

# Year 9 Mathematics Scope and Sequence 2021

Semester 1					
Data driven focus areas.					
5.3	Right-Angled Triangles (Trigonometry) MA5.1-13MG	Volume MA5.3-14MG		Surds MA5.3-6NA	Logarithms MA5.3-11NA
5.2	Right Angled Triangles (Trigonometry) MA5.1-10MG	Volume MA5.2-12MG		Indices MA5.2-7NA	
5.1		Area and Surface Area MA5.1-8MG	Financial Mathematics MA5.1-4NA	Indices MA5.1-5NA	Numbers of any Magnitude MA5.1-9MG
Time	Wks 1-6	Wks 7-10	Wks 1-5	Wks 6-8	Wk 9-10
<b>Concepts</b>	<p>Applies trigonometry to solve problems, including problems involving bearings.</p> <p>Applies trigonometry, given diagrams, to solve problems, including problems involving angles of elevation and depression.</p>	<p>Applies formulas to find the volumes of right pyramids, right cones, spheres and related composites solids.</p> <p>Applies formulas to calculate the volumes of composite solids composed of right prisms and cylinders.</p> <p>Calculates the areas of composite shapes, and the surface area of rectangular and triangular prisms.</p>	<p style="text-align: center;"><i>Earning Money and Taxation Only</i></p> <p>Solves financial problems involving earning, spending and investing money.</p>	<p>Performs operations with surds and indices.</p> <p>Applies index laws to operate with algebraic expressions involving integer indices.</p> <p>Operates with algebraic expressions involving positive-integer and zero indices, and establishes the meaning of negative indices for numerical bases</p>	<p>Interprets very small and very large units of measurement, uses scientific notation, and rounds to significant figures</p> <p>Uses the definition of a logarithm to establish and apply the laws of logarithms</p>
<b>Assessment Tasks - Major</b>	<b>Assessment Task 1 – Formula Sheet Examination</b> Notice Term 1 Week 7 Due Term 1 Week 9		<b>Assessment Task 2 – Examination</b> Notice Term 2 Week 6 Due Term 2 Week 8		
<b>Revision Excel Book</b>	Chapter 10	Chapter 13	Teacher supplied	Chapter 3	Chapter 6

## Year 9 Mathematics Scope and Sequence 2021

Semester 2				
Data driven focus areas.				
5.3		Algebraic Techniques MA5.3-5NA	Harder Equations MA5.3-7NA	
5.2	Linear Relationships MA5.2-9NA	Algebraic Techniques MA5.2-6NA	Harder Equations MA5.2-8NA	Financial Mathematics MA5.2-4NA
5.1	Linear Relationships MA5.1-6NA			Financial Mathematics MA5.1-4NA
4		Algebraic Techniques MA4-8NA	Revise Equations MA4-10NA	
Time	<b>Wk 1-6</b>	<b>Wks 7-10</b>	<b>Wks 1-6</b>	<b>Wks 7-10</b>
<b>Concepts</b>	<p>Uses the gradient-intercept form to interpret and graph linear relationships.</p> <p>Determines the midpoint, gradient and length of an interval, and graphs linear relationships.</p>	<p>Selects and applies appropriate algebraic techniques to operate with algebraic expressions.</p> <p>Simplifies algebraic fractions, and expands and factorises quadratic expressions.</p>	<p>Uses algebraic techniques to solve simple linear and quadratic equations.</p>	<p>Solves financial problems involving compound interest.</p> <p><i>Compound and Simple Interest Part 2 - 5.1</i></p> <p>Solves financial problems involving earning, spending and investing money.</p>
<b>Assessment Tasks - Major</b>	<b>Assessment Task 3 – Investigation Assignment</b> Notice Term 3 Week 7 Due Term 3 Week 9		<b>Assessment Task 4 – Examination</b> Notice Term 4 Week 6 Due Term 4 Week 8	
<b>Revision – Excel Book</b>	Chapter 8	Chapter 2	Chapter 9	Chapter 5