useful links/articles to watch and read:

Netflix: Babies
BBC1 iPlayer: Life and Birth
BBC iPlayer Call the Midwife
Secret Life of 4 and 5 Year Olds



Tassoni, P. (2012) Penny Tassoni's Practical EYFS Handbook, 2nd edition, Harlow: Pearson
Magazines: Mother and Baby; Nursery World
BTEC Nationals Children's Play, Learning and Development (Text book)
How Children Learn: From Montessori to Vygotsky - Educational Theories and Approaches Made Easy

Useful things to research:

1. Types of play – child initiated/adult initiated
2. Physical development from birth to 7 years 11 months
3. Curriculum approaches to play:
 - ✓ Reggio Emilia
 - ✓ HighScope
 - ✓ Forest Schools
 - ✓ The New Zealand Te Whāriki
 - ✓ Montessori.
4. Theories of Attachment: Bowlby's theory of attachment; Ainsworth's and the 'Strange Situation'

Some tasks to complete before September:

Task 1:

Research the following curriculum approaches:

- ✓ Reggio Emilia
- ✓ HighScope

Identify two benefits of each approach.

What similarities are there between the HighScope approach and that of Reggio Emilia?

Task 2:

Explain the difference between growth and development.

State three physical skills that a 9 month old baby has acquired.

Describe the key developmental differences between a baby at 3 months and a baby at 9 months



Bridging the Gap: CRIMINOLOGY



Useful websites to use:

<https://bit.ly/3bpDavn>

A chapter of a Criminology book covering the basics.

<https://bit.ly/34ZvT2U>

Sociological explanations of crime



Useful links/articles to watch and read:

TED Talk – Finger Prints

<https://bit.ly/2Y1zRq5>

TED Talk – How reliable is your memory?

<https://bit.ly/2VAmgEw>

Netflix: Amanda Knox

Netflix: Conversations with a Killer – The Ted Bundy Tapes

Useful things to research:

Crime
Deviance
Types of Crime
Criminal Justice System
Crown Prosecution System
Roles in Court
Types of Court

Some tasks to complete before September:

Create fact files on key criminal cases:



Stephen Lawrence



Damilola Taylor



Amanda Knox



Barry George

Harold Shipman

Email ismikle@nottinghamacademy.org for further tasks



Bridging the Gap: ENGLISH LITERATURE

Useful websites to use:

Seneca Learning Revision: A-Level Literature

<https://podcasts.apple.com/us/podcast/revise-a-level-english-lit-revision/id1460402605?ign-mpt=uo%3D4>

<https://literaryterms.net/glossary-of-literary-terms/>

Useful links/articles to watch and read:

<https://www.folger.edu/shakespeare-unlimited/why-shakespeare-stories-still-resonate>

How and Why We Read:

<https://www.youtube.com/watch?v=MSYw502dJNY>

The Power of Fiction:

https://www.ted.com/playlists/346/the_power_of_fiction_1



Useful things to research:

Literature through the ages: how has love been presented throughout the ages (as far back as you can find)?

Narrative theory:

<https://www.youtube.com/watch?v=mlZNGkM07mY>

<https://www.youtube.com/watch?v=OwT-irY4LM>

Literary value and the canon:

<https://www.youtube.com/watch?v=hXLm3zZYhc0>

<https://www.youtube.com/watch?v=MSYw502dJNY>

<https://www.youtube.com/watch?v=GHq-tRWauj4>



Some tasks to complete before September:

1. Take notes of any ideas or techniques that the writer used that interested you.
2. Write a critical review of the text. Here is an example, a review of The Handmaid's Tale in The Guardian:
<https://www.theguardian.com/books/2010/sep/26/the-handmaids-tale-margaretatwood>
3. Do a piece of creative writing inspired by the text – this should in some way mimic the style of writing of the author – and write a commentary on how you have achieved this.
4. Read a critical view of the text that you have chosen. 5. Create a short presentation (3–5 minutes), that you can deliver to your class and/or teacher, on the text which covers the basic ideas of the text but also considers it critically.

