SSS Maths Scope and Sequence

Week	Unit	Topic	Lesson Code	Lesson Title	Learning Outcomes
	SS1 – Term 1				By the end of the lesson, pupils will…
1	**Numbers and Numeration**	**Number Sense**	M1-T1-W01-L001	Review of Numbers and Numeration	Identify prime numbers and prime factors Calculate LCM and HCF
			M1-T1-W01-L002	Addition and subtraction of fractions	Add and subtract fractions, including word problems
			M1-T1-W01-L003	Multiplication and division of fractions	Multiply and divide fractions, including word problems
			M1-T1-W01-L004	Addition and subtraction of decimals	Add and subtract decimals, including word problems
2	**Numbers and Numeration**	**Number Sense**	M1-T1-W02-L005	Multiplication and division of decimals	Multiply and divide decimals, including word problems
			M1-T1-W02-L006	Conversion of fractions, percentages, and decimals	Convert between fractions, percentages, and decimals
			M1-T1-W02-L007	Finding the percentage of a quantity	Find the percentage of a quantity (including word problems)
			M1-T1-W02-L008	Express one quantity as a percentage of another	Express one quantity as a percentage of another (including word problems)
3	**Numbers and Numeration**	**Number Sense**	M1-T1-W03-L009	Percentage change	Calculate percentage increase and decrease (including word problems)
			M1-T1-W03-L010	Real world use of fractions	Solve real-life problems using fractions
			M1-T1-W03-L011	Real world use of decimals	Solve real-life problems using decimals
			M1-T1-W03-L012	Approximation of whole numbers	Round numbers to tens, hundreds, thousands, millions, billions, and trillions
4	**Numbers and Numeration**	**Number Sense**	M1-T1-W04-L013	Approximation in everyday life	Round numbers in everyday life

			M1-T1-W04-L014	Conversion from any other base to base 10	Convert from any other base to base 10
			M1-T1-W04-L015	Conversion from base 10 to any other bases	Convert numbers from base 10 to any other base
			M1-T1-W04-L016	Practice conversion between bases	Convert from one base to another base
5	**Numbers and Numeration**	**Number Bases**	M1-T1-W05-L017	Addition and subtraction of number bases	Perform addition and subtraction operations on numbers involving number bases other than base 10 including binary numbers
			M1-T1-W05-L018	Multiplication of number bases	Perform multiplication of numbers involving number bases other than base 10 including binary numbers
			M1-T1-W05-L019	Division of number bases	Perform division of numbers involving number bases other than base 10 including binary numbers
			M1-T1-W05-L020	Basic equations involving number bases	Solve basic equations involving number bases
6	**Numbers and Numeration**	**Number Bases**	M1-T1-W06-L021	Introduction to modular arithmetic	Describe and interpret cyclical events
			M1-T1-W06-L022	Simplest form of a given moduli	Reduce numbers to their simplest form with a given modulus
			M1-T1-W06-L023	Operations in various moduli	Add, subtract, multiply, and divide numbers in various moduli
			M1-T1-W06-L024	Modular arithmetic in real-life situations	Apply modular arithmetic to real-life situations
7	**Numbers and Numeration**	**Real Number System**	M1-T1-W07-L025	Rational and irrational numbers	Define rational and irrational numbers Classify numbers as rational or irrational
			M1-T1-W07-L026	Real numbers on the number line	Locate integers, fractions, and decimals on the number line

			M1-T1-W07-L027	Comparing and ordering rational numbers	Compare and order rational numbers
			M1-T1-W07-L028	Approximating of decimals	Round decimals to a given number of decimal places
8	**Numbers and Numeration**	**Real number system and operations**	M1-T1-W08-L029	Recurring decimals as common fractions	Convert recurring decimals into common fractions
			M1-T1-W08-L030	Operations on rational numbers	Perform operations on rational numbers
			M1-T1-W08-L031	Order of Operations (BODMAS)	Apply the order of operations (BODMAS) to solve mathematical problems
			M1-T1-W08-L032	Index Notation	Identify the index and base in index notation Identify that the index indicates the number of times the base is multiplied by itself
9	**Numbers and Numeration**	**Indices**	M1-T1-W09-L033	First and second laws of indices	Identify the first law of indices ($a^m \times a^n = a^{m+n}$) and multiply two or more indices Identify the second law of indices ($a^m \div a^n = a^{m-n}$) and divide two or more indices
			M1-T1-W09-L034	Third and fourth laws of indices	Identify and apply the third law of indices ($a^0 = 1$) Identify and apply the fourth law of indices ($(a^x)^y = a^{xy}$)
			M1-T1-W09-L035	Simplifying indices	Apply multiple laws of indices to simplify expressions that contain indices
			M1-T1-W09-L036	Fractional indices – Part 1	Simplify expressions that contain fractional indices
10	**Numbers and Numeration**	**Indices**	M1-T1-W10-L037	Fractional indices – Part 2	Simplify more complicated expressions that contain fractional indices
			M1-T1-W10-L038	Simple equations using indices – Part 1	Solve simple equations that involve indices

			M1-T1-W10-L039	Simple equations using indices – Part 2	Solve simple equations that involve indices
		Standard Form	M1-T1-W10-L040	Introduction to standard form	Express and interpret numbers in standard form
11	**Numbers and Numeration**	**Standard Form**	M1-T1-W11-L041	Standard form addition and subtraction	Add and subtract numbers in standard form
			M1-T1-W11-L042	Standard form multiplication and division	Multiply and divide numbers in standard form
			M1-T1-W11-L043	Practice application of standard form	Apply operations on numbers in standard form to real-life problems
		Logarithms	M1-T1-W11-L044	Relationships between logarithms and indices	Identify the relationship between logarithms and indices (e.g. $y = 10^k$ implies $\log_{10} y = k$) Solve logarithms in base 10 using the relationship to indices
12	**Numbers and Numeration**	**Logarithms**	M1-T1-W12-L045	Solving logarithms using indices	Solve logarithms using the relationship to indices
			M1-T1-W12-L046	Logarithms – Numbers greater than 1	Find the logarithms of numbers greater than 1 using logarithm tables
			M1-T1-W12-L047	Antilogarithms – Numbers greater than 1	Find the antilogarithms of numbers greater than 1 using antilogarithm tables
			M1-T1-W12-L048	Multiplication and division of logarithms – Numbers greater than 1	Multiply and divide numbers greater than 1 using logarithms
13	**REVIEW**	**REVIEW**		REVIEW	REVIEW
	SS1 - Term 2				
1	**Numbers and Numeration**	**Logarithms**	M1-T2-W13-L049	Powers and roots of logarithms – Numbers greater than 1	Calculate powers and roots of numbers greater than 1 using logarithms
			M1-T2-W13-L050	Logarithms – Numbers less than 1	Find the logarithms of numbers less than 1 using logarithm tables
			M1-T2-W13-	Antilogarithms – Numbers less than 1	Find the antilogarithms of numbers less than 1

					using antilogarithm tables
			L051		
			M1-T2-W13-L052	Multiplication and division of logarithms – Numbers less than 1	Multiply and divide numbers less than 1 using logarithms
2	**Numbers and Numeration**	**Logarithms**	M1-T2-W14-L053	Powers and roots of logarithms – Numbers less than 1	Calculate powers and roots of numbers less than 1 using logarithms
			M1-T2-W14-L054	Laws of Logarithms – Part 1	Identify that $\log_{10}(pq) = \log_{10}p + \log_{10}q$
			M1-T2-W14-L055	Laws of Logarithms – Part 2	Identify that $\log_{10}(p/q) = \log_{10}p - \log_{10}q$
			M1-T2-W14-L056	Laws of Logarithms – Part 3	Identify that $\log_{10}(p^n) = n\log_{10}p$
3	**Numbers and Numeration**	**Sets**	M1-T2-W15-L057	Define and describe sets and elements of a set	Use various ways of writing and describing sets in terms of their members or elements
			M1-T2-W15-L058	Set notation	Write and interpret sets of values using set notation
			M1-T2-W15-L059	Finite and infinite sets	Define and identify finite and infinite sets
			M1-T2-W15-L060	Null/empty, unit, and universal sets	Define and identify null/empty sets, unit sets, and universal sets
4	**Numbers and Numeration**	**Sets**	M1-T2-W16-L061	Equivalent and equal sets	Define and identify equivalent and equal sets
			M1-T2-W16-L062	Subsets	Describe and identify subsets of a given set Represent subsets with Venn diagrams Use the correct symbols to demonstrate subsets
			M1-T2-W16-L063	Intersection of 2 sets	Describe and identify the intersection of 2 sets Represent the intersection of 2 sets with a Venn diagram Use the correct symbols for intersection

