

# A-Level Preparation into the Sixth Form 2024

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## **Mathematics**

In order to access the challenges of A Level Mathematics it is important to be prepared. We require you to have a number of basic key skills that you will have learnt during your GCSE course and will be called upon during your time in both Year 12 and Year 13 Mathematics.

To have the best possible start to your A-Level course you must have a secure knowledge of the following GCSE topics. Practice of these topics must be done by completing the Summer Homework that can be found on the school website (<https://www.st-michaels.barnet.sch.uk/assets/Sixth-Form/Maths-Summer-HW-2020.pdf>) for the PDF document.

1. Law of indices
2. Straight Line graphs
3. Algebraic fractions
4. Manipulating algebraic expressions
5. Changing the subject of the formula
6. Linear equations, inequalities and simultaneous equations
7. Solving Quadratics Equations
8. Graphs –sketch and recognise common graphs
9. Transformations of graphs
10. Trigonometry
11. Vectors
12. Statistics
13. Probability

If you are not sure of any topic, use a GCSE textbook for reference or look at <http://www.cimt.plymouth.ac.uk/projects/mepres/step-up/default.htm> or at [www.mymaths.co.uk](http://www.mymaths.co.uk).

The questions must be completed and you should bring any concerns to your Maths teachers in the first few weeks in September (maths clinics are held every Tuesday from 1:20pm until 1:55pm in OC1). Please note that there will be two Key Skills Tests on these topics in September.

## **Wider Reading**

Please see the following websites for Maths related articles:

<http://nrich.maths.org/forstudents> <http://plus.maths.org>