



**Expanding Minds**  
**Years 9, 10 & 11**



# Expanding Minds

Every pupil has the potential to be a high performer.

Not only do we aspire to this in formal academic qualifications but also in a much broader sense.

*Expanding Minds* has been put together in order to support you in your learning beyond the classroom and examination specifications. We hope that you are motivated to try something different, explore subjects that you love in greater depth and breadth and challenge yourself to be more independent in your learning.

Each of your subjects have collated ideas for you to try.

Have a go and expand your mind!

# BUSINESS

Developing an understanding of the wider business environment, build your 'commercial capital'

- Watch BBC Business news (contained within breakfast show)
- Listen to Radio 5 Breakfast show
- Listen to Podcasts – Radio 4 The Bottom Line, Radio 5 Wake up to Money
- Podcast – Business as Usual Podcast (fortnightly on youtube produced by a Business teacher), [https://www.youtube.com/watch?v=d\\_8LQKi5BuU](https://www.youtube.com/watch?v=d_8LQKi5BuU)
- Sign up to the Business Studies Blog on [www.tutor2u.net](http://www.tutor2u.net)
- Read Business Articles from main newspapers or BBC website
- Watch TV documentaries – The Apprentice, Dragon's Den, Inside the Factory etc
- Watch Business Movies; The founder, The Social Network, Up in the air etc
- **Activity – From these various sources discuss with peers and/or produce a scrapbook of current business news stories.** (precise, highlight, annotate with concepts and key terms that are exemplified).
- Quizlet <https://quizlet.com/Lucienneevans/classes>



# BUSINESS CONT'D

## Understanding and Developing Subject Knowledge

- Tutor2u - Complete recall activities, watch webinars, revision quiz's etc [www.tutor2u.net](http://www.tutor2u.net)
- YouTube – A level : Tutor2 webinars, Takingthebiz
- GCSE – Bizconsesh
- Seneca website <https://app.senecalearning.com/classroom/course/e7efbfa0-222a-11e8-9249-b5781fc38111>



## Applying Business Concepts

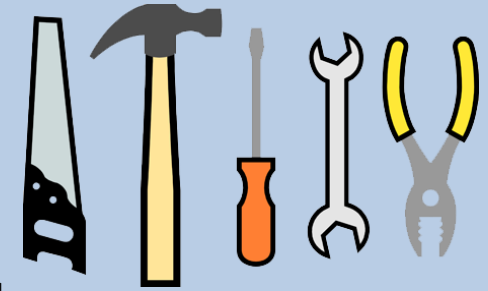
- Y10 Take part in the Young Enterprise Company's programme
- Arrange work experience in business environment
- Talk to any trusted adults about their workplace. What issues is the business facing? How are they motivated as staff?

## COMPUTER SCIENCE



- Scratch: Practise your block programming skills. <https://scratch.mit.edu/>
- Kodu Game Lab - Microsoft 3D Visual programming tool. <http://fuse.microsoft.com/projects/kodu>.
- Learn the first principles of computer programming. <https://www.codeforlife.education/rapidrouter/>
- Learn Python.org - Python Learning tool [www.learnpython.org/](http://www.learnpython.org/)
- Hour of Code – <https://code.org/learn>
- Codecademy - Excellent site for learning various programming languages. [www.codecademy.com](http://www.codecademy.com)

