

# Year 12 Mathematics Curriculum

Spring Term 2018-19



Curriculum Content	Assessment	What homework will they have?	I'm not an expert, so how can I help?
<p><b>What will my child be studying this term?</b> Students will follow the Edexcel specification for A level Mathematics. This is the new specification A level started in 2017/18. It is a two year course with no intermediate AS level.</p> <p>Students will continue to focus on pure Mathematics for the first half of this term introducing calculus and working with exponentials and logarithms. The second half term will focus on the applied units - Mechanics in particular. This will cover the maths associated with vectors - forces and motion.</p> <p>One lesson per fortnight will continue to review the now completed Pure topics in order to maintain fluency.</p>	<p>Progress will be formally assessed via half-termly written tests conducted in lesson time.</p> <p>In addition, written homework based upon past paper questions will be formally and formatively assessed approximately every 3 weeks.</p> <p>An extended assessment will take place at the beginning of the summer term.</p>	<p>In addition to the formal written homework used for assessment (see left), teachers may also set smaller lesson to lesson tasks in support of a particular learning objective.</p> <p>Students may also be periodically asked to complete assignments on websites "PiXL6" and/or "Integral" on which they have been registered.</p>	<p>Ensure that students are well organised and are clear about their assigned tasks outside of lessons. Ask to see their work periodically - both the classwork and homework books.</p> <p>Ensure that students have ready access to the PiXL6 and Integral websites and are making use of them.</p>
<p><b>Content covered:</b> PURE: Differentiation, Integration, Exponentials and logs. MECHANICS: SUVAT equations with constant acceleration, Forces &amp; motion, Functions of time. STATISTICS: Data collection, Measures of location and spread, Representations of data, Probability, Statistical distributions, Hypothesis testing.</p>			
<p><b>Literacy and numeracy:</b> Students are expected to maintain their own classwork and homework books (issued by the school) and to make adequate notes and annotated examples from taught lessons. Presentation and explanation of methods is critical to success at A level and this will be repeatedly reinforced throughout the entire course. Classwork and homework books will be inspected periodically throughout the year. In addition, presentation quality will be examined as part of all interim assessments.</p>			
<p><b>What can I do to help my child?</b> Regularly ask them how they are getting on. Encourage them to speak to their teacher if necessary or contact the teacher yourself if you feel that this would be appropriate. In addition, see comments above right.</p>			
<p><b>Additional resources and details of core texts used:</b> The Pearson "Edexcel AS and A level Mathematics" series of text books are used. These are newly purchased by the school as a consequence of the new specification. All students will receive copies of the textbooks for the duration of the course and which must be returned to the school on completion. Two separate textbooks will be required for each of the two years of the course (these are entitled "Pure Mathematics Year 1/AS" and "Statistics and Mechanics Year 1/AS"). All students have also been enrolled onto the PiXL6 Maths support website where they can access any part of the course at any time. The school will also use this resource for additional homework from time to time.</p>			
<p><b>Teaching group arrangements:</b> Groups are set according to subject options selected by students (Maths appears in multiple option blocks). Multiple classes within an option block may run if there are sufficient numbers of students.</p>			
<p><b>Where can I get more advice?</b> Mr R Cannings (Curriculum Leader) – rcannings@stratfordschool.co.uk. Please include the name of your child's teacher so the message can be forwarded appropriately.</p>			