Radnor House Sevenoaks - Curriculum Overview Maths year 9 (Higher GCSE)

Our students follow a three-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://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

September 2023

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	Autumn Term 13 WEEKS	Spring Term 11 WEEKS	Summer Term 11 WEEKS
Year 9 5 hours per week Any excess weeks allow for assessment and regular revision weeks linked to PLC's.	**Number** • Add, subtract, multiply and divide with decimals • Product rule for counting • Estimation • Index laws • Factors, multiples and primes • Index notation • Standard form • Simplifying surds **Algebra** • Algebraic notation • Expanding and factorising into single brackets • Expanding and factorising into double brackets • Setting up and solving equations • Changing the subject of a formulae • Iteration • Algebraic proof • Linear sequences • Nth term of linear sequences • Nth term of quadratic sequences • Recognising sequences	**Interpreting and representing data** • Two-way tables • Averages from small data sets • Averages form discrete and continuous data that is tabulated • Stem and leaf diagrams • Representing data • Scatter graphs • Correlation **Fractions, ratio and percentages** • Convert between fractions, decimals and percentages • Fractions of an amount • Four operations with fractions • Percentage calculations • Reverse percentages • Sharing in a given ratio	**Revision for end of year exams** **Angles and trigonometry** • Angle facts • Angle proof • Angles in parallel lines • Interior and exterior angles in polygons • Pythagoras' Theorem in 2D • Right angled trigonometry • Angles of elevation • Exact trigonometric values **Graphs** • Distance time and velocity time graphs • Linear graphs • Equation of a line • Parallel and perpendicular lines • Recognise linear, quadratic, and cubic graphs • Plot other graphs