## DESIGN AND TECHNOLOGY



- Investigate a range of designers from different decades, what made them so successful? Collect images and critically analyse a selection of iconic products. Produce a story book showing the key design trends for each decade with written explanations.
- Conduct an additional piece of research for one of the project you are currently working on.
- Conduct further reading and research about the key material areas we cover (timbers, polymers, metals) to produce an information booklet about each one (including how they are extracted / manufactured and the characteristics/properties of the materials).
- Conduct further reading and research about how fabrics are constructed and produce an information booklet about it.
- Conduct primary research (visit shops etc to gain first-hand information rather than using the internet) when completing the research section of your non-exam assessment.
- Analyse the research tasks in more detail commenting on wide range of points
- Sustainability is an important topic which the exam board will always ask questions about. Conduct further research on how companies have become more sustainable. Consider whether companies do enough to support sustainability?
- Discuss how a particular designer has had an influential impact on the design industry. (ie Philippe Starck)
- Name 2 different brands or designers that are associated with the United Kingdom then explain why they have been influential in the development of the UK as an international centre for design and technology.
- Collect tears from magazines to produce a scrapbook of interesting features used in products, annotate points of interest. Make suggestions of how these could be used in your own designs.
- Saturday and Sunday broadsheet newspapers have a 'Technology' section – why not have a read?
- If possible, visit exhibitions / museums ... i.e. the design museum, the V&A in London etc.
- Bookshops – second hand charity shops are great for finding interesting and cheap art books.

# ENGLISH



- Join your local library
- Go to the theatre and see a Shakespeare play, or a play from the literary heritage.
- Read a high quality newspaper- read the editorials, book reviews and look out for journalistic pieces from prolific authors
- Extend your vocabulary: create a vocabulary book and use your wider reading to explore low frequency lexis.
- Enter a short story competition- there are lots of these advertised on the internet!
- Read A' Level revision guides on your set texts to deepen your knowledge and thinking.
- Consider writing a blog to develop your sense of voice ( especially helpful for GCSE English Language Paper 2)
- Watch the news ( BBC reportage) to widen your understanding of current affairs. This is helpful for GCSE English Language Paper 2.
- Write a short story and send it off to a publisher- could you be the next J.K. Rowling?!
- Get involved in a reading group/ book circle. You could join the Carnegie Shadowing group- fabulous books to discover!!

## FRENCH

- Go to websites such as [www.memrise.com](http://www.memrise.com) or [www.quizlet.com](http://www.quizlet.com) to practise vocabulary lists and use duo lingo on your phone to further your learning.
- Listen to French music (youtube) and French radio stations ([www.ecouterradioenligne.com](http://www.ecouterradioenligne.com) )
- Watch French films (first with subtitles and maybe without the next time you watch it.) and watch your favourite sport on a French channel.
- Read the news about francophone countries on [www.TV5monde.com](http://www.TV5monde.com)
- Change the settings on your phone/tablet to French
- Take part to the trip to Belgium in Year 9
- Look into the trip to Châtenay-Malabry with Telford's twinning association
- Make up a French recipe at home and try new French food
- Read a French magazine and try to describe in French what is on the photo
- Make a leaflet about French speaking countries to broaden your general knowledge
- Look up the different jobs and educational opportunities that learning a language may bring you
- Read some French literature (you could order the bilingual version of Les Misérables!)
- Research the benefits that learning a language have on your health (eg: NHS recommend to learn a foreign language to enhance your mental health)
- Translate your favourite song into French.





## GEOGRAPHY



- Read a good daily newspaper/ news websites – so much news has a geographical element. Keep a close eye on relevant news stories to become an informed, global citizen.
- Magazines and journals – National Geographic is available in school.
- Have, and dip into, a good atlas at home. Download Google Earth, ideal for widening your geographical horizons. Google Maps is also useful and includes the excellent 'Street View' function.
- Use the library.
- Consider any holiday or visit an informal geographical fieldtrip. Read travel guides before and when you go – these will enable you to enjoy all aspects of your trip e.g. landscape and culture.
- Get blogging! Express your opinions on global or local issues on sites such as the BBC.
- Write an EPQ on a geographical theme that you are interested in exploring in greater detail – it is also an opportunity to investigate a geographical area not covered in class.
- Enter Geographical competitions - explore the Geographical Association and Royal Geographical Society websites and become a Young Geographer and get involved in the poster and essay competitions they run.
- Watch geographical and issues-based programmes on TV – there are so many, and even dedicated channels on Freeview such as the Discovery Channel and National Geographic. Look at TED lectures online for up-to-date presentations and debates on wide ranging issues.
- Look into volunteering opportunities with issues based charities, such as the National Trust.