			M1-T2-W16-L064	Intersection of 3 sets	Describe and identify the intersection of 3 sets Represent the intersection of 3 sets with a Venn diagram
5	**Numbers and Numeration**	**Sets**	M1-T2-W17-L065	Disjoint sets	Describe and identify disjoint sets Represent disjoint sets with a Venn diagram
			M1-T2-W17-L066	Union of two sets	Describe and identify the union of two sets Represent the union of two sets with a Venn diagram Use the correct symbols for union
			M1-T2-W17-L067	Complement of a set	Describe and identify the complement of a set Represent the complement of a set with a Venn diagram
			M1-T2-W17-L068	Real life problems involving 2 sets	Diagram and solve real life problems involving 2 sets
6	**Numbers and Numeration**	**Sets**	M1-T2-W18-L069	Real life problems involving 3 sets – Part 1	Diagram and solve real life problems involving 3 sets
			M1-T2-W18-L070	Real life problems involving 3 sets – Part 2	Diagram and solve real life problems involving 3 sets
			M1-T2-W18-L071	Use of variables	Identify that variables represent unknown numbers Identify the values of variables in simple algebraic expressions (e.g. $2 + x = 5$)
			M1-T2-W18-L072	Simplification – grouping terms	Simplify algebraic expressions by grouping like terms
7	**Algebraic Processes**	**Simplification and substitution**	M1-T2-W19-L073	Simplification – removing brackets	Simplify algebraic expressions by removing brackets
			M1-T2-W19-L074	Simplification – expanding brackets	Simplify algebraic expressions by expanding brackets
			M1-T2-W19-L075	Factoring – Common factors	Factorise algebraic expressions by determining common factors

			M1-T2-W19-L076	Factoring - Grouping	Factorise algebraic expressions by grouping common terms
8	**Algebraic Processes**	**Factoring**	M1-T2-W20-L077	Substitution of values	Substitute values into given algebraic expressions
			M1-T2-W20-L078	Addition of algebraic fractions	Add algebraic fractions
		Equations and formulae	M1-T2-W20-L079	Subtraction of algebraic fractions	Subtract algebraic fractions
			M1-T2-W20-L080	Linear equations	Solve linear equations using the balance method
9	**Algebraic Processes**	**Equations and formulae**	M1-T2-W21-L081	Linear equations with brackets	Solve linear equations that contain brackets
			M1-T2-W21-L082	Linear equations with fractions	Solve linear equations that contain fractions
			M1-T2-W21-L083	Word problems	Create and solve equations from word problems
			M1-T2-W21-L084	Substitution in formulae	Substitute given values into a formula
10	**Algebraic Processes**	**Equations and formulae**	M1-T2-W22-L085	Change of subject – Part 1	Change the subject of a formula
			M1-T2-W22-L086	Change of subject – Part 2	Change the subject of a formula
			M1-T2-W22-L087	Reduction to basic form of surds	Reduce surds to basic form
			M1-T2-W22-L088	Addition and subtraction of surds	Solve simple problems involving addition and subtraction of surds
11	**Numbers and Numeration**	**Surds**	M1-T2-W23-L089	Addition and subtraction of surds	Solve more complicated problems involving addition and subtraction of surds

			M1-T2-W23-L090	Properties of surds	Identify properties of surds
			M1-T2-W23-L091	Multiplication of surds – Part 1	Multiply surds
			M1-T2-W23-L092	Multiplication of surds – Part 2	Multiply surds
12	**Numbers and Numeration**	**Surds**	M1-T2-W24-L093	Rationalization of the denominator of surds – Part 1	Rationalize the denominator of surds
			M1-T2-W24-L094	Rationalization of the denominator of surds – Part 2	Rationalize the denominator of surds
			M1-T2-W24-L095	Expansion and Simplification of Surds	Expand and simplify expressions involving surds
			M1-T2-W24-L096	Practice of surds	Apply various operations to simplify expressions involving surds
13	**REVIEW**	**REVIEW**		REVIEW	REVIEW
	SS1 - Term 3				
1		**Functions**	M1-T3-W25-L097	Relations and types of relations	Identify and describe relations between sets Create arrow diagrams to show relations between sets
			M1-T3-W25-L098	Mapping, including domain and range	Determine the rule for a given mapping Distinguish between domain and range
			M1-T3-W25-L099	Functions	Identify functions from certain relations Use function notation
			M1-T3-W25-L100	Functions	Give reasons why a given relation is or is not a function
2	**Algebraic Processes**	**Linear and quadratic graphs**	M1-T3-W26-L101	Graphs of linear functions	Identify linear functions Make tables of values for given linear functions
			M1-T3-W26-	Graphs of linear functions	Use tables of values to draw straight line

			L102		graphs within Cartesian axis
			M1-T3-W26-L103	Quadratic functions	Construct tables of values for given quadratic functions
			M1-T3-W26-L104	Quadratic functions on the Cartesian plane – Part 1	Use tables of values to draw the graphs of quadratic functions on the Cartesian plane
3	**Algebraic Processes**	**Linear and quadratic graphs**	M1-T3-W27-L105	Quadratic functions on the Cartesian plane – Part 2	Draw a smooth parabolic curve through plotted points
			M1-T3-W27-L106	Values from the graphs of quadratic functions	Read off values from the graphs of quadratic functions (including minimum and maximum values, and axis of symmetry
		Quadratic equations	M1-T3-W27-L107	Factorising quadratic expressions	Factorise quadratic expressions
			M1-T3-W27-L108	Solving quadratic equations	Solve quadratic equations using the principal that if $a \times b = 0$, then either $a = 0$ or $b = 0$, or both a and b are 0
4	**Algebraic Processes**	**Quadratic equations**	M1-T3-W28-L109	Solving quadratic equations using factorisation	Use factorisation to solve quadratic equations
			M1-T3-W28-L110	Finding a quadratic equation with given roots	Form a quadratic equation given its roots
			M1-T3-W28-L111	Graphical solution of quadratic equations	Use graphical methods to solve quadratic equations
			M1-T3-W28-L112	Finding an equation from a given graph	Form a quadratic equation from a given graph
5	**Algebraic processes**	**Quadratic equations**	M1-T3-W29-L113	Completing the square and perfect squares	Solve quadratic equation by using perfect squares and completing the square
			M1-T3-W29-L114	The quadratic formula	Solve quadratic equation using the quadratic formula
			M1-T3-W29-L115	The sum and product of roots	Form a quadratic equation given the sum and the product of its roots

			M1-T3-W29-L116	Word problems leading to quadratic equations	Solve word problems by forming and solving suitable quadratic equations
6	**Geometry**	**Angles**	M1-T3-W30-L117	The degree as a unit of measure	Define the degree as a unit of measure Describe how degree measurements are utilized in ever day life Use a protractor to measure angles
			M1-T3-W30-L118	Acute, obtuse, right, reflex, and straight angles	Identify and describe acute, obtuse, right, reflex, and straight angles Classify angles as acute, obtuse, right, reflex, or straight
			M1-T3-W30-L119	Drawing of angles with specific measurements	Drawing of angles with specific measurements given
			M1-T3-W30-L120	Complementary and Supplementary angles	Identify and describe complementary and supplementary angles Classify angles as complementary or supplementary
7			M1-T3-W31-L121	Parallel lines	Describe parallel lines Use a compass to draw a set of parallel lines
			M1-T3-W31-L122	Perpendicular lines	Describe perpendicular lines Use a compass to draw a set of perpendicular lines and label the angle measurements
			M1-T3-W31-L123	Alternate and corresponding angles	Identify and describe alternate and corresponding angles Classify angles as alternate or corresponding
			M1-T3-W31-L124	Adjacent and opposite angles	Identify and describe adjacent and opposite angles Classify angles as adjacent or opposite
8	**Geometry**	**Angles**	M1-T3-W32-L125	Interior and exterior angles	Identify and describe interior and exterior angles Classify angles as interior or exterior
			M1-T3-W32-	Practical application of angle	Measure angles in real life

