

Mathematics

10 Things you could be doing if you think you have finished your Maths homework

- Read through all the notes taken in the lesson and make sure you understand them
- Complete any set questions you didn't finish in class
- Check your answers and rework any questions you had difficulty with.
- Complete **all** the questions from exercises started in your lessons, even if the teacher hasn't asked you to do them, to consolidate your learning.
- Try some questions from the Mixed Exercises and Review Exercises from your text books.
- Build up a folder of the more difficult questions and revisit them frequently.
- Review all previous topics to ensure they remain fresh in your mind. Revisit past questions to ensure you still understand them.
- Check which formulas are given in the formula booklet and learn those which aren't, in particular for your applied modules.
- Ensure you understand how to use the given formulas and think where they might be applied.
- Use www.mymaths.co.uk to consolidate your learning and understanding by going to A level, then the module you want to work on. Click on EdEx to ensure you are working to the correct syllabus.

6 Things you could be doing if you are thinking of applying for a Mathematical subject at University or you are just really interested in the subject.

- You will find useful resources and problems you can work through on <http://nrich.maths.org/public/>
- For a real challenge try tackling some questions from a Step Paper. Either follow this link <http://www.admissionstests.cambridgeassessment.org.uk/adt/step/Test+Preparation> or Google 'Step Papers'.
- If you want some even harder question try visiting the British Mathematical Olympiad Web-site and try some Round 1 questions <http://www.bmoc.maths.org>.
- There are lots books written about the history and the great problems of Mathematics. Authors include Ian Stewart, Marcus du Sautoy, Simon Singh and John Derbyshire. You will find many titles in the school library.
- There have been some recent films about Mathematics:
 - 'A Beautiful Mind' starring Russell Crowe is a fictionalised account of the life of John Nash. Nash was one of the founders of Game Theory, a subject that we start to study in the D2 module.
 - 'Good Will Hunting' starring Matt Damon and Ben Affleck. Is about a gifted mathematician working as a janitor in the Mathematics Faculty of a university. A problem in Graph Theory, which we study in D1, forms part of the plot.
- There are some interesting television programmes on Mathematics:
 - 'The Story of Maths' is a series presented by Marcus du Sautoy that is regularly repeated on BBC4. Look out for it.
 - 'Numb3rs' is an American cop show in which the FBI hire a mathematician to help solve crime. Although fictional, the mathematics is generally real, or indeed complex.