# HISTORY



## MATHS

- Have a go at the National Numeracy Challenge [www.nationalnumeracy.org.uk/improve-your-maths](http://www.nationalnumeracy.org.uk/improve-your-maths) or their Family Maths Toolkit which provides lots of ideas and resources that you can use with the whole family [www.familymathstoolkit.org.uk](http://www.familymathstoolkit.org.uk)
- Visit London's Science Museum and use your problem-solving skills in the **Top Secret: From Ciphers to Cyber Security** exhibition, walk around the **Mathematics: The Winton Gallery** or get investigate Maths in everyday life in the interactive **Wonderlab: The Equinor Gallery**
- Attempt the weekly puzzle at Puzzle of the Week [www.puzzleoftheweek.com](http://www.puzzleoftheweek.com). Submit your answers using the school's details to achieve house points.
- Be challenged, get curious and do Maths at Parallel <https://parallel.org.uk> - get a Teacher Code from your Maths Teacher to achieve house points.
- Get involved in the individual UKMT Junior Mathematical Challenge through school and strive for a bronze, silver or gold and a possible invite to their Kangaroo or Olympiad. <https://www.ukmt.org.uk>
- Be part of the UKMT Team Maths Challenges <https://www.ukmt.org.uk>
- Sign up for the National Cipher Challenge <http://www.cipherchallenge.org>
- Attempt The Alan Turing Cryptography Competition [https://www.maths.manchester.ac.uk/cryptography\\_competition/](https://www.maths.manchester.ac.uk/cryptography_competition/)
- The nRich website has some brilliant puzzles and articles on all areas of maths. <https://nrich.maths.org/>
- CorbettMaths 5-a-day worksheets are great extra practise. <https://corbettmaths.com/5-a-day/>



## MATHS CONT'D

- Visit Bletchley Park, and explore the home of the World War Two Codebreakers.
- Compete in the Battle of the Bands and other events on TTRockstars <https://trockstars.com>
- Try the problems available at The Scottish Mathematical Council website <http://www.wpr3.co.uk/MC/probs.html>



### Maths Books

Murderous Maths books, Kjartan Poskitt

Why do Buses come in Threes, Eastaway and Wyndham

How Long is a Piece of String, Eastaway

Does God Play Dice, Ian Stewart (or other books by the same author)

You are a Mathematician, David Wells (or other books by the same author)

Fermat's Last Theorem, Simon Singh (or other books by the same author)

Chaos, James Gleick

Music of the Primes, Marcus du Sautoy (or other books by the same author)

50 Maths Ideas that you really need to know, Tony Crilly

The Tiger that isn't, Blastland and Dilnot

How to lie with Statistics, Darrell Huff

Bad Science, Ben Goldacre

1089 and all that, David Acheson

The man who loved numbers, Ben Hoffman

The Joy of Counting, Tom Korner

## MUSIC

- Every week choose one piece to listen to in a style that you are not familiar with.
- Listen to as much music as possible! Radio 3 and Classic FM are good for familiarising yourself with more classical styles – can you learn to recognise the characteristics of different eras and composers?
- Try Radio 6 for different styles of contemporary music and new artists
- Attend as many concerts or gigs as you can. Theatre Severn and Oakengates Theatre have many classical, popular and jazz events.
- Look out for music events in the Town Park and other local venues.
- Go and watch the CBSO at Symphony Hall!
- Join a choir, this will improve both you singing and aural skills.
- Join a band or orchestra, either at school or one in your area run by Telford and Wrekin Music.
- Enter a composition competition – look on BBC Proms or the Royal Opera House website for ideas. Work to develop your music theory skills. Use the music theory page by working through an ABRSM or Trinity-Guildhall theory workbooks.
- Learn to improvise.
- Choose a composer whose music you like and try to find out more about him/her.
- Challenge yourself to learn a piece in a different style to that which you are accustomed



## PE

The best way to improve your skill and understanding in sport is to attend clubs both inside and outside school.

### *Sporting Events*

Below are some key events that we would recommend you have a broad range of knowledge on. Keep up to date with as many sporting events as possible and further your knowledge of where and when the events occur, who takes part ...

