

Turramurra High School - 2022-Year 9 5.2/5.1 - Scope and Sequence

Term 1 2022												
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	
31/1	1/2		7/2	14/2	21/2	28/2	7/3	14/3	21/3	28/3	4/4	
SDD 2	Yr 7 & Seniors only	Topic 1: Indices & Algebraic Techniques	Swimming Carnival	Topic 1: Indices & Algebraic Techniques	Topic 2: Equations 1	Topic 3: Measurement 1 Perimeter & Area of composite shapes		Topic 4: Measurement Surface Area		Topic 5: Polygons		
		MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.1 5NA, MA5.2 8NA		MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.1 5NA, MA5.2 8NA	MA5.2-1WM, MA5.2-8NA	MA5.1 1WM, MA5.1 2WM, MA5.1 8MG	MA5.1 1WM, MA5.1 2WM, MA5.1 8MG	MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.2 1 14MG				
		<ul style="list-style-type: none"> Apply the addition, subtraction, multiplication, and division operations to algebraic expressions, including the removal of brackets Fully factorise algebraic expressions. Solve linear algebraic equations. Extend and apply the index laws to variables, using positive-integer indices and the zero index. Simplify algebraic products and quotients using index laws. 		<ul style="list-style-type: none"> Apply the addition, subtraction, multiplication, and division operations to algebraic expressions, including the removal of brackets Fully factorise algebraic expressions. Solve linear algebraic equations. Extend and apply the index laws to variables, using positive-integer indices and the zero index. 	<ul style="list-style-type: none"> Solve linear algebraic equations, involving 1 step, 2 step and equations with grouping symbols. 	<ul style="list-style-type: none"> Consolidate and build on the concepts from stage 4 of Pythagoras' Theorem, perimeter, area and volume. Calculate and solves problems involving the area of composite figures. Use significant figures as another method of rounding. 		<ul style="list-style-type: none"> Review of nets of solids. Review types of solids in particular, what a prism is opposed to a pyramid. Solve problems involving the surface areas of right prisms. 		Student can use logic and reasoning to solve numerical problems involving plane shapes. <ul style="list-style-type: none"> Establish results for interior and exterior angles of polygons Apply logic and reasoning to solve simple numerical problems involving plane shapes 		

Term 2 2022													
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10		
25/4	26/4	27/4	2/5	9/5	16/5	23/5	30/5	6/6	13/6	14/6	20/6	27/6	
Anzac Day	S.D.D.	Topic 6 : Similarity		Topic 7: Indices & Scientific Notation			Topic 8: Trigonometry			Topic 8 Trigonometry cont'd		Topic 9: Linear Relationships	
		MA5.1-1WM, MA5.1-2WM, MA5.1-3WM, MA5.1-11MG		MA5.1-9MG, MA5.2-1WM, MA5.2-3WM, MA5.2-7NA			MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 10MG					MA5.1 1WM, MA5.1 3WM, MA5.1 6NA, MA5.2 1WM, MA5.2 3WM, MA5.2 9NA	
		<ul style="list-style-type: none"> Students can use ratio and scale factors to solve problems involving similar figures and scale drawings. Use the enlargement transformation to explain similarity and develop the conditions for triangles to be similar. Solve problems using ratio and scale factors in similar figures and scale drawings. 	Student can interpret very small and very large units of measurement, use scientific notation and apply index laws to operate with algebraic expressions involving integer indices <ul style="list-style-type: none"> Apply index laws to algebraic expressions involving integer indices Investigate very small and very large time scales and intervals Express numbers in scientific notation 			<ul style="list-style-type: none"> Use similarity to investigate the constancy of the sine, cosine and tangent ratios for a given angle in right-angled triangles Apply trigonometry to solve right-angled triangle problems Apply trigonometry to solve right-angled triangle problems Solve right-angled triangle problems, including those involving angles of elevation and depression 					Semester 1 Assessment		Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software
				NAPLAN								Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software	