			L126	measurement	
			M1-T3-W32-L127	Word problems involving angle measurement	Solve word problems involving measurements of angles
			M1-T3-W32-L128	Bisectors of angles and line segments	Identify bisectors of angles and line segments
9	**Geometry**	**Angles**	M1-T3-W33-L129	Intercept theorem	Use the intercept theorem to calculate line segments
			M1-T3-W33-L130	Angle problem solving	Apply angle theorems and properties to solve problems, including word problems
		Triangles	M1-T3-W33-L131	Classification of Triangles: Equilateral, isosceles, and scalene	Classify illustrated triangles by their characteristics
			M1-T3-W33-L132	Drawing of Triangles: Equilateral, isosceles, and scalene	Draw triangles based on numerical data
10	**Geometry**	**Triangles**	M1-T3-W34-L133	Interior and Exterior angles of a triangle	Calculate the measurements of interior and exterior angles of a triangle
			M1-T3-W34-L134	Acute, obtuse, and right-angled triangles	Identify characteristics of acute, obtuse, and right-angled triangles Classify angles as acute, obtuse, or right
			M1-T3-W34-L135	Congruent and similar triangles	Classify triangles as similar or congruent
			M1-T3-W34-L136	Area of triangles	Calculate the area of a triangle given the base and the height Calculate the area given the three sides
11	**Geometry**	**Triangles**	M1-T3-W35-L137	Word problems involving triangles	Solve word problems involving triangles
			M1-T3-W35-L138	Finding the hypotenuse of a right triangle	Find the hypotenuse of a right-angled triangle using Pythagoras' theorem
			M1-T3-W35-L139	Finding the other sides of a right triangle	Apply Pythagoras' theorem to find the length of the other two sides of a right-angled

				triangle
		M1-T3-W35-L140	Application of Pythagorean's Theorem	Solve diagram and word problems involving Pythagorean theorem
12	**REVIEW**	**REVIEW**	REVIEW	REVIEW
13	**REVIEW**	**REVIEW**	REVIEW	REVIEW
SS2 - Term 1				
1	**Review**	**SS1 Review**	M2-T1-W01-L001	Review of Number Bases and Indices	Convert between number bases Apply the laws of indices to simplify expressions
			M2-T1-W01-L002	Review of Linear Equations	Solve linear equations algebraically Graph linear functions
			M2-T1-W01-L003	Review of Quadratic Equations	Solve quadratic equations algebraically Graph and interpret quadratic functions
			M2-T1-W01-L004	Review of Angles and Triangles	Identify types of angles and triangles Solve triangles by finding angle and side measures
2	**Numbers and Numeration**	**Approximation and Errors**	M2-T1-W02-L005	Significant figures	Round numbers to a given number of significant figures
			M2-T1-W02-L006	Estimation	Making a rough estimate of a calculation
			M2-T1-W02-L007	Percentage Error	Calculate the percentage error when using rounded values
			M2-T1-W02-L008	Degree of Accuracy	Decide on the degree of accuracy that is appropriate for given data which may have been rounded
3	**Algebraic Processes**	**Simultaneous linear and quadratic**	M2-T1-W03-L009	Simultaneous linear equations using elimination	Solve simultaneous linear equations using elimination
			M2-T1-W03-L010	Simultaneous linear equations using substitution	Solve simultaneous linear equations using substitution

			M2-T1-W03-L011	Simultaneous linear equations using graphical methods – Part 1	Solve simultaneous linear equations using graphical methods
		equations	M2-T1-W03-L012	Simultaneous linear equations using graphical methods – Part 2	Solve simultaneous linear equations using graphical methods
4	**Algebraic Processes**	**Simultaneous linear and quadratic equations**	M2-T1-W04-L013	Words problems on simultaneous linear equations	Solve word problems leading to simultaneous linear equations
			M2-T1-W04-L014	Simultaneous linear and quadratic equations using substitution	Solve simultaneous linear and quadratic equations using substitution
			M2-T1-W04-L015	Simultaneous linear and quadratic equations using graphical methods - Part 1	Solve simultaneous linear and quadratic equations using graphical methods
			M2-T1-W04-L016	Simultaneous linear and quadratic equations using graphical methods – Part 2	Solve simultaneous linear and quadratic equations using graphical methods
5	**Algebraic Processes**	**Variation**	M2-T1-W05-L017	Direct variation	Solve numerical and word problems involving direct variation
			M2-T1-W05-L018	Inverse variation	Solve numerical and word problems involving inverse variation
			M2-T1-W05-L019	Joint variation	Solve numerical and word problems involving joint variation
			M2-T1-W05-L020	Partial variation	Solve numerical and word problems involving partial variation
6	**Algebraic Processes**	**Inequalities**	M2-T1-W06-L021	Inequalities on a number line	Represent inequalities in one variable on a number line
			M2-T1-W06-L022	Solutions of inequalities	Solve inequalities in one variable
		Distance	M2-T1-W06-L023	Distance formula	Apply the distance formula to find the distance from one point to another on a line

			M2-T1-W06-L024	Mid-point formula	Apply the mid-point formula to find the mid-point of a line
7	**Algebraic Processes**	**Linear Equations**	M2-T1-W07-L025	Gradient of a straight line	Find the gradient of a line using two points, and the formula $m = \frac{y_2 - y_1}{x_2 - x_1}$
			M2-T1-W07-L026	Sketching graphs of straight lines	Sketch the graph of a straight line whose equation is $y = mx + c$ on the Cartesian plane, where m is the gradient of the line and c is the y-intercept
			M2-T1-W07-L027	Equation of a straight line	Determine the equation of a straight line from the gradient and a given point Determine the equation of a straight line from two given points
			M2-T1-W07-L028	Practice with straight lines	Determine the equation of a straight line and graph it on the Cartesian plane
8	**Algebraic Processes**	**Tangent lines**	M2-T1-W08-L029	Gradient of a curve – Part 1	Draw the tangent to a curve at a given point Use the tangent to find an appropriate value for the gradient of a curve at a given point
			M2-T1-W08-L030	Gradient of a curve – Part 2	Draw the tangent to a curve at a given point Use the tangent to find an appropriate value for the gradient of a curve at a given point
		Algebraic Fractions	M2-T1-W08-L031	Simplification of algebraic fractions – Part 1	Use factorisation to simplify algebraic fractions by reducing them to their lowest terms
			M2-T1-W08-L032	Simplification of algebraic fractions – Part 2	Use factorisation to simplify more complex algebraic fractions by reducing them to their lowest terms
9	**Algebraic Processes**	**Algebraic Fractions**	M2-T1-W09-L033	Multiplication of algebraic fractions	Multiply algebraic fractions, reducing them to their lowest terms
			M2-T1-W09-L034	Division of algebraic fractions	Divide algebraic fractions, reducing them to their lowest terms
			M2-T1-W09-	Addition and subtraction of algebraic	Add and subtract algebraic fractions to give a

			L035	fractions – Part 1	single algebraic fraction
			M2-T1-W09-L036	Addition and subtraction of algebraic fractions – Part 2	Add and subtract algebraic fractions to give a single algebraic fraction
10	**Algebraic Processes**	**Algebraic Fractions**	M2-T1-W10-L037	Substitution in algebraic fractions	Use substitution of numerical values or algebraic terms to simplify given algebraic fractions
			M2-T1-W10-L038	Equations with algebraic fractions	Solve equations that contain algebraic fractions
			M2-T1-W10-L039	Undefined algebraic fractions	Determine the values that make an algebraic fraction undefined
			M2-T1-W10-L040	Algebraic fraction word problems	Solve word problems that contain algebraic fractions
11	**Logical Reasoning**	**Logical Reasoning**	M2-T1-W11-L041	Simple statements	Identify and form open and closed simple statements Deduce the truth or otherwise of simple statements
			M2-T1-W11-L042	Negation	Form the negation of a simple statement
			M2-T1-W11-L043	Compound statements	Distinguish between simple and compound statements
			M2-T1-W11-L044	Implication	Draw conclusions from a given implication
12	**Logical Reasoning**	**Logical Reasoning**	M2-T1-W12-L045	Conjunction and Disjunction	Distinguish between conjunction and disjunction, representing them on truth tables
			M2-T1-W12-L046	Equivalence and Chain rule	Recognize equivalent statements and apply them to arguments Recognize the chain rule and apply it to arguments
			M2-T1-W12-	Venn diagrams	Use Venn diagrams to demonstrate connections between statements