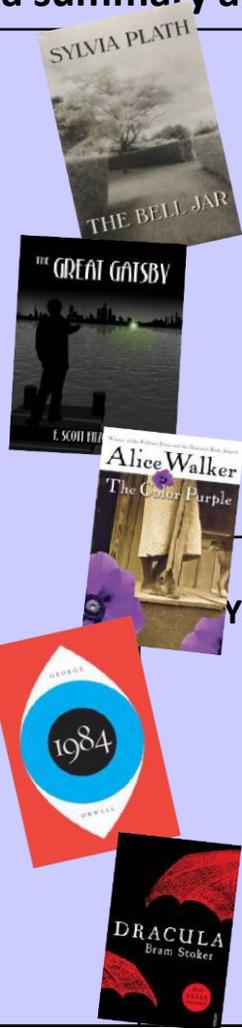


Bridging the Gap: ENGLISH LITERATURE

A fiction reading list

If you're looking for a challenging text to get into or just don't really know where to start, have a look at the following novels. Find a summary and see if it interests you.

Chinua Achebe: Things Fall Apart
Chimimanda Ngozi Adichie: Half of a Yellow Sun
Naomi Alderman: The Power
Margaret Atwood: The Year of the Flood
Jane Austen: Pride and Prejudice
Pat Barker: Regeneration
Iain Banks: The Wasp Factory
Anthony Burgess: A Clockwork Orange
Angela Carter: The Bloody Chamber
Paulo Coelho: The Alchemist
Philip K Dick: Do Androids Dream of Electric Sheep
Bret Easton Ellis: American Psycho
Zora Neal Hurston: Their Eyes Were Watching God
Guy Gunaratne: In Our Mad Furious City
William Golding: The Lord of the Flies
J.D. Salinger: The Catcher in the Rye
Nathaniel Hawthorne: The Scarlett Letter
Khaled Hosseini: A Thousand Splendid Suns
Aldous Huxley: Brave New World
Kazuo Ishiguro: Never Let Me Go
Madeline Miller: Circe
Tony Morrison: Beloved



George Orwell: 1984
Sylvia Plath: The Bell Jar
Jean Rhys: Wide Sargasso Sea
Arundhati Roy: The God of Small Things
Jean Rhys: Wide Sargasso Sea
Lionel Shriver: We Need to Talk About Kevin
Zadie Smith: White Teeth
Bram Stoker: Dracula
Oscar Wilde: The Picture of Dorian Gray
Jeanette Winterson: Oranges are not the Only Fruit
Marcus Zusak: The Book Thief

Books you will read on the course.

You might want to read these or other texts by the same author.

Scott. F. Fitzgerald: The Great Gatsby
Alice Walker: The Color Purple
Carol Ann Duffy: The Feminine Gospels
AQA Poetry Anthology: Love Through The Ages
Tennessee Williams: Cat on a Hot Tin Roof

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Bridging the Gap: HEALTH AND SOCIAL CARE

Useful websites to use:

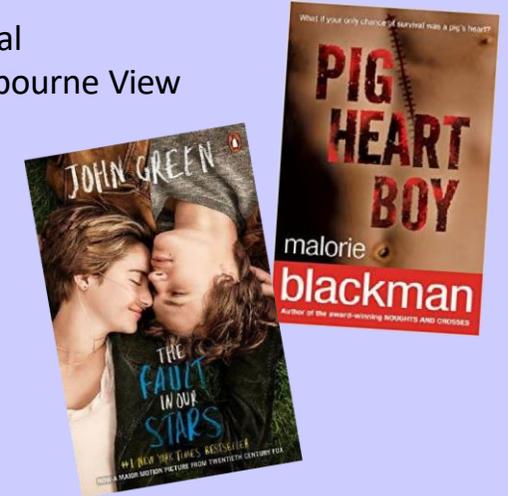
World Health Organisation (WHO)
The NHS Website
OCR Cambridge technical in Health and Social Care
www.diabetes.org.uk
www.bhf.org.uk (heart)
Change 4 Life

Useful links/articles to watch and read:

The Cure, Channel 4 – Stafford Hospital
Panorama: Undercover Care -Winterbourne View
Elizabeth is Missing (BBC iPlayer)
Still Alice (DVD)
Miss you Already (Netflix)

Further Reading:

Story of Baby P by Ray Jones
The Fault in Our Stars by John Green
Pig Heart Boy by Malorie Blackman
Nursing Times magazine



Useful things to research:

1. Role of the Quality Care Commission
2. Legislation such as:
 - The Care Act 2014
 - Children and Families Act 2014
 - Food Safety Act 1990
 - Civil Contingencies Act 2004
3. Theories of communication:
 - Argyle's communication cycle
 - Tuckman's stages of group interaction

Some tasks to complete before September:

Research and produce an information booklet on the following support networks:

