



## Scope and Sequence Year 10 Mathematics 2013

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
<b>Time/ Duration</b>	Term 1 Week 1-3	Term 1 Week 4-7	Term 1 Week 8-10	Term 2 Week 1-3	Term 2 Week 4-7	Term 2 Week 8-10
<b>Name of Unit</b>	Working with Number  NS5.1.1	Equations and Inequalities PAS4.4, PAS 5.2.2	Measurement  MS4.2 MS5.2.2	Ratio and Rates  NS5.2.1	Investigating Geometry  SGS5.2.1	Consumer Arithmetic  NS5.1.2
<b>Concepts</b>	Index Laws, Scientific notation and approximation.	Solve equations and inequations.	Surface Area and Volume	Problems involving ratio and rates	Properties of quadrilaterals.	Saving and borrowing
<b>In class Activities and Homework</b>	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, practical activities, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet
<b>Learning Areas</b>	Use negative indices and express square and cube roots in index notation. Use appropriate approximations. Express numbers in scientific notation.	Solves equations and inequations involving multiple steps.	Calculate surface areas and volumes of prisms, pyramids and cylinders.	Converting rates from one set of units to another. Solve a variety of real life problems involving ratios and rates.	Complete numerical problems based on geometrical properties.	Applying simple interest formula to problems related to investing money. Calculating compound interest and repayments. Best buys.
<b>Reporting Stems</b>	Measurement Number Patterns and Algebra Space and Geometry					



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	<b>Unit 7</b>	<b>Unit 8</b>	<b>Unit 9</b>	<b>Unit 10</b>	<b>Unit 11</b>	<b>Unit 12</b>
<b>Time/ Duration</b>	Term 3 Week 1-3	Term 3 Week 4-7	Term 3 Week 8-10	Term 4 Week 1-3	Term 4 Week 4-7	Term 4 Week 8-10
<b>Name of Unit</b>	Coordinate Geometry PAS5.1.2	Trigonometry  MS5.1.2	Data  DS5.1.1	Probability  NS5.1.3	Graphs  PAS5.2.4, PAS5.2.5	Option: Further Trigonometry  MS5.2.3
<b>Concepts</b>	Midpoint, gradient and length of an interval joining two points.	Trigonometric ratios of acute angles. Trigonometry of right angled triangles.	Groups data to analyse and construct frequency and cumulative frequency tables and graphs.	Theoretical probabilities and relative frequency.	Non linear graphs.	Applies trigonometry to solve problems including bearings.
<b>In class Activities and Homework</b>	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet	Use spreadsheets to analyse collected data. Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, Weekly homework sheet. Probability games.	Exercises, use of Mathletics, weekly homework sheet	Exercises, use of Mathletics, weekly homework sheet
<b>Learning Areas</b>	Determine the midpoint, gradient and length from a diagram. Determine if slope is positive or negative.	Selecting and using appropriate trigonometric ratios to find sides and angles of right angled triangles.	Group data into class intervals. Find mean using class intervals.	Determine the relative frequency of an event. Using the formula to calculate probability of simple events	Draws and interprets graphs including simple parabola and hyperbolae.	Use degrees and minutes. Use three figure and compass bearings. Sine and cosine rules for students doing General Mathematics in Year 11.
<b>Reporting Stems</b>	Patterns and Algebra, Number Measurement Space and Geometry Data					