			L047		
			M2-T1-W12-L048	Validity	Determine the validity of an argument
13	**REVIEW**	**REVIEW**		REVIEW	
	SS2 - Term 2				
1	**Numbers and Numeration**	**Sequences and Series**	M2-T2-W13-L049	Sequences	Determine the rule that generates a sequence of terms, and extend the sequence
			M2-T2-W13-L050	Arithmetic progressions	Define an arithmetic progression in terms of its common difference, d, and first term, a
			M2-T2-W13-L051	Geometric progressions	Define a geometric progression in terms of its common ratio, r, and first term, a
			M2-T2-W13-L052	nth term of an arithmetic sequence	Apply the formula to find the nth term of an arithmetic sequence
2	**Numbers and Numeration**	**Sequences and Series**	M2-T2-W14-L053	nth term of a geometric sequence	Apply the formula to find the nth term of a geometric sequence
			M2-T2-W14-L054	Series	Distinguish between a sequence and a series
			M2-T2-W14-L055	The sum of an arithmetic series	Calculate the sum of the first n terms of an arithmetic series
			M2-T2-W14-L056	Numerical and real-life problems involving sequences and series	Apply sequences and series to numerical and real-life problems
3	**Geometry**	**Quadrilaterals**	M2-T2-W15-L057	Characteristics of quadrilaterals	Identify and describe characteristics of quadrilaterals: square, rectangle, rhombus, parallelogram, kites, and trapezium. Differentiate between types of quadrilaterals
			M2-T2-W15-L058	Interior angles of quadrilaterals	Calculate the measurement of interior angles of quadrilaterals
			M2-T2-W15-	Exterior angles of quadrilaterals	Calculate the measurement of exterior angles

			L059		of quadrilaterals
		Triangles	M2-T2-W15-L060	Solving triangles	Identify how to solve various types of triangles by finding side and angle measures (review)
4	**Geometry**	**Triangles**	M2-T2-W16-L061	Proportional division of the side of a triangle	Apply the midpoint theorem
			M2-T2-W16-L062	Bisector of an angle in a triangle	Apply the angle bisector theorem
			M2-T2-W16-L063	Similar triangles	Use the properties of similar triangles to deduce lengths in similar shapes
			M2-T2-W16-L064	Triangle problem solving	Apply various theorems and properties of triangles to solve for angles and lengths
5	**Mensuration and Geometry**	**Unit Conversion**	M2-T2-W17-L065	Conversion of units: smaller to larger	Convert from smaller units to larger units using common units of measurement
			M2-T2-W17-L066	Conversion of units: larger to smaller	Convert from large units to smaller units using common units of measurement
		Perimeter and Area	M2-T2-W17-L067	Perimeter and area of a square and rectangle	Calculate the perimeter and area of a square and rectangle, and solve related word problems
			M2-T2-W17-L068	Perimeter and area of a parallelogram	Calculate the perimeter and area of a parallelogram
6	**Mensuration and Geometry**	**Perimeter and Area**	M2-T2-W18-L069	Area of parallelogram theorem	Solve problems on area of parallelogram using the theorem
			M2-T2-W18-L070	Perimeter and area of a trapezium	Calculate the perimeter and area of a trapezium
			M2-T2-W18-L071	Perimeter and area of a rhombus	Calculate the perimeter and area of a rhombus
			M2-T2-W18-L072	Perimeter and area of a kite	Calculate the perimeter and area of a kite
7	**Geometry**		M2-T2-W19-	Perimeter and area of a triangle	Calculate the perimeter and area of a triangle

			L073		
		Perimeter and Area	M2-T2-W19-L074	Perimeter and area of compound shapes	Calculate the perimeter and area of a compound shape
		Polygons	M2-T2-W19-L075	Properties of polygons	Identify and describe properties of polygons (pentagon to decagon)
			M2-T2-W19-L076	Sum of interior angles of polygons	Calculate the sum of the interior angles of polygons
8	**Geometry**	**Polygons**	M2-T2-W20-L077	Interior and exterior angles of polygons	Calculate the measurement of interior and exterior angles of polygons
			M2-T2-W20-L078	Word problems involving polygons	Solve word problems involving polygons
		Construction	M2-T2-W20-L079	Bisect a given line segment	Use a pair of compasses to construct a perpendicular bisection of a line
			M2-T2-W20-L080	Bisect a given angle	Use a pair of compasses to bisect an angle Use a protractor to measure a given angle and its bisected parts
9	**Geometry**	**Construction**	M2-T2-W21-L081	Construct 90°, 60°, and 120° angles	Use a pair of compasses to construct angles 90°, 60° and 120°
			M2-T2-W21-L082	Construct 45°, 30° and 15° angles	Use a pair of compasses to construct 45°, 30°and 15° using bisection of 90° and 60°
			M2-T2-W21-L083	Construct 75°, 105° and 150° angles	Use a pair of compasses to construct angles 75°, 105°, and 150°.
			M2-T2-W21-L084	Construction of triangles – Part 1	Construct triangles using given lengths of three sides (SSS)
10	**Geometry**	**Construction**	M2-T2-W22-L085	Construction of triangles – Part 2	Construct triangles using two given sides and an angle (SAS)
			M2-T2-W22-L086	Construction of triangles – Part 3	Construct triangles using two given angles and a side (ASA)
			M2-T2-W22-	Construction of quadrilaterals - Part 1	Construct squares and rectangles using given

			L087		sides
			M2-T2-W22-L088	Construction of quadrilaterals - Part 2	Construct rhombi and parallelograms using two sides and an angle
11	**Geometry**	**Construction**	M2-T2-W23-L089	Construction of quadrilaterals - Part 3	Construct trapeziums using the lengths of 3 sides and an angle Construct other quadrilaterals given side and angle measures
			M2-T2-W23-L090	Construction word problems – Part 1	Construct angles and triangles based on information in word problems
			M2-T2-W23-L091	Construction word problems – Part 2	Construct quadrilaterals and compound shapes based on information given in word problems
			M2-T2-W23-L092	Construction of loci – Part 1	Construct points at a given distance from a given point
12	**Geometry**	**Construction**	M2-T2-W24-L093	Construction of loci – Part 2	Construct points equidistant from two given points
			M2-T2-W24-L094	Construction of loci – Part 3	Construct points equidistant from two straight lines
			M2-T2-W24-L095	Construction of loci – Part 4	Construct points at a given distance from a given straight line
			M2-T2-W24-L096	Construction practice	Apply construction techniques to construct various figures
13	**REVIEW**	**REVIEW**		REVIEW	REVIEW
	SS2 - Term 3				
1	**Trigonometry**	**Trigonometry**	M2-T3-W25-L097	Review of sine, cosine, and tangent	Identify the trigonometric ratios (SOHCAHTOA)
			M2-T3-W25-L098	Application of sine, cosine, and tangent	Apply the trigonometric ratios of tangent, sine and cosine to solve right-angled triangles, using log books if available

				Deriving special angles (30, 45, 60)	Derive the trigonometric ratios of special angles 30°, 45°, and 60° using an equilateral triangle
			M2-T3-W25-L099		
			M2-T3-W25-L100	Applying special angles	Use the special angles 30°, 45°, and 60° to solve problems
2	**Trigonometry**	**Trigonometry**	M2-T3-W26-L101	Inverse trigonometry	Identify that inverse trigonometric functions 'undo' the corresponding trigonometric functions Apply inverse trigonometric functions to find unknown angles
			M2-T3-W26-L102	Trigonometry and the Pythagoras' Theorem	Solve right-angled triangles using trigonometric ratios and the Pythagoras' Theorem
			M2-T3-W26-L103	Angles of elevation	Calculate angles of elevation Calculate height and distance associated with an angle of elevation
			M2-T3-W26-L104	Angles of depression	Calculate angles of depression Calculate depth and distance associated with an angle of depression
3	**Trigonometry**	**Trigonometry**	M2-T3-W27-L105	Applications of angles of elevation and depression – Part 1	Solve practical problems related to angles of elevation and depression
			M2-T3-W27-L106	Applications of angles of elevation and depression – Part 2	Solve practical problems related to angles of elevation and depression
			M2-T3-W27-L107	The general angle – Part 1	Extend sine, cosine, and tangent ratios of acute angles to obtuse and reflex angles
			M2-T3-W27-L108	The general angle – Part 2	Express a positive or negative angle of any size in terms of an equivalent positive angle between 0° and 360 °
4	**Trigonometry**	**Angles between 0**	M2-T3-W28-L109	Trigonometric ratios for $0 \leq \theta \leq 360°$	Define $\sin \theta$ and $\cos \theta$ as ratios within a unit circle

