

**Mathematics** (Edexcel) - Mr Fevrier & Mr Hussain - July 2018  
AS/A Edexcel 8371 2016/17  
Maths Edexcel AS 8371 (2015/16), A2 9371 (2016/17)  
Pure Mathematics Edexcel AS 8373 (2015/16), A2 9373 (2017/18)

## **Reading List**

[Preparation work to bring you up to speed with GCSE topics needed at A-Level: Bridging GCSE and A-level Maths Student Book Second edition by Mark Rowland](#)

### **Books Needed for year 12**

[Edexcel AS and A level Mathematics Pure Mathematics Year 1/AS Textbook + e-book \(A level Maths and Further Maths 2017\) by Greg Attwood](#)

Edexcel AS and A level Mathematics Statistics & Mechanics Year 1/AS Textbook + e-book by Greg Attwood

### **Support Materials**

There are revision guides that you can purchase from school for £2.50, each one covers either year 12 or year 13 content.

If you wish to buy other revision guides, please ensure that they cover the Edexcel content.

### **Further Reading**

[Concise Introduction to Pure Mathematics by Martin Liebeck](#)

Definitely not very heavy, but nonetheless, an interesting/relaxing read about imaginary numbers and a vast array of other topics.

[Mathematical Methods for Science Students by G Stephenson](#)

A very clear and readable text useful for introducing some university level concepts to the top end of the A level cohort. The book starts off easy and gradually progresses onto some very interesting mathematics such as multivariable calculus and a study of the gamma function.

**A Very Short Introduction to Mathematics** by *Timothy Gowers*

Tiny, incredibly dense book written by a Fields Medallist. Provides a great jumping off point for further independent reading around maths, and a glimpse of the character of 'real maths'

[Fermat's Last Theorem by Simon Singh](#)

Basically, everyone who studies mathematics reads this. You won't stand out at all. An enjoyable read.

[The Music of the Primes by Marcus du Sautoy](#)

About the Riemann hypothesis and other various topics in number theory.

Yellow and Green Booklets are also provided by the maths department for independent reading (2016)

## **5 Activities for Independent Learning in Maths**

- 1) There isn't enough time to complete all of the exercises from the textbook in lessons. You should attempt these questions at home and ask your teacher in the next lesson if you get stuck.
- 2) At the end of each chapter you should complete the mixed exercise to help prepare you for the mini-assessments.
- 3) When you are starting a new chapter you could research the new topic and do some reading so you are ready for the new learning to take place.
- 4) Use the feedback from mini-assessments to identify your weaker areas and construct your own targets for revision.

## Independent Learning at KS5

5) Use past paper questions from other sources, e.g. the internet, to help secure your understanding of topics you have struggled with. You don't need to wait until the end of the module to do this, you will gain more confidence by doing this as you go along.

*Maths for AS - Questions (Independent Revision for KS5).* In Maths box June 2016