

# DIG BOOKLET!



Ideas for  
deepening  
your  
knowledge and  
understanding



Are you up for the challenge?

# Maths

KS3

**UKMT Maths Challenge Club** – Week 1 Wednesday 2nd break and  
Week 2 Monday 2nd break

Eedi - <https://app.eedi.com/login>

## Suggested Reading:

- Can you Solve my Problems? - Alex Bellos
- 50 Mathematical Ideas You Really Need to Know – Tony Crilly
- The Math Book – Clifford A Pickover
- The GCHQ Puzzle Books

KS4

**Maths Support** - D8 Thursdays after school

## Suggested Reading:

- Alex's Adventures in Number Land – Alex Bellos
- Alex Through The Looking Glass – Alex Bellos
- The Code Book – Simon Singh
- Fermat's Last Theorem – Simon Singh

## Documentaries & Films:

- [https://www.ted.com/talks/eddie\\_woo\\_how\\_math\\_is\\_our\\_real\\_sixth\\_sense?language=en](https://www.ted.com/talks/eddie_woo_how_math_is_our_real_sixth_sense?language=en)
- <https://abakcus.com/25-beautiful-math-documentaries-to-love-math/>

KS5

## Suggested Reading:

- Infinite Powers – Steven Strogatz
- Godel, Escher, Bach: An Eternal Golden Braid – Douglas Hofstadter

## TED Talks in Maths:

[https://www.ted.com/playlists/189/math\\_talks\\_to\\_blow\\_your\\_mind](https://www.ted.com/playlists/189/math_talks_to_blow_your_mind)

MOOCS – Mathematics Courses:

<https://www.mooc.org/#course-categories>



# English

## KS3

Creative writing club – Thursday after school in D204

Read a newspaper once a week!

Read a book monthly alternating between fiction and non-fiction.

Familiarise yourself with the library and participate in the monthly topic challenges! (Science week, WBD, Remembrance month)

## KS4

Creative writing club – Thursday after school in D204

Read a newspaper article once a week to understand issues around the world!

Year 11: Attend intervention on a Monday P6

Read a book monthly! Try different genres you haven't read before.

Reread your texts – AIC, ACC, Macbeth, poems

### ALL

#### Links:

- Litchart
- Sparknotes
- York Notes
- BBC Bitesize
- Mr Bruff
- SENECA

Revision guides - AIC, ACC, Macbeth and poetry Knowledge Organisers

## KS5

- **George Orwell Essay 'Politics and the English Language'**
- <https://www.orwellfoundation.com/the-orwell-foundation/orwell/essays-and-other-works/politics-and-the-english-language/>
- **Literary Theory links and books -** [https://www.literaryconnections.co.uk/resources/books\\_a.html](https://www.literaryconnections.co.uk/resources/books_a.html)
- Literature Podcasts - <https://senecalearning.com/en-GB/blog/english-lit-a-level-podcasts-by-seneca/>
- Re-read texts/watch film versions/theatre productions of texts



# Science

## KS3

- **KS3 Science club** – Thursdays B202
- **NASA Space Place:** <https://spaceplace.nasa.gov/>
- **Science experiments** for kids:
- <https://www.sciencefun.org/kidszone/experiments/>

## KS4

- **STEM club** – Thursdays B105
- **Books:**
  - Bill Bryson – A short history of nearly everything
  - Ben Goldacre – Bad Science
  - Marty Jopson – Why teapots dribble...
  - Randall Munroe – Thing Explainer
- **TV/documentaries and people** to search for:
  - Horizon, NASA TV, Minute Physics
  - David Attenborough, Brian Cox, Maggie Aderin-Pocock
  - Current Netflix science series:<https://www.netflix.com/gb/browse/genre/2595>

## KS5

### **TED talks in science:**

<https://www.ted.com/talks?sort=newest&topics%5B%5D=Science>

**New Scientist:** [www.newscientist.com](http://www.newscientist.com)

<https://www.newscientist.com/article/2241718-the-21-best-science-documentaries-you-should-watch-right-now/>



# Geography

## KS3

**Climate Change- The Facts – BBC iPlayer**  
<https://www.bbc.co.uk/iplayer/episode/m00049b1/climate-change-the-facts>

### TED Education

Lots of mini videos on geography and beyond

<https://ed.ted.com/lessons?category=geography&direction=desc&sort=featured-position>

**TED Talks on Sustainable Development**  
<https://www.ted.com/talks?sort=relevance&q=sustainable+development>

## KS4

**Global populations by Hans Rosling** [https://www.ted.com/talks/hans\\_rosling\\_global\\_population\\_growth\\_box\\_by\\_box?language=en](https://www.ted.com/talks/hans_rosling_global_population_growth_box_by_box?language=en)