- Mind
- Age UK
- Headway
- Empower Me

Research concepts of equality, diversity and rights and write one side of A4 outlining:

- Definition of each concept and how they are applied in the context of health, social care and child care environment



Bridging the Gap: HISTORY – Germany (1918-1945)



Useful websites to use:

- <https://www.activehistory.org/>
- http://www.bbc.co.uk/history/worldwars/wwtwo/hitler_01.shtml
- <https://spartacus-educational.com/GERnazigermany.htm>
- <https://www.history.com/topics/germany/weimar-republic>
- <https://www.historylearningsite.co.uk/nazi-germany/>
- <https://www.annefrank.org/en/anne-frank/go-in-depth/germany-1933-democracy-dictatorship/>
- <https://www.historylearningsite.co.uk/nazi-germany/>

Useful links/articles to watch and read:

Films to watch:

- Schindler's List
- The Pianist
- Valkyrie
- Sophie Scholl
- Downfall

Books to read:

- Anne Frank's Diary
- The Book Thief by Markus Zusak
- The Reader by Bernhard Schlink



Useful things to research:

Treaty of Versailles 1919
The Weimar Republic
Gustav Stresemann
Great Depression
Hitler's rise to power
Life in Nazi Germany

Some tasks to complete before September:

Create a profile on:
Friedrich Ebert
Gustav Stresemann
Paul Von Hindenburg
Adolf Hitler



Bridging the Gap: HISTORY - The Tudors: Henry VII



Useful websites to use:

<https://www.tudorhistory.org/>
<https://englishhistory.net/tudor/>
<https://www.bbc.co.uk/teach/how-the-tudor-dynasty-shaped-modern-britain/zrhdbdm>
https://www.britainexpress.com/History/Tudor_index.htm
<http://www.tudorbritain.org/>
<http://www.tudorplace.com.ar/>

Useful links/articles to watch and read:

To watch:

Henry VIII - Mind of A Tyrant (by David Starkey, in 4 parts on dailymotion.com)

Monarchy (a Channel 4 TV series) Season 2, episode 1 ("The Crown Imperial") on dailymotion.com in 5 parts

To read:

<https://www.britannica.com/biography/Henry-VII-king-of-England>

https://www.historytoday.com/archive/british_english_monarchs/henry-vii (a range of good articles on Henry VII)

Useful things to research:

- Henry VII's reign (1485-1509)
- Richard III and the Princes in the Tower
- The Battle of Bosworth, 1485
- Henry VII and Rebellions
- Henry VII and relationship with Spain, Scotland, France and the Habsburgs



Some tasks to complete before September:

Create a profile on:

Henry VII
Richard III
Elizabeth of York (Henry's wife)
Henry VIII



Bridging the Gap: ICT

Useful websites to use:

<http://www.teach-ict.com/asa2home.htm>

<https://www.techradar.com/uk>

<https://www.codecademy.com/>

<https://codeburst.io/how-to-make-a-collapsible-menu-using-only-css-a1cd805b1390>

<https://helpx.adobe.com/uk/dreamweaver/how-to/create-responsive-navigation-menu.html>

<https://www.knowitallninja.com/> - a website for L3 BTEC. Especially useful for Unit 1. Students can sign up and take the online tests and revise.

<https://blog.hootsuite.com/social-media-for-business/> - useful for Unit 3 Social Media.

Useful links/articles to watch and read:

Various news articles:

<https://techcrunch.com/>

Articles on:

Networks, Protocols, Hardware, Cabling, Topology, Software

<https://fcit.usf.edu/network/chap1/chap1.htm>

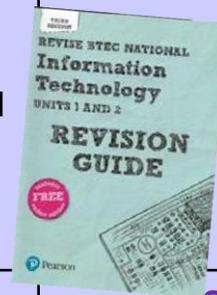
YouTube Video's:

<https://youtu.be/cNwEVYkx2Kk>

<https://youtu.be/Ud8UeNgdaz4>



Revision Guide: Information Technology Unit 1



Useful things to research:

HTML Coding

Relational Databases

IT Networks and Network Topology

9 Awesome YouTube Accounts for Tech Enthusiasts

<https://www.grammarly.com/blog/youtube-accounts-for-tech-enthusiasts/>

The benefits and limitations of different social media platforms

Some tasks to complete before September:

Sign up to: Sololearn.

You may access the material through apps on your phone or use the following website on your PC: <https://www.sololearn.com>

Work your way through materials on HTML.