			M2-T3-W28-L110	Trigonometric ratios	Determine the sine, cosine, and tangent rations of any angle between 0 and 360
		and 360	M2-T3-W28-L111	Graph of $\sin\theta$	Use the unit circle to draw the graphs of $\sin\theta$ for $0 \leq \theta \leq 360°$ and solve related trigonometric problems
			M2-T3-W28-L112	Graph of $\cos\theta$	Use the unit circle to draw the graphs of $\cos\theta$ for $0 \leq \theta \leq 360°$ and solve related trigonometric problems
5	**Trigonometry**	**Sine and Cosine Rules, Bearings**	M2-T3-W29-L113	Graphs of sine Θ and cosine Θ	Use the unit circle to draw the graphs of functions of the form $y = a\sin\theta + b\cos\theta$ for $0° \leq \theta \leq 360°$ and solve related trigonometric problems
			M2-T3-W29-L114	The Sine Rule	Derive the sine rule and use it to calculate lengths and angles in triangles
			M2-T3-W29-L115	The Cosine Rule	Derive the cosine rule and use it to calculate lengths and angles in triangles
			M2-T3-W29-L116	Application of sine and cosine rules	Use the sine and cosine rules to solve triangles
6		**Bearings**	M2-T3-W30-L117	Compass bearings	Interpret bearings in terms of compass directions Interpret bearing as the direction of one point from another
			M2-T3-W30-L118	Solving problems on compass bearings	Make diagram representations of compass bearing statements Solve problems on compass bearings
			M2-T3-W30-L119	Three figure bearings	Identify angles measured clockwise from the geographic north Represent angles in three digits
			M2-T3-W30-L120	Distance-bearing form and diagrams	Understand the bearing of a point taken from a reference point

					Write the distance and bearing of one point from another as (r, θ) Interpret a problem and draw a corresponding diagram
7		**Bearings**	M2-T3-W31-L121	Reverse bearings	Find the reverse bearing of a given bearing
			M2-T3-W31-L122	Distance-bearing problems	Draw diagrams for given bearing problems and create right-angled triangles from the diagram Identify the angles and sides of the right triangle as the direction and distance of bearings
			M2-T3-W31-L123	Bearing problem solving – Part 1	Solve bearings problems with right triangles Apply Pythagoras' theorem and trigonometric ratios to calculate distance and direction
			M2-T3-W31-L124	Bearing problem solving – Part 2	Solve bearings problems with acute and obtuse triangles Apply the sine and cosine rules to calculate distance and direction
8	**Statistics and Probability**	**Statistics**	M2-T3-W32-L125	Drawing pie charts	Draw pie charts from given data
			M2-T3-W32-L126	Interpretation of pie charts	Interpret and solve pie chart problems
			M2-T3-W32-L127	Drawing and interpretation of bar charts	Draw and interpret bar charts
			M2-T3-W32-L128	Mean, Median, and Mode	Calculate the mean, median, and mode of a list of ungrouped data
9	**Statistics and Probability**	**Statistics**	M2-T3-W33-L129	Mean, median, and mode from a chart or graph	Calculate mean, median, and mode from a frequency chart or a bar graph
			M2-T3-W33-L130	Frequency distribution tables	Present and interpret grouped data in frequency distribution tables

					Apply class intervals
			M2-T3-W33-L131	Drawing Histograms	Present and interpret grouped data in histograms
			M2-T3-W33-L132	Interpreting Histograms	Interpret information in a histogram, including estimating mode
10	**Statistics and Probability**	**Statistics**	M2-T3-W34-L133	Frequency polygons	Present and interpret grouped data in frequency polygons
			M2-T3-W34-L134	Mean of grouped data	Calculate, illustrate, and interpret the mean of grouped data Calculate the mean using the assumed mean
			M2-T3-W34-L135	Median of grouped data	Calculate, illustrate, and interpret the median of grouped data
			M2-T3-W34-L136	Mode of grouped data	Calculate, illustrate, and interpret the mode of grouped data
11	**Statistics and Probability**	**Statistics**	M2-T3-W35-L137	Practice with mean, median, and mode of grouped data	Solve problems involving mean, median, and mode of grouped data
			M2-T3-W35-L138	Cumulative frequency tables	Construct cumulative frequency tables
			M2-T3-W35-L139	Cumulative frequency curves	Construct cumulative frequency curves and estimate quartiles
			M2-T3-W35-L140	Inter-quartile range	Calculate the inter-quartile range from estimated quartiles Calculate the semi inter-quartile range
12	**REVIEW**	**12**		REVIEW	REVIEW
13	**REVIEW**	**13**		REVIEW	REVIEW
	SS3 - Term 1			**SS3 - Term 1**	
1	**Review**	**SS2 Review**	M3-T1-W01-L001	Algebraic Processes	Solve simultaneous linear equations using elimination, substitution, or graphing
			M3-T1-W01-	Algebraic Processes	Find the equation of a line given two points,

			L002		and graph it on the Cartesian plane
			M3-T1-W01-L003	Geometry	Calculate missing angle measures and side lengths of triangles Calculate interior and exterior angles of triangles, quadrilaterals, and other polygons
			M3-T1-W01-L004	Statistics	Present and interpret data Calculate measures of central tendency
2	Mensuration	Areas	M3-T1-W02-L005	Review of perimeters of shapes	Determine and use the correct formula for calculate the perimeter of a specified shape
			M3-T1-W02-L006	Review of area of regular shapes	Determine and use the correct formula to calculate the area of a specified shape
			M3-T1-W02-L007	Area of similar shapes	Calculate the area of similar shapes using the appropriate formulae
			M3-T1-W02-L008	Area of compound shapes	Calculate the area of compound shapes using the appropriate formulae
3	Geometry	Circles	M3-T1-W03-L009	Review of circles	Identify parts of a circle Calculate the circumference of a circle using the formula $C = 2\pi r$
			M3-T1-W03-L010	Length of an arc	Calculate the length of an arc
			M3-T1-W03-L011	Perimeter of a sector	Calculate the perimeter of a sector of a circle
			M3-T1-W03-L012	Perimeter of a segment	Calculate the perimeter of a segment of a circle
4	Geometry	Circles	M3-T1-W04-L013	Area of a circle	Calculate the area of a circle using the formula $A = \pi r^2$
			M3-T1-W04-L014	Area of a sector	Calculate the area of a sector of a circle
			M3-T1-W04-	Area of a segment	Calculate the area of a segment of a circle

			L015		
			M3-T1-W04-L016	Area and perimeter of composite shapes	Solve problems involving areas and perimeter of composite shapes
5	**Geometry**	**Circles**	M3-T1-W05-L017	Circle Theorem 1	Identify and demonstrate: A straight line from the centre of a circle that bisects a chord, is at right angles to the chord
			M3-T1-W05-L018	Applications of Circle Theorem 1	Solve problems using Circle Theorem 1
			M3-T1-W05-L019	Circle Theorem 2	Identify and demonstrate: The angle subtended at the centre of a circle is twice that subtended at the circumference
			M3-T1-W05-L020	Applications of Circle Theorem 2	Solve problems using Circle Theorem 2
6	**Geometry**	**Circles**	M3-T1-W06-L021	Circle Theorems 3 and 4	Identify and demonstrate: The angle in a semi-circle is a right angle Angles in the same segment are equal
			M3-T1-W06-L022	Applications of Circle Theorems 3 and 4	Solve problems using Circle Theorem 3 and 4
			M3-T1-W06-L023	Circle Theorem 5	Identify and demonstrate: Opposite angles of a cyclic quadrilateral are supplementary
			M3-T1-W06-L024	Applications of Circle Theorem 5	Solve problems using Circle Theorem 5
7	**Geometry**	**Circles**	M3-T1-W07-L025	Circle Theorem 6 and 7	Identify and draw the tangent to a circle Identify and demonstrate: - The lengths of the two tangents from a point to a circle are equal - The angle between a tangent and a radius in a circle is equal to 90°
			M3-T1-W07-L026	Applications of Circle Theorem 6 and 7	Solve problems using Circle Theorems 6 and 7

			M3-T1-W07-L027	Circle Theorem 8 –Alternate segment theorem	Identify and demonstrate: The alternate segment theorem.
			M3-T1-W07-L028	Apply the alternate segment theorem	Solve problems using the alternate segment theorem
8	**Mensuration**	**Circles Areas and Volumes**	M3-T1-W08-L029	Solving problems on circles	Apply circle theorems and other properties to find missing angles in various circle diagrams
			M3-T1-W08-L030	Surface area of cube	Calculate the surface area of a cube using the appropriate formula
			M3-T1-W08-L031	Volume of a cube	Calculate the volume of a cube using the appropriate formula
			M3-T1-W08-L032	Surface area of cuboid	Calculate the surface area of a cuboid using the appropriate formula
9	**Mensuration**	**Areas and Volumes**	M3-T1-W09-L033	Volume of a cuboid	Calculate the volume of a cuboid using the appropriate formula
			M3-T1-W09-L034	Nets of prisms	Draw nets of prisms
			M3-T1-W09-L035	Surface area of triangular prism	Calculate the surface area of a triangular prism using the appropriate formula
			M3-T1-W09-L036	Volume of a triangular prism	Calculate the volume of a triangular prism using the appropriate formula
10	**Mensuration**	**Areas and Volumes**	M3-T1-W10-L037	Surface area of cylinder	Calculate the surface area of a cylinder using the appropriate formula
			M3-T1-W10-L038	Volume of a cylinder	Calculate the volume of a cylinder using the appropriate formula
			M3-T1-W10-L039	Surface area of cone	Calculate the surface area of a cone using the appropriate formula
			M3-T1-W10-L040	Volume of a cone	Calculate the volume of a cone using the appropriate formula