**WIMBLEDON (June-July)** - This is the oldest tennis tournament in the world, it is one of the four Grand Slam tennis tournaments and is the only major still played on grass.

**SIX NATIONS** - The Six Nations is an annual international rugby union competition involving six European sides; England, France, Ireland, Italy, Scotland and Wales.

**THE ASHES** - This is the notational prize in test cricket series played between England and Australia. Ashes series are traditionally of five tests played every two years

**OLYMPICS** - The Olympic Games are held every four years and are the leading international sporting event featuring summer and winter sports competitions.

**THE FOOTBALL WORLD CUP** - Also known as the FIFA World Cup, this competition occurs every four years.

**THE COMMONWEALTH GAMES** - An international multi-sport event involving athletes from the Commonwealth of Nations.

**UEFA EURO 2020** - Football championships

### Resources

[Www.brainmac.co.uk/index.htm](http://www.brainmac.co.uk/index.htm)

[Www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize)

[Www.bbc.co.uk/sport](http://www.bbc.co.uk/sport)



## RELIGIOUS EDUCATION



Task	Evidence
Write a diary for 'A day in the life of ...'	Can produce a diary entry for a day in the life of a religious believer from either Hinduism, Buddhism or the Baha'i faith
Attend a Catholic Baptism / Denominational Christening	Can produce a display (including photographs) of the event
Write a book review on a religious-centred text (as agreed with your RE teacher)	Book review
Visit a place of worship (organised by HTA)	Can produce a display (including photographs) of the event
Visit a place of worship (organised by yourself)	Can produce a display (including photographs) of the event
EXPLORE website	Produce a display on which Big Question you contributed to and why ... to include key information / arguments + your own opinion ... which of the arguments did you find the most / least convincing and why
Who had the biggest impact on Christianity today ... St Peter or St Paul?	Create a fact file and assess & analyse what influence both of these people have had
Organise a Lenten Meditation session for the staff. This will take place one lunchtime (to be discussed with RE staff). As a group, you will need to research and explore the purpose and importance of Meditation and decide as a group how best to create an atmosphere and session that fulfils these aims.	Meditation service / experience takes place. Evaluation forms completed.
'Turin Shroud ... Real or Fake?'	Create a fact file and assess & analyse the evidence & arguments on both sides
Which is the most convincing ... Theism or Atheism?	Create an evidence file and assess & analyse the evidence & arguments on both sides

## SCIENCE

- Read a good daily newspaper/ news websites – so much news has a Science and Technology element. Keep a close eye on relevant news stories to become a scientifically literate citizen.
- Magazines and journals – National Geographic is an excellent source of ideas about Biology and the environment; BBC Science FOCUS magazine is also excellent for this age group.
- Click on the Daily “Google Doodle” pictures on the Google Search engine. Many of these are links to key figures from the history of Science and Technology and will help you to understand the scientific endeavour that led to many of the ideas that you learn about in lessons today!
- Use the library of books down in the Science department.
- Whenever you are on holiday or have a free weekend, explore a Science or Technology museum. For example, just down the road in Ironbridge you can visit Enginuity. A daytrip away, you have Chester Zoo, MOSI (Manchester), Thinktank (Birmingham). Or you could even travel a little bit further to Deutsches Museum (Munich, Germany) !
- Get blogging! Express your opinions on medical and technology issues on sites such as the BBC.
- Enter the yearly Google Science Fair – up for grabs is a prize to travel abroad and meet some amazing people. In 2011, winners of the Google Science Fair got to meet President Barack Obama at the White House in USA!!
- Watch TED lectures online for up-to-date presentations and debates on wide ranging issues in Science. TED make some great videos to help you to revise and understand a whole range of different scientific ideas in interesting ways.
- Get involved with the Shropshire Wildlife Trust activities to learn more about the natural world and biodiversity.
- Have a go at some of the fun experiments that you can do at home from the IOP (Institute Of Physics) with Marvin and Milo <http://www.physics.org/marvinandmilo.asp> and be prepared to be amazed!!!!