**Climate Change- The Facts – BBC iPlayer**  
<https://www.bbc.co.uk/iplayer/episode/m00049b1/climate-change-the-facts>

### TED Education

Lots of mini videos on geography and beyond

<https://ed.ted.com/lessons?category=geography&direction=desc&sort=featured-position>

## KS5

### Books:

*Prisoners of Geography* and *The Power of Geography*, both by Tim Marshall

### Videos

Rise of the Continents with Dr Ian Stewart <https://www.dailymotion.com/video/x82ulf2>

### TED Talks on Globalisation

<https://www.ted.com/talks?sort=relevance&q=globalisation>

### TED Talks on China

<https://www.ted.com/talks?sort=relevance&q=china>

### TED Talks on nationalism

<https://www.ted.com/talks?sort=relevance&q=nationalism>



# History

## KS3

Explore the options on Meanwhile, Elsewhere; Meanwhile, She; Meanwhile Nearby

<https://meanwhileelsewhereinhistory.wordpress.com/>

You could also visit the Bayeux Tapestry in Reading Museum or the ruins of Reading Abbey (both in the centre of town)

Subscribe and watch the videos on the History Hit YouTube channel.

## KS4

### **Unit 1:**

#### ***Trenches Medicine:***

Book: 'The Facemaker' by Lindsey Fitzharris

Listen: <https://www.iwm.org.uk/history/voices-of-the-first-world-war-wounded>

#### ***Medicine Through Time***

### **Unit 2**

#### **Anglo Saxons and Normans:**

Visit the Bayeux Tapestry at Reading Museum

#### **Superpower Relations:**

You can watch any episodes of the CNN Cold War documentary - available on YouTube.

<https://www.youtube.com/watch?v=22KIQ1QNnhE&list=PL3H6z037pboGWTxs3xGP7HRGrQ5dOQdGc>

### **Unit 3:**

#### **Weimar and Nazi Germany**

Watch: Hitler the rise of evil

## KS5: History

### **Unit 1: Industrialisation**

Watch the videos on Royal Holloway's YouTube Channel

### **Unit 2: Cold War**

You can watch any episodes of the CNN Cold War documentary - available on

YouTube. <https://www.youtube.com/watch?v=22KIQ1QNnhE&list=PL3H6z037pboGWTxs3xGP7HRGrQ5dOQdGc>

Reading: The Cold War by John Lewis Gaddis

## KS5: Politics

***Keep up to date with BBC News – download the app and turn on the politics notifications.***

***Watch Prime Minister's Questions and Question Time.***



# MFL

## KS4

**Watch films or series in French/German/Spanish on Netflix – ask your teacher for recommendations.**

**Set your phone into French/German/Spanish for a week or month.**

## KS3

**Listen to some songs in the language you are studying. Ask your teacher for recommendations or search on YouTube for popular songs in French/German/Spanish. Watch clips of children's TV shows (e.g. Peppa Pig) in French or German. Search on YouTube. Find out about the culture and history of a French/German/Spanish speaking country.**

## KS5

**Watch films in French/German with French/German subtitles (not English ones!) Watch films you know well with subtitles in French or German e.g. animated films. Buy a second-hand French or German translation of a novel you have read in English and read it alongside the English one. Search Instagram/TikTok for influencers who post in French/German on a subject you are interested in e.g. sport, fashion, make up.**

# Computing

## KS3

Look into how programs are constructed- through the use of game design with **Scratch**:

<https://scratch.mit.edu/>

Stretch yourself in programming with 'small basic' :

<https://smallbasic-publicwebsite-code.azurewebsites.net/>

Get yourself a **Raspberry Pi** micro-computer- they're small but powerful pieces of kit that can do so much more! You'll also get to grips with more advanced ways to program:

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

## KS4

**GCSE Bitesize** and **Seneca** has a fantastic resources for the course that we offer:

<https://www.bbc.co.uk/bitesize/subjects/z34k7ty>

<https://senecalearning.com>

**Craig 'N' Dave** is a great YouTube channel devoted to our exam board at GCSE (OCR J277)-. It has everything you need for the course in handy video tutorials:

<https://www.youtube.com/watch?v=7Up7DIPkTzo&list=PLCiOXwirraUAEhj4TUjMxYm4593B2dUPF>

Also for KS4, use a handy free online revision guide (.pdf):

<https://www.thelinkacademy.org.uk/site/data/files/4666D4AE3F5F1BFE9B790F593C4F4C5A.pdf>

Learn to program using *Python* and other programming languages with the **W3 schools** tutorials:

<https://www.w3schools.com/>

## KS5

**Craig 'N' Dave** is really helpful at looking at the deeper understanding of various units in video tutorials:

<https://www.youtube.com/watch?v=dVi2B7fGVm4&list=PLCiOXwirraUBj7HtVHfNZsnwiyZQj97da>

The resources covering the entire course is also available on **Google Classrooms**.