			M3-T1-W11-L041	Surface area of a rectangular pyramid	Calculate the surface area of a rectangular pyramid using the appropriate formula
11	**Mensuration**	**Areas and Volumes**	M3-T1-W11-L042	Volume of a rectangular pyramid	Calculate the volume of a rectangular pyramid using the appropriate formula
			M3-T1-W11-L043	Surface area of a triangular pyramid	Calculate the surface area of a triangular pyramid using the appropriate formula
			M3-T1-W11-L044	Volume of a triangular pyramid	Calculate the volume of a triangular pyramid using the appropriate formula
12	**Mensuration**	**Areas and Volumes**	M3-T1-W12-L045	Surface area of sphere	Calculate the surface area of a sphere using the appropriate formula
			M3-T1-W12-L046	Volume of a sphere	Calculate the volume of a sphere using the appropriate formula
			M3-T1-W12-L047	Surface area of composite solids	Calculate the surface area of composite solids using the appropriate formulae
			M3-T1-W12-L048	Volume of composite solids	Calculate the volume of composite solids using the appropriate formulae
13	**REVIEW**	**REVIEW**		REVIEW	REVIEW
	SS3 - Term 2				
1	**Numbers and Numeration**	**Ratio, Rate, and Proportion**	M3-T2-W13-L049	Expression of ratios	Express ratios in their simplest terms Increase and decrease quantities in a given ratio
			M3-T2-W13-L050	Comparison of ratios	Compare and simplify ratios
			M3-T2-W13-L051	Rate	Use rates to connect quantities of different kinds
			M3-T2-W13-L052	Proportional division	Divide quantitate into given proportions
2	**Numbers and Numeration**	**Ratio, proportion**	M3-T2-W14-L053	Rates of pay	Calculate rates of pay using ratio and proportion and data given

			M3-T2-W14-L054	Scales - Part 1	Interpret scales used in drawing plans and maps
		, and rates	M3-T2-W14-L055	Scales – Part 2	Use scales to calculate distance between two points
			M3-T2-W14-L056	Travel rates	Calculate travel rates using ratio and proportion and data given
3	Numbers and Numeration	Ratio, proportion, and rates	M3-T2-W15-L057	Foreign exchange	Convert one type of currency to another based on given rates using ratio and proportion
			M3-T2-W15-L058	Density	Calculate the density of a population or an object using ratio and proportion
			M3-T2-W15-L059	Speed – Part 1	Calculate the speed of a moving object given distance and time
			M3-T2-W15-L060	Speed – Part 2	Calculate time needed to cover a specified distance at a specified speed
4	Numbers and Numeration	Percentages	M3-T2-W16-L061	Speed – Part 3	Calculate distance covered in a specified time at a specified speed
			M3-T2-W16-L062	Time and speed (include avg. rates)	Calculate average speed of a moving object; determine average time of an activity
			M3-T2-W16-L063	Profit	Calculate profit on a transaction by applying percentage
			M3-T2-W16-L064	Loss	Calculate loss on a transaction by applying percentage
5	Numbers and Numeration	Percentages	M3-T2-W17-L065	Commission	Calculate commission on a transaction by applying percentage
			M3-T2-W17-L066	Discount	Calculate discount on a transaction by applying percentage
			M3-T2-W17-L067	Simple interest – Part 1	Calculate simple interest rates and time

			M3-T2-W17-L068	Simple interest – Part 2	Calculate the total amount of a quantity after applying simple interest
6	**Numbers and Numeration**	**Percentages**	M3-T2-W18-L069	Hire purchase	Calculate hire purchase based on percentages
			M3-T2-W18-L070	Compound interest – Part 1	Calculate compound interest using successive addition
			M3-T2-W18-L071	Compound interest – Part 2	Calculate compound interest using the formula
			M3-T2-W18-L072	Depreciation	Calculate depreciation using percentages
7	**Numbers and Numeration**	**Percentages**	M3-T2-W19-L073	Financial partnerships	Calculate financial partnership using percentage
			M3-T2-W19-L074	Income taxes – Part 1	Calculate the amount of income tax to be paid using percentages
			M3-T2-W19-L075	Income taxes – Part 2	Calculate the amount of income tax to be paid using percentages
			M3-T2-W19-L076	Additional practice with applications of percentage	Calculate value added tax using percentages Calculate the amount to be paid for employer health insurance based on percentages
8	**Vectors and Transformations**	**Vectors in a plane**	M3-T2-W20-L077	Introduction to vectors and scalars	Define and describe vectors and scalars and their uses
			M3-T2-W20-L078	Vector notation and representation	Use correct notation and representation for vectors
			M3-T2-W20-L079	Zero vector and negative/inverse of a vector	Define zero vector Write the negative/inverse of a given vector
			M3-T2-W20-L080	Addition and subtraction of vectors	Add or subtract vectors based on information given
9	**Vectors and Transformation**	**Vectors in a plane**	M3-T2-W21-L081	Multiplication of a vector by a scalar	Multiply a vector by a scalar to find the scalar multiple

			M3-T2-W21-L082	Two given points as a vector	Express two given points as a vector
	s		M3-T2-W21-L083	Triangular law of vector addition	Explain the triangular law of vector addition
			M3-T2-W21-L084	Equality of vectors	Define equal vectors Demonstrate an example of vector equality
10	**Vectors and Transformations**	**Vectors in a plane**	M3-T2-W22-L085	Parallel vectors	Define parallel vectors Demonstrate an example of parallel vectors
			M3-T2-W22-L086	The position vector of the mid-point of a line segment	Define the mid-point theorem Demonstrate an example of the mid-point theorem
			M3-T2-W22-L087	Finding the magnitude or length of a column vector	Use the Pythagorean Theorem to find the magnitude or length of a column vector based on information given
			M3-T2-W22-L088	Finding the direction of vector	Find the direction of a vector based on information given Represent the vector in a diagram
11	**Geometry**	**Transformation in the Cartesian Coordinate Plane**	M3-T2-W23-L089	Lines of symmetry	Identify lines of symmetry on two dimensional shapes
			M3-T2-W23-L090	Reflection	Identify that reflection creates an object of the same size and shape, but facing the opposite direction Recognize and perform a reflection
			M3-T2-W23-L091	Rotation and rotation about the origin	Identify that rotation moves an object circularly around a single point, without changing its size or shape Recognize and perform a rotation around a single point and around the origin
			M3-T2-W23-L092	Translation – Part 1	Identify that translation moves an object without changing its size or shape

					Recognize and perform a translation
12	**Geometry**	**Transformation in the Cartesian Coordinate Plane**	M3-T2-W24-L093	Translation – Part 2	Recognize and perform a translation
			M3-T2-W24-L094	Enlargement – Part 1	Use scalar multiplication to enlarge given shapes
			M3-T2-W24-L095	Enlargement – Part 2	Use scalar multiplication to enlarge given shapes
			M3-T2-W24-L096	Combinations of transformation	Translate and enlarge a given shape. Enlarge and reflect a given shape
13	**REVIEW**	**REVIEW**		REVIEW	REVIEW
	SS3 - Term 3				
1	**Statistics and Probability**	**Probability**	M3-T3-W25-L097	Introduction to probability – Part 1	Define, use, and give examples of terms used in probability. Use the language of probability to describe events in real life
			M3-T3-W25-L098	Introduction to probability – Part 2	Use probability notation to describe basic events. Identify the law of probability (probability is between 0 and 1, inclusive)
			M3-T3-W25-L099	Addition of probabilities for mutually exclusive events	Apply the addition law to find the probability of two mutually exclusive events both occurring. Illustrate the addition law using Venn diagrams
			M3-T3-W25-L100	Addition of probabilities for independent events	Apply the addition law to find the probability of two independent events both occurring. Illustrate the addition law using Venn diagrams
2	**Statistics and**	**Probability**	M3-T3-W26-	Multiplication of probabilities – Part 1	Apply the multiplication law to find the