Work through the revision materials for Unit 1 Technology Systems: <https://www.knowitallninja.com/courses/information-technology-systems/>

Work through the revision materials for Unit 2 - Creating Systems to manage information. <https://www.knowitallninja.com/courses/creating-systems-to-manage-information/>



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Bridging the Gap: MATHS



Useful websites to use:

www.mathsgenie.co.uk

www.corbettmaths.com

<http://m4ths.com/gcse-to-a-level-bridge.html>

http://mathsdontpanic.co.uk/AS_A2/Bridging_the_Gap



Useful links/articles to watch and read:



For A level maths you will need the Casio Classwiz Calculator Fx-991ex. It would be useful to watch YouTube videos on how to use this calculator to its full potential.

www.examsolutions.net is another great resource for watching videos on how to answer GCSE and AS style maths questions.

Useful things to research and practice:

Solving Quadratics
Sketching different types of graphs
Laws of Indices
Surds
Simultaneous Equations
Speed, Distance, Time Graphs
Techniques of Displaying Data

Some tasks to complete before September:

www.mathsgenie.co.uk is great for practising the topics shown on the left.

If you click GCSE revision and scroll down to Grade8/9 there are lots of practise questions, with the answers included for independent learning.



Bridging the Gap: PHOTOGRAPHY and ART

Useful websites to use:

www.creativelive.com – How to use a camera in the dark.

www.slrphotographyguide.com – How to photograph moving objects?

www.wikihow.com – how to blend Acrylica paint

www.myblueprint.com – 4 watercolour pencils techniques that will change your art game

www.mymodernmet.com – 5 tips for creating the perfect portfolio

<https://challengenottingham.co.uk/activities-for-children/f/creative-activities>

<https://www.visit-nottinghamshire.co.uk/nottgoingout/educational-resources>

Left Lion – April online issue:

<https://www.leftlion.co.uk/magazine/2020/april/leftlion-magazine-124/>

Useful things to research:

How to improve your annotation skills

How to create ideas in art and photography

How to use mixed medias in art

How to create an effective collage piece

How to improve your technical abilities

Improve how you research an artist or photography by checking their websites and not just using basic info on the web.

Useful links/articles to watch and read:

How to use photoshop for beginners

<https://www.youtube.com/watch?v=pFyOznL9UvA>

How to creatively blend two images in Photoshop

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

19 AMAZING Photoshop Tips, Tricks, and Hacks

<https://www.youtube.com/watch?v=38wy9PvUml4>

Blend multiple images in Photoshop

https://www.youtube.com/watch?v=Pr2jx62_k-g

How to Remove ANYTHING from a Photo in Photoshop

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

Watch Portrait Artist of the Year as it shows different ways of work (excellent series)

Some tasks to complete before September:

Work on Photoshop skills if you have the programme or use Pixel online. Take images of themes you are interested in, for example, people, objects, detail, texture?

Work on your technical abilities – how to paint, using the camera and observational drawing.

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Bridging the Gap: PHYSICS



Useful websites to use:

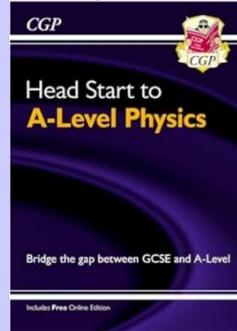
<https://spark.iop.org/teaching-advanced-physics#gref>

<https://www.revisely.com/>

<https://phet.colorado.edu>

<https://www.physicsandmathstutor.com/>

<https://www.alevelphysicsonline.com/>



Useful links/ articles to watch and read:

Try 'Head Start to A-Level Physics' (Buy online at: <https://www.cgpbooks.co.uk/>, only £5.99!).

Subscribe to 'New Scientist' (magazine)

Worth a read:

John Gribbin: In Search of Schrodinger's Cat

Brian Cox: Wonders of the Solar System

Chad Orzel: "How to Teach Quantum Physics to your Dog"

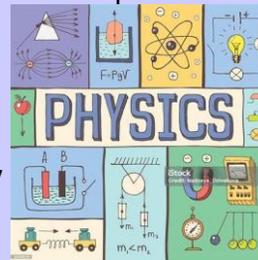
Useful things to research:

How to Harvard reference

Different types of errors

How to calculate absolute and percentage uncertainty

How to present data scientifically



Some tasks to complete before September:

Y11 to Y12 Transition Booklet

Access the booklet [here](#)

Bridging the Gap: PSYCHOLOGY

Useful websites to use:

www.simplypsychology.org

Lots of useful material, easy to navigate.

www.tutor2u.net/psychology

This website has great content, but difficult to navigate. Click reference library, select Study Notes, A Level and AQA from the filters.

