



DRAYTON MANOR HIGH SCHOOL

Success at Sixth Form – Subject Specific Tips

Subject	Mathematics	
Class and homework expectations		
<p>Students should bring the following items to each lesson:</p> <ul style="list-style-type: none"> • Homework from previous lesson • Textbook • Scientific Calculator • Pens • Ruler • Pencil • Paper/exercise book 	<p>Homework will generally be given every lesson with the expectation that at least 3 hours of private study each week should go towards this homework and general revision of all topics that have been covered. Topics will get assessed throughout the year though these homeworks and regular half termly assessments. It is expected that all students regularly achieve above and beyond their target grades.</p> <p>Students are expected to arrive on time to all lessons and attend all lessons and any catch up lessons when possible.</p>	
Scheme of Work		
<p>Year 12 You will have a pure mathematics teacher who teaches you 3 times a week, a stats teacher who teaches one hour a week and a mechanics teacher who teaches for one hour a week.</p> <p>The contents of the year 1 course can be found by looking at both the year 1 pure book and the year 1 applied books both of which can be found at the following website www.pearsonactivelearn.com. Each student has their own individual login for this.</p>	<p>Year 13 Year 13 builds on the maths learnt in year 12 and has the same teaching structure as laid out adjacent.</p> <p>The contents of the year 2 course can be found by looking at both the year 2 pure book and the year 2 applied books both of which can be found at the following website www.pearsonactivelearn.com.</p>	
Assessment Objectives		
<p>Use and apply standard techniques Students should be able to:</p> <ul style="list-style-type: none"> • select and correctly carry out routine procedures; and • accurately recall facts, terminology and definitions 	<p>Reason, interpret and communicate mathematically Students should be able to:</p> <ul style="list-style-type: none"> • construct rigorous mathematical arguments (including proofs) • make deductions and inferences • assess the validity of mathematical arguments • explain their reasoning; and • use mathematical language and notation correctly. 	<p>Solve problems within mathematics and in other contexts Students should be able to:</p> <ul style="list-style-type: none"> • translate problems in mathematical and non-mathematical contexts into mathematical processes • interpret solutions to problems in their original context, and, where appropriate, evaluate their accuracy and limitations • translate situations in context into mathematical models • use mathematical models; and • evaluate the outcomes of modelling in context, recognise the limitations of models and, where appropriate, explain how to refine them.
Assessment		
<p>There is no coursework involved and you are therefore only assessed in three exams at the end of the two years. Two of these exams assess pure content and the other assesses applied mathematics. This applied exam is in two sections half on statistics and half on mechanics.</p>		

As well as these external exams you will also be assessed half termly on both your Core Mathematics and your Applied maths by your classroom teachers. These assessments must be treated like the final exams and should be used to ensure that you have a complete understanding of the work covered.

How to do well in the subject at A Level

- Attend all lessons and catch up with any work missed on show my homework and by seeing your teacher.
- Ensure that you revise for all half termly topic exams, endeavouring to achieve at least your target grade.
- Use the Mathematics Department to its fullest effect by seeking help from your class teacher or any other maths teacher in your free time.
- Practicing past paper questions and the exam skills required to complete the exams in the time limit given.

Support available

- The Mathematics Department offers catch up classes by invitation for those students underachieving in half termly assessments.
- The Mathematics Department is always on hand for help before, during and after school.
- For those students wishing to study Mathematics or related subjects the Mathematics Department run a STEP Mathematics class preparing students for any extra Mathematics exams. Many of the top universities require this knowledge for entry onto certain based courses (includes Mathematics, Physics, Engineering, Computer Science).

How parents can help support

- Please help your son or daughter to organise their folder and keep it up to date.
- Check that they are doing homework.
- Discuss with them any letter you receive about opportunities provided both in and outside of school.

Helpful websites or resources

www.pearsonactivelearn.com

www.mathspapers.co.uk/edexcel.html

www.examsolutions.net

www.maths-revision.net/alevel/

www.s-cool.co.uk/a-level/maths

www.revisionworld.com/a2-level-level-revision/maths

www.schoolworkout.co.uk/a_level.htm

www.mathscentre.ac.uk

www.mrbartonmaths.com/alevel.htm

www.physicsandmathstutor.com