	Probability		L101		probability that at least one of two independent events occurs
			M3-T3-W26-L102	Multiplication of probabilities – Part 2	Apply the multiplication law to find the probability that at least one of two independent events occurs
			M3-T3-W26-L103	Practice applications of probabilities	Apply addition and multiplication laws to a variety of probability questions
			M3-T3-W26-L104	Practice applications of probabilities	Apply addition and multiplication laws to a variety of probability questions
3	**Statistics and Probability**	**Probability**	M3-T3-W27-L105	Outcome tables	Illustrate probability spaces with outcome tables and use them to solve probability problems
			M3-T3-W27-L106	Tree diagrams	Illustrate probability spaces with tree diagrams
			M3-T3-W27-L107	Problem solving with tree diagrams	Use tree diagrams to solve probability problems
			M3-T3-W27-L108	Venn diagrams	Illustrate probability spaces with Venn diagrams and use them to solve probability problems
4	**Statistics and Probability**	**Statistics**	M3-T3-W28-L109	Review cumulative frequency curve	Draw the cumulative frequency curve Estimate the quartiles from the cumulative frequency curve
			M3-T3-W28-L110	Percentiles	Estimate percentiles of data from the cumulative frequency curve
			M3-T3-W28-L111	Applications of percentiles	Apply percentiles to real-life problems
			M3-T3-W28-L112	Dispersion and variation	Describe and interpret the dispersion or spread of values in a data set
5	**Statistics and Probability**	**Statistics**	M3-T3-W29-L113	Measures of dispersion	Calculate the range and variance of a set of ungrouped values

			M3-T3-W29-L114	Standard deviation of ungrouped data	Calculate the standard deviation of a set of ungrouped values
			M3-T3-W29-L115	Standard deviation of grouped data – Part 1	Calculate the standard deviation of a set of grouped values *without* class intervals
			M3-T3-W29-L116	Standard deviation of grouped data – Part 2	Calculate the standard deviation of a set of grouped values *with* class intervals
6	**Statistics and Probability**	**Statistics**	M3-T3-W30-L117	Standard deviation in real-Life	Use and interpret standard deviation in real-life applications
			M3-T3-W30-L118	Mean deviation of ungrouped data	Calculate the mean deviation of ungrouped data
			M3-T3-W30-L119	Mean deviation of grouped data – Part 1	Calculate the mean deviation of grouped data *without* class intervals
			M3-T3-W30-L120	Mean deviation of grouped data – Part 2	Calculate the mean deviation of grouped data *with* class intervals
7		**Review**	M3-T3-W31-L121	Sets	Review of sets
			M3-T3-W31-L122	Indices & Logarithms	Review of indices and logarithms
			M3-T3-W31-L123	Sequences and Series	Review of sequences and series
			M3-T3-W31-L124	Ratio/Proportion/Rate/Percentages	Review of ratio, proportion, rate, and percentages
8		**Review**	M3-T3-W32-L125	Equations and Formulae	Review of equations and formulae
			M3-T3-W32-L126	Quadratic Equations & Graphs	Review of linear, quadratic equations and graphs
			M3-T3-W32-L127	Simultaneous Equations & Graphs	Review of simultaneous equations and graphs

			M3-T3-W32-L128	Variations	Review of variations
9		**Review**	M3-T3-W33-L129	Triangles and other polygons	Review of triangles and other polygons
			M3-T3-W33-L130	Circles	Review of circles
			M3-T3-W33-L131	Tangents to circles	Review of tangents to circles
			M3-T3-W33-L132	Construction	Review of construction of angles and loci
10		**Review**	M3-T3-W34-L133	Transformations on the Cartesian Plan	Review of transformations
			M3-T3-W34-L134	Area & Surface Areas	Review of area and surface area
			M3-T3-W34-L135	Volume	Review of volume
			M3-T3-W34-L136	Trigonometry	Review of trigonometry
11		**Review**	M3-T3-W35-L137	Bearings and Distances	Review of bearings and distance
			M3-T3-W35-L138	Vectors and Scalars	Review of vectors and scalars
			M3-T3-W35-L139	Statistics	Review of statistics
			M3-T3-W35-L140	Probability	Review of probability
12	**REVIEW**	**REVIEW**		REVIEW	Preparing for the WAEC exam
13	**REVIEW**	**REVIEW**		REVIEW	Preparing for the WAEC exam

	SS4 - Term 1				
1	**Numbers and Numeration**	**Numeration**	M4-T1-W01-L001	Basic numeration	Apply the principles of BODMAS to operations on rational numbers Approximate answers to a given number of decimal places and significant figures Calculate the percentage error using rounded values
		Sequence and Series	M4-T1-W01-L002	Sequences	Identify arithmetic and geometric sequences Apply the formulae to find the nth term of a sequence
			M4-T1-W01-L003	Series	Distinguish between sequence and series Calculate the sum of the first n terms of an arithmetic and a geometric series
			M4-T1-W01-L004	Problem solving using sequences and series	Apply sequences and series to numerical and real-life problems
2		**Ratio, Rate, Proportion**	M4-T1-W02-L005	Ratios	Increase and decrease quantities in a given ratio Solve real-life problems involving ratio
			M4-T1-W02-L006	Rates	Solve problems related to rate, including real-life applications (e.g. rates of pay, travel rates, currency exchange rates)
			M4-T1-W02-L007	Proportional division	Divide quantities into given proportions, and solve real-life applications
			M4-T1-W02-L008	Speed	Solve problems involving speed, time, and distance
3		**Percentages**	M4-T1-W03-L009	Applications of percentages – Part 1	Solve problems involving profit, loss, commission, and discount
			M4-T1-W03-L010	Applications of percentages – Part 2	Solve problems involving simple interest, hire purchase, and compound interest
			M4-T1-W03-	Applications of percentages – Part 3	Solve problems involving depreciation,

			L011		financial partnerships, and taxes
4		**Indices and Logarithms**	M4-T1-W03-L012	Indices	Apply the laws of indices to simplify expressions Solve equations that involve indices
			M4-T1-W04-L013	Logarithms	Identify the relationship between logarithms and indices, and use it to solve logarithms Use logarithm tables to solve problems involving logarithms and antilogarithms
			M4-T1-W04-L014	Logarithms	Apply the laws of logarithms to solve problems
	Numbers and Numeration	**Sets**	M4-T1-W04-L015	Representing sets with diagrams and symbols	Describe and represent using diagrams and symbols (including subsets, the intersection of 2 or 3 sets, disjoint sets, the union of 2 sets, the complement of a set)
			M4-T1-W04-L016	Solving problems involving sets	Diagram and solve real life problems involving 2 or 3 sets
5		**Surds**	M4-T1-W05-L017	Operations on surds	Perform operations on surds (addition, subtraction, multiplication)
			M4-T1-W05-L018	Simplifying surds	Rationalize the denominator of surds Expand and simplify expressions involving surds
	Algebra	**Algebraic expressions**	M4-T1-W05-L019	Simplification and factorisation	Simplification and factorisation of algebraic expressions
		Functions	M4-T1-W05-L020	Functions	Identify and describe functions, and their domain and range Use function notation
6		**Linear equations**	M4-T1-W06-L021	Graphing linear functions	Graph linear functions, and identify the solutions and gradient
			M4-T1-W06-	Applications of linear functions	Solve problems involving linear functions

			L022		
7		Quadratic Equations	M4-T1-W06-L023	Distance and mid-point formulae	Identify and apply the distance formula to find the distance between one point and another on a line Identify and apply the mid-point formula to find the mid-point of a line
			M4-T1-W06-L024	Graphing and interpreting quadratic functions	Graph quadratic functions, and identify the solutions, and maximum or minimum
			M4-T1-W07-L025	Solving quadratic equations algebraically – Part 1	Factorise and solve quadratic equations
			M4-T1-W07-L026	Solving quadratic equations algebraically – Part 2	Solve quadratic equation by completing the square Solve quadratic equation using the quadratic formula
			M4-T1-W07-L027	Problem solving with quadratic equations	Solve problems (including word problems) involving quadratic equations
8		Simultaneous Equations	M4-T1-W07-L028	Simultaneous linear equations	Solve simultaneous linear equations using elimination, substitution, and graphing
			M4-T1-W08-L029	Applications of simultaneous linear equations	Solve word problems leading to simultaneous linear equations
			M4-T1-W08-L030	Simultaneous quadratic and linear equations	Solve simultaneous quadratic and linear equations using substitution and graphing
		Tangents	M4-T1-W08-L031	Tangent to a quadratic function	Solve problems involving the tangent line to a quadratic function
		Inequalities	M4-T1-W08-L032	Inequalities	Solve inequalities in one variable and represent them on number lines
9	Algebra	Variation	M4-T1-W09-L033	Variation	Identify and differentiate between direct, indirect, joint, and partial variation Solve variation problems
		Algebraic	M4-T1-W09-	Simplification of algebraic fractions	Use factorisation to simplify algebraic fractions