Useful links/articles to watch and read:



TED Talk – 9 Psychology Myths

<https://bit.ly/2KEahzC>



Netflix: Babies

Podcast: **Psych Crunch** - From the British Psychological Society's

<https://digest.bps.org.uk/podcast/>

Useful things to research:

Attachment

What is an attachment and what are the different types of attachment?

Memory

What is the multi-store model of memory? What are some case studies that support this theory?

Social Influence

What is Zimbardo's classic study into conformity? What was wrong with it?

Some tasks to complete before September:

The first Topic that we do in sixth form is **Approaches** - this gives a really good understanding of the different perspectives in psychology.

Complete a presentation for the different approaches, with the outline of the approach then the strengths (including any applications) and weaknesses of the approach.

The approaches that we will cover are:

Behaviourist Approach

Biological Approach

Cognitive Approach

Psychodynamic Approach (Freud)

Humanistic Approach

A good starting point is:

<https://www.simplypsychology.org/perspective.html>

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Bridging the Gap: SOCIOLOGY

Useful websites to use:

www.educationforum.co.uk/sociology_2/onlinesochohome.htm
www.sociology.org.uk

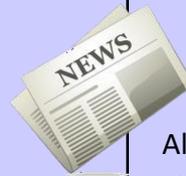
S-Cool Revision site:

http://www.s-cool.co.uk/topic_index.asp?subject_id=64

Sociology Central: <http://www.sociology.org.uk/>

National Statistics: <http://www.statistics.gov.uk/glance/>

Sociology Resources <http://www.ruthssociology.com/>



Useful links/articles to watch and read:

Almost all television programmes have sociological value. From soaps & Big Brother to current affairs and documentaries. Ones to look out for include:

Panorama (BBC1); Channel 4 News; Cutting Edge (C4); Have I Got News For You

Magazines/journals Key magazines would include:

Sociology Review; New Internationalist; The New Statesmen; The Economist

All newspapers are valuable resources for students. A number of key newspapers have sociologists writing articles, and cover stories in a very sociological in-depth way. Key newspapers include: The Guardian (On Tuesday there is An 'Education' supplement, and on Wednesday there is a 'Society' supplement); The Independent.

Useful things to research:

Family

What is a family and what are the different family types? Do males and females have separate roles in the family?

Education

Why do we need education? Would I achieve the same academic grades if I lived in a different part of Nottingham, or the UK or around the world?

Some tasks to complete before September:

Watch the C4 documentary '21 kids and counting':

<https://www.channel4.com/programmes/21-kids-and-counting>.

Write a sociological review of this programme, including:

What is unusual/surprising about the Radford family? Are they what you expected? Why/why not? What can we learn from them about family life in modern Britain? What pressures do the family face and how do they manage these? Is this a 'functional' family, where everything works smoothly for the benefit of the whole, or a 'dysfunctional family'? Explain your view.

Read this article on 'The Lost Boys':

<https://www.newstatesman.com/politics/education/2016/09/lost-boys-how-white-working-class-got-left-behind> and create a table of all the reasons why white working class boys are failing at school. One column should be headed 'factors inside school' (e.g. interactions with teachers, peer group etc) and the other 'factors outside school' (e.g. poverty at home, wider community)



Bridging the Gap: SPORT AND PE



Useful websites to use:

Teach pe:
<https://www.teachpe.com/>

A Level PE:
<https://ashpe.weebly.com/>



Useful links/articles to watch and read:

TED Talk:
<https://www.ted.com/talks?topics%5B%5D=sports>

Science for sport:
<https://www.scienceforsport.com/articles/>

Australian Institute of sport fact sheets:
<https://ais.gov.au/nutrition>

Useful things to research:

Use the OCR website to research course content for each of the courses we deliver at 6th Form:

<https://www.ocr.org.uk/qualifications/as-and-a-level/physical-education-h155-h555-from-2016/>

<https://www.ocr.org.uk/qualifications/cambridge-technical/sport-and-physical-activity/>

Some tasks to complete before September:

Use the teach pe and A Level PE websites to become familiar with the following topics:

Sports coaching
Anatomy and physiology
Sport psychology
Fitness training
Biomechanics