# RE/ WELLBEING

## KS3

Keep up to date with current affairs.

Practise using GCSE style questions.

Read grade 9 answers.

Watch topical debating programmes such as Question Time.

Get involved in Spirited Arts competition

## KS4

Watch topical debating programmes such as Question Time or Newsnight.

Read philosophy texts such as 'Think', S. Blackburn, ['Meditations on First Philosophy'](#), R. Descartes, ['Five Dialogues'](#), Plato

## KS5

Watch topical debating programmes such as Question Time or Newsnight.





# PE

## KS3

Extra-curricular activities within school  
(see timetable)

Outside local clubs:

**Netball:**

<https://laurelparknetball.co.uk/juniors/>  
<https://www.rdn1.co.uk/rdn1-juniors>

**Athletics:**

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

**Football:**

<https://www.teamstats.net/teams/football/reading>

**Badminton:**

<https://www.readingbadminton.org.uk/2019-20/clubs>

**Gymnastics:**

<https://virtuegymnastics.co.uk/>

## KS4

Extra-curricular activities & clubs mentioned in the  
KS3 section

<https://theeverlearner.com/>  
<https://senecalearning.com/en-GB/>  
<https://www.youtube.com/watch?v=hxCIJ9kvorc>  
(Paper 1)  
<https://www.youtube.com/watch?v=j8QD3Gh8MrY>  
(Paper 2)

[https://www.hoddereducation.co.uk/subjects/sport-pe/products/14-16/my-revision-notes-ocr-gcse-\(9-1\)-pe-third-edit-\(1\)](https://www.hoddereducation.co.uk/subjects/sport-pe/products/14-16/my-revision-notes-ocr-gcse-(9-1)-pe-third-edit-(1))

## KS5

<https://s3-eu-west-1.amazonaws.com/nucleus.woodkirk/Btec Sport L3 revision aid-1584963302.pdf>

Pearson REVISE BTEC National Sport Units 1 & 2 Revision Guide inc. online edition - 2023 and 2024 exams and assessments: for home learning and exams (REVISE BTEC Nationals in Sport)

<https://www.youtube.com/watch?v=gVJzKR8dln8>





# Technology

## KS3 & KS4

Watch, design and make themed you tube videos

Watch how things are made you tube videos

Watch cooking shows or videos

Use the KS3 & 4 recipe book from google classroom to cook dishes

Use recipes from books or BBC good food.

Upcycle Items

Make costumes for drama

Design, make and create things!

Help at home...help with any DIY projects – you will learn so much

Visit design museums, art galleries and engineering museums.

Look at items – think about – what was the idea for this originally? How was it made?

## KS5

Look at specific designers like Dyson.

Know the ten most influential famous engineers

Watch YouTube – how to make items like clothes or a bike step by step

Visit a fashion show

Visit design museums, art galleries and engineering museums.

Visit a restaurant where you can see the chef cooking the food

Visit Reading University for taste testing.

Each item around us has been designed and made – do you know the processes of how things are made?



# Art

## KS3

**Aim to achieve Gold outcomes on all class work and homework**

**Re-watch You Tube tutorials from class work PowerPoints on Google Classroom**

**With permission – take home sketchbook to improve/finish classwork**

## KS4

**Attend KS4 Club after school regularly**

**Watch YouTube videos on pop art & drawing/photoshop/DSLR skills tutorials.**

**Watch Arts competitions – Portrait Artist of the Year, The Great Pottery Throwdown, Landscape Artist of the Year & The Great British Photography Challenge**

## KS5

**Use study periods to work in personal spaces in A20**

**Watch arts competitions – Portrait Artist of the Year, The Great Pottery Throwdown, Landscape Artist of the Year & The Great British Photography Competition**

**Visit galleries in person or virtually. Reading Museum, the MERL, the Oxford Museum of Modern Art and if possible, London Galleries.**

**Watch YouTube skills tutorials and specific artists.**



# Music



## KS3

- Active participation in Christmas Concert and School Production.
- Attend music workshops delivered by subject specialists and guests who are working in the industry.
- Active engagement in music clubs.
- Perform to support a local charity.
- Attend music focused school trips to raise cultural capital.
- Encouragement of cross-curricular activities.
- Collaboration with other students to form a choir or a band.