		Fractions	L034		
			M4-T1-W09-L035	Operations on algebraic fractions	Apply operations (addition, subtraction, multiplication, division) to algebraic fractions and reduce them to their lowest terms
		Logical Reasoning	M4-T1-W09-L036	Logical reasoning – Part 1	Distinguish between simple and compound statements Draw conclusions from a given implication Distinguish between conjunction and disjunction, representing them on truth tables Recognize equivalent statements and apply them to arguments
10			M4-T1-W10-L037	Logical reasoning – Part 2	Recognise and use the symbols for negation, conjunction, disjunction, implication and equivalence Use Venn diagrams to demonstrate connections between statements
	Probability and Statistics	**Statistics**	M4-T1-W10-L038	Pie charts and bar graphs	Draw and interpret pie charts and bar graphs
			M4-T1-W10-L039	Mean, median, and mode of ungrouped data	Calculate the mean, median, and mode of ungrouped data from lists, tables, and graphs
			M4-T1-W10-L040	Histograms	Create a frequency distribution table and use it to draw a histogram Interpret histograms
11			M4-T1-W11-L041	Frequency polygons	Present and interpret grouped data in frequency polygons
			M4-T1-W11-L042	Mean, median, and mode of grouped data	Calculate the mean, median, and mode of grouped data and apply to problem solving
			M4-T1-W11-L043	Cumulative frequency curves and quartiles	Construct a cumulative frequency curve and estimate quartiles Calculate inter-quartile range and semi inter-

					quartile range
			M4-T1-W11-L044	Percentiles	Estimate percentiles of data from the cumulative frequency curve Apply percentiles to real-life problems
12			M4-T1-W12-L045	Dispersion and variation	Describe and interpret the dispersion or spread of values in a data set Calculate the range and variance of a set of ungrouped values
			M4-T1-W12-L046	Standard deviation	Calculate the standard deviation of ungrouped and grouped data
			M4-T1-W12-L047	Mean deviation	Calculate the mean deviation of ungrouped and grouped data
			M4-T1-W12-L048	Statistics problem solving	Solve advanced problems involving statistics
13	**Review or Mock Exams**				
	SS4 - Term 2			**WAEC Review**	
1	**Geometry**	**Angles**	M4-T2-W13-L049	Measuring angles	Identify various types of angles (acute, obtuse, right, reflex, straight) Measure angles using a protractor
			M4-T2-W13-L050	Solving for angles – Part 1	Solve for angles given intersecting lines, including parallel lines with a transversal
			M4-T2-W13-L051	Solving for angles – Part 2	Solve for angles in triangles
			M4-T2-W13-L052	Solving for angles – Part 3	Solve for angles in quadrilaterals and other polygons

2			M4-T2-W14-L053	Solving for angles – Part 4	Solve for angles in compound and complex shapes
			M4-T2-W14-L054	Angle problem solving	Apply angle theorems and properties to solve word problems
	Mensuration	**Mensuration**	M4-T2-W14-L055	Conversion of units of measurement	Convert from large units to smaller units of measurement Convert from smaller units to larger units of measurement
			M4-T2-W14-L056	Area and perimeter of triangles and quadrilaterals	Calculate the area and perimeter of triangles and quadrilaterals
3	**Trigonometry**	**Trigonometry**	M4-T2-W15-L057	Trigonometric ratios	Identify trigonometric and inverse trigonometric ratios and use them to solve for sides and angles of a triangle
			M4-T2-W15-L058	Solving right-angled triangles	Apply the Pythagorean theorem and trigonometric ratios to solve for sides and angles of right-angled triangles, including word problems
			M4-T2-W15-L059	Angles of elevation and depression	Solve practical problems related to angles of elevation and depression
			M4-T2-W15-L060	The unit circle and trigonometric functions of larger angles	Define $\sin\theta$ and $\cos\theta$ as ratios within a unit circle Solve problems involving trigonometric functions of obtuse and reflex angles
4			M4-T2-W16-L061	Graphs of trigonometric functions	Draw the graph of $\sin\theta$, $\cos\theta$, and functions of the form $y = a\sin\theta + b\cos\theta$
			M4-T2-W16-L062	Sine and Cosine Rules	Use the sine and cosine rules to calculate lengths and angles in triangles
	Bearings and distance	**Bearings and distance**	M4-T2-W16-L063	Compass bearings	Interpret bearings in terms of compass directions Make diagram representations of compass

					bearing statements Solve problems on compass bearings
			M4-T2-W16-L064	Distance-bearing form	Use distance-bearing form to give the distance and bearing of one point from another Interpret a problem and draw a corresponding diagram
5			M4-T2-W17-L065	Distance-bearing problems	Draw diagrams for given bearing problems Identify the angles and sides of the right triangle as the direction and distance of bearings Find the reverse bearing of a given bearing
			M4-T2-W17-L066	Bearing problem solving	Solve various bearing problems, applying the Pythagoras theorem, sine rule, and cosine rule as necessary
			M4-T2-W17-L067	Circle	Calculate the circumference and area of a circle Calculate the length of an arc and area of a sector of a circle
			M4-T2-W17-L068	Subtended angles	Solve problems on angles subtended at the circumference and centre of a circle
6	Geometry	Circles	M4-T2-W18-L069	Circle theorems	Identify the 5 circle theorems Apply the 5 circle theorems to solve for angles in circles
			M4-T2-W18-L070	Tangent to a circle	Identify and draw the tangent line to a circle Solve problems related to the tangent to a circle
			M4-T2-W18-L071	Alternate segment theorem	Identify the alternate segment theorem Solve for missing angles using the alternate segment theorem
			M4-T2-W18-L072	Circle problem solving	Apply circle theorems and other properties to find missing angles in various circle diagrams

7	**Mensuration**	**3-dimensional solids**	M4-T2-W19-L073	Surface area	Identify the formulae for surface area Find the surface area of cubes, cuboids, prisms, cylinders, cones, pyramids, spheres and composite solids
			M4-T2-W19-L074	Volume	Identify the formulae for volume Find the volume of cubes, cuboids, prisms, cylinders, cones, pyramids, spheres and composite solids
	Vectors and Transformation	**Vectors**	M4-T2-W19-L075	Operations on vectors	Add and subtract vectors Multiply a vector by a scalar
			M4-T2-W19-L076	Magnitude and direction of vectors	Find the magnitude or length of a column vector Find the direction of a vector
8		**Transformation**	M4-T2-W20-L077	Transformation	Perform single transformations (reflection, rotation, translation, and enlargement), and combinations of transformations
	Geometry	**Construction**	M4-T2-W20-L078	Bisection	Bisect a given line or angle
			M4-T2-W20-L079	Angle construction	Use a pair of compasses to construct special angles and their combinations (90°, 45°, 60°, 30°, 75°, 135°, and 150°)
			M4-T2-W20-L080	Triangle construction	Use a pair of compasses to construct a triangle from given side and angle lengths
9			M4-T2-W21-L081	Quadrilateral construction	Use a pair of compasses to construct a quadrilateral from given side and angle lengths
			M4-T2-W21-L082	Construction of loci	Use a pair of compasses to construct various loci
			M4-T2-W21-L083	Construction of complex shapes	Use a pair of compasses to construct various complex shapes

			M4-T2-W21-L084	Construction word problems	Construct shapes based on information given in word problems
10	**Probability & Statistics**	**Probability**	M4-T2-W22-L085	Addition of probabilities	Apply the addition law to find the probabilities of mutually exclusive and independent events occurring
			M4-T2-W22-L086	Multiplication of probabilities	Apply the multiplication law to find the probabilities of independent events occurring
			M4-T2-W22-L087	Illustration of probabilities	Use outcome tables, tree diagrams, and Venn diagrams to illustrate probability and solve problems
			M4-T2-W22-L088	Probability problem solving	Solve problems related to probability
11	**Mixed WAEC Exam Preparation**	**Problem Solving**	M4-T2-W23-L089	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
			M4-T2-W23-L090	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
			M4-T2-W23-L091	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
			M4-T2-W23-L092	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
12		**Problem Solving**	M4-T2-W24-L093	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
			M4-T2-W24-L094	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams

				Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
			M4-T2-W24-L095		
			M4-T2-W24-L096	Building problem-solving skills	Combine and apply senior secondary math topics to solve high-level questions similar to those from previous WAEC exams
13	**Review or Mock Exams**				