Term 3 2022																			
Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		Week 7		Week 8		Week 9		Week 10	
18/7	19/7	25/7	1/8	8/8	15/8	22/8	29/8	5/9	12/9	19/9									
Topic 9: Linear Relationships				Topic 10: Rates/Ratios & Direct Proportions				Topic 11: Algebraic Fractions				Topic 12: Single Variable Data Analysis				Topic 13: Single Variable Data Analysis 2			
MA5.1 1WM, MA5.1 3WM, MA5.1 6NA, MA5.2 1WM, MA5.2 3WM, MA5.2 9NA				MA5.2 1WM, MA5.2 2WM				MA5.2 1WM, MA5.2 3WM, MA5.2 6NA				MA4-20SP				MA5.1-1WM, MA5.1-2WM, MA5.1-3WM, MA5.1-12SP, MA5.2-1WM, MA5.2-3WM, MA5.2-15SP			
Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software Sketch linear graphs using the coordinates of two points Solve problems involving parallel lines Interpret and graph linear relationships using the gradient-intercept form of the equation of a straight line Solve problems involving parallel and perpendicular lines				Review rates concepts and travel graphs Students can recognise direct and indirect proportion, and solve problems involving direct proportion. <ul style="list-style-type: none"> Solve problems involving direct proportion; explore the relationship between graphs and equations corresponding to simple rate problems 				Students can simplify algebraic expressions involving fractions. <ul style="list-style-type: none"> Apply the four operations to simple algebraic fractions with numerical denominators Apply the four operations to algebraic fractions with pronumerals in the denominator 				<ul style="list-style-type: none"> Review the types of data Calculate mean, median, mode and range for sets of data and interpret these statistics in the context of data 				<ul style="list-style-type: none"> Students can use quartiles and box plots to compare sets of data, and evaluates sources of data. Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread. Determine quartiles and interquartile range, Construct and interpret box plots and use them to compare data sets. Compare shapes of box plots to corresponding histograms and dot plots. Investigate reports of surveys in digital media and elsewhere for information on how data was obtained to estimate population means and medians 			
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Term 4 2022																					
Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		Week 7		Week 8		Week 9		Week 10		Week 11	
10/10	17/10	24/10	31/10	7/11	14/11	21/11	28/11	5/12	12/12	19/12	20/12										
Topic 13 cont'd: Single Variable Data Analysis 2		Topic 14: Percentages (Financial Maths)		Topic 15: Financial Maths								Topic 16: Equations		Topic 17: Numbers of any magnitude							
MA5.1-1WM, MA5.1-2WM, MA5.1-3WM, MA5.1-12SP, MA5.2-1WM, MA5.2-3WM, MA5.2-15SP		MA4-5NA, MA4-1WM, MA4-2WM, MA4-3WM		MA5.1-1WM, MA5.1-2WM, MA5.1-3WM, MA5.1-4NA								MA5.2 1WM, MA5.2 3WM,		MA5.1-1WM, MA5.1-2WM, MA5.1-3WM, MA5.1-9MG							
<ul style="list-style-type: none"> Students can use quartiles and box plots to compare sets of data, and evaluates sources of data. Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread. Determine quartiles and interquartile range, Construct and interpret box plots and use them to compare data sets. Compare shapes of box plots to corresponding histograms and dot plots. Investigate reports of surveys in digital media and elsewhere for information on how data was obtained to estimate population means and medians 		<ul style="list-style-type: none"> Find percentages of quantities and express one quantity as a percentage of another, with and without the use of digital technologies. Solve problems involving the use of percentages, including percentage increases and decreases, with and without the use of digital technologies 		Students can solve financial mathematics problems involving earning money. <ul style="list-style-type: none"> Solve problems involving earning money. Solve problems involving simple interest. Solve equations arising from substitution into formulae. 								Urban Challenge		Solves algebraic equations involving fractions.		<ul style="list-style-type: none"> Investigate very small and very large time scales and intervals Describe limits of accuracy 					
														SDD							
														School Holidays							