## KS4

- Active participation in Christmas concert and school production.
- Attend music workshops delivered by subject specialists and guests who are working in the industry.
- Active engagement in music clubs.
- Perform to support a local charity.
- Attend music focused school trips to raise cultural capital.
- Encouragement of cross-curricular activities.
- Attend live music performances.
- Collaboration with other students to form a choir or a band.
- Constant practice of writing and practical skills.



# Drama

## KS3

- Active participation in Christmas concert and school production.
- Attend drama workshops delivered by subject specialists and guests who are working in the industry.
- Active engagement in drama clubs.
- Perform to support a local charity.
- Attend drama focused school trips to raise cultural capital.
- Encouragement of cross-curricular activities.

## KS4

- Active participation in Christmas concert and school production.
- Attend workshops delivered by subject specialists and guests who are working in the industry.
- Active engagement in drama clubs.
- Perform to support a local charity.
- Attend drama focused school trips to raise cultural capital.
- Encouragement of cross-curricular activities.
- Attend live theatre performances.
- Constant practice of writing and practical skills.



# Business and Accounting

## KS4

**Attend homework club with Mr Priddey  
break 1, Mondays**

**Watch The Apprentice on iPlayer to see  
business in action!**

## KS5

**Read the FT or BBC business news page for  
interesting business stories**

**Business as usual podcast -  
<https://www.youtube.com/c/ALevelBusiness>**

**Business case studies -  
<https://businesscasestudies.co.uk/>**

## ACCOUNTING

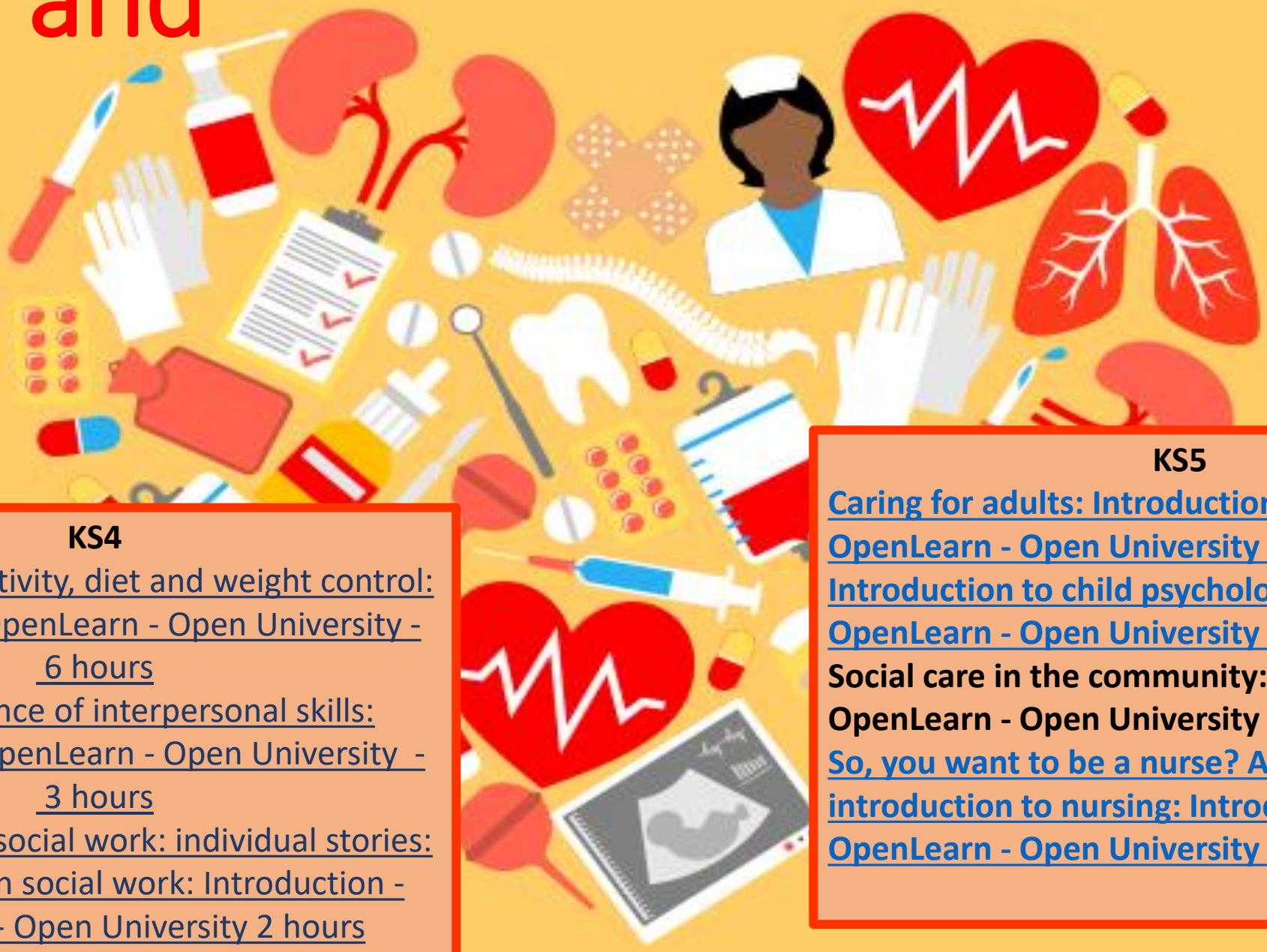
**Accounting videos to help theory:  
<https://www.youtube.com/@agaaccountingvideos4888>**

