Radnor House Sevenoaks - Curriculum Overview Maths year 10 (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 <u>http://qualifications.pearson.com/en/qualifications/edexcel-gcses/mathematics-</u>2015.coursematerials.html#filterQuery=category:Pearson-UK:Category%2FSpecification-and-sample-assessments

Other useful websites for Maths include:

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

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
Year 10	Perimeter area and Volume	Pythagoras and right-angled trigonometry	Constructions
5 hours per week Any excess weeks allow for assessment and regular revision	 Convert between metric units Calculate area and perimeter of rectangles, triangles, trapeziums, compound shapes and others. Identify and name 3D shapes Calculate the surface are and volume of cubes, cuboids and other right prisms 	 Applying Pythagoras' theorem to fins missing lengths. Apply right angled trigonometry to find missing angles and lengths. Use right angled trig when triangles can be drawn on coordinate grids. Exact trig values 	 Bearings Loci Triangle constructions Angle construction Construction of perpendicualr bi sector Drawing plans and elevations Draw scale diagrams.
	Real life GraphsDistance time graphs	 Probability Single event probability Expected outcomes. 	Revision for end of year exams
	 Velocity time graphs Plot coordinates in all four quadrants Draw and label axes. Use function machines. Draw straight line graphs. Identify and interpret gradient. Understand parallel lines. Be able to calculate the equation of a straight line. Understand parallel lines. 	 Venn Diagrams Mutually exclusive events Tree diagrams Multiplicative reasoning Convert between metric measures of speed Work with speed distance and time Work with density mass and volume Best buys 	 Quadratics Expand and factorising quadratic expressions. Solve quadratic equations by factorising. Find the roots of a quadratic equation algebraically. Complete a table of values Draw a quadratic graph
	Transformations		
	 Be able to describe translations, enlargements, reflections and rotations. 		



Ratio and Proportion	
 Simplify ratios. 	
 Sharing in a given ratio 	
Convert between currencies.	
 Understand inverse and direct proportion 	