

## Radnor House Sevenoaks - Curriculum Overview Maths year 11 (Foundation GCSE)

Our students follow a two-year GCSE course which allows them to develop an understanding of mathematics and mathematical processes, develop the ability to reason and apply their skills and knowledge to problem solving.

The GCSE 9-1 specification and sample resources can be found at <http://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-2015.coursematerials.html#filterQuery=category:Pearson-UK:Category%2FSpecification-and-sample-assessments>

Other useful websites for Maths include:

Online resources:

[Sparx - Radnor House Sevenoaks \(sparxmaths.uk\)](http://sparxmaths.uk)  
<http://www.emaths.co.uk>  
<http://www.counton.org/>  
<http://www.what2learn.com/home/examgames/maths/>  
<http://www.bbc.co.uk/education/levels/z4kw2hv>

Maths Careers:

<http://www.mathscareers.org.uk/>  
<http://www.ima.org.uk/quiz/>  
<http://www.topuniversities.com/student-info/careers-advice/what-can-you-do-mathematics-degree>  
<http://www.futuremorph.org/14-16/next-steps/follow-your-favourite-subject/careers-from-maths/>  
<https://plus.maths.org/content/Career>

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	Autumn Term 13 WEEKS	Spring Term 11 WEEKS	Summer Term 11 WEEKS
<b>Year 11</b>  <b>5 hours per week</b>  <b>Any excess weeks allow for assessment and regular revision.</b>	<b>Perimeter area and volume 2</b> <ul style="list-style-type: none"> <li>Naming parts of a circle</li> <li>Calculating are and circumference of a circle.</li> <li>Calculating surface area and volume of cylinders</li> <li>Calculating surface area and volume of spheres, pyramids, and cones</li> </ul> <b>Fractions, indicies and standard form</b> <ul style="list-style-type: none"> <li>Converting between mixed numbers and improper fractions.</li> <li>To be able to complete four operations with mixed numbers.</li> <li>Convert between currencies.</li> <li>Understand inverse and direct proportion.</li> <li>Apply index laws numerically and algebraically.</li> <li>Convert between ordinary numbers and numbers in standard form.</li> <li>Carry out calculations with numbers in standard from</li> </ul> <b>Revision and November exams</b>  <b>Congruence, similarity and vectors</b>	<p><b>This time will be used for revision of the entire course. There will be regular in class assessments during this time as well as the mocks.</b></p>	<p><b>This time will be used for revision of the entire course. There will be regular in class assessments during this time.</b></p>

	<ul style="list-style-type: none"> <li>• Solve angle problems involving congruence.</li> <li>• Identity similar shapes</li> <li>• Calculate missing lengths in similar shapes.</li> <li>• Work with scale diagrams, bearings, and maps.</li> <li>• Understand and use column notation in relation to vectors.</li> <li>• Be able to represent information graphically given column vectors.</li> <li>• Identify two column vectors which are parallel.</li> <li>• Calculate using column vectors, and represent graphically, the sum of two vectors, the difference of two vectors and a scalar multiple of a vector.</li> </ul> <p><b>Algebra and graphs</b></p> <ul style="list-style-type: none"> <li>• Transposition of formulae.</li> <li>• Solving simultaneous equations algebraically and graphically.</li> <li>• Drawing and recognising reciprocal and cubic graphs.</li> </ul>		
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