**<https://www.youtube.com/@agaaccountingteacher>**

**<https://www.youtube.com/@AccountingLecture>**



# Health and Social Care



## KS4

Eating to win: activity, diet and weight control:

Introduction - OpenLearn - Open University -  
6 hours

The importance of interpersonal skills:

Introduction - OpenLearn - Open University -  
3 hours

Perspectives on social work: individual stories:

Perspectives on social work: Introduction -  
OpenLearn - Open University 2 hours

## KS5

Caring for adults: Introduction and guidance -

OpenLearn - Open University 15 hours

Introduction to child psychology: Introduction -

OpenLearn - Open University - 8 hours

**Social care in the community: Introduction -**

**OpenLearn - Open University 0-3 hours**

So, you want to be a nurse? A brief

introduction to nursing: Introduction -

OpenLearn - Open University - 6 hours



# Psychology/ Sociology/ Criminology/ Politics

## PSYCHOLOGY

**Free** OU Courses for Psychology

Compulsory Courses:

[Making sense of ourselves - OpenLearn - Open University](#)

(4 hours - Approaches in Psychology)

[Investigating psychology - OpenLearn - Open University](#)

(3 hours – Approaches in Psychology)

[Forensic psychology - OpenLearn - Open University](#)

(24 hours – Forensic Psychology)

[Understanding depression and anxiety - OpenLearn - Open University](#)

(8 hours – Psychopathology)

[Attachment in the early years - OpenLearn - Open University](#)

(6 hours – Attachment)

[Exploring depression - OpenLearn - Open University](#)

(7 hours – Psychopathology)

[Starting with psychology - OpenLearn - Open University](#)

(5 hours – Pre-Sixth Form Task)

[Psychological research, obedience and ethics - OpenLearn - Open University](#)

(5 hours – Social Influence)

[Identity in question - OpenLearn - Open University](#)

(12 hours – Gender)

Optional Courses:

[The psychology of cybercrime - OpenLearn - Open University](#)

(6 hours)

[Mindfulness in mental health and prison settings - OpenLearn - Open University](#)

(10 hours – links to Forensic Psychology)

[Living psychology: animal minds - OpenLearn - Open University](#)

(12 hours)

## CRIMINOLOGY

Suggested further reading:

Criminology A Very Short Introduction

by Tim Newton

Closing Ranks My Life as a Cop

by Leroy Logan

The Wire

by David Simon

Stories of the Law and How It's Broken

by The Secret Barrister

The Rule of Law

by Tom Bingham

Eve was Framed

by Helena Kennedy

Chasing the Scream

by Johann Hari

The Blood of Emmett Till

by Timothy B. Tyson

Are Prisons Obsolete?

by Angela Y. Davis

Forensics The Anatomy of Crime

by Val McDermid

Italy's Other Mafia Gomorrah

by Roberto Saviano

The Executioner's Song

By Vintage Mailer

In Cold Blood

By Truman Capote

The Radium Girls

by Kate Moore

## SOCIOLOGY

Read Sociological Review each month.

Get involved in trip to Parliament.

Read sociological research, books available to borrow in A302.

Watch Question Time, keep up to date with current affairs using school accounts for The I.

## KS5: Politics

Keep up to date with BBC News – download the app and turn on the politics notifications.

Read political commentators and editorials, e.g. use school account to New York Times, Political Review and The I.

Get involved in local politics but shadowing local councillors and attending council meetings.

Trip to Parliament

Watch Prime Minister's Questions and Question Time, Newsnight