Maths Year 10

TERM 1

10.1 Proportion	Ratios as fractions
	Solving Contextual and Geometrical Problems using Ratios as Fractions
	Comparing Lengths using Ratios and Scale Factors
	Comparing Area and volume of similar shapes
	Equivalent & simplifying ratios
	Solve Problems Using Unitary method
	Direct Proportion
	Inverse Proportion
	Ratios and Graphs
	Percentage Change
	Reverse Percentage Change
	Repeated Percentage Change
	Compound Interest
	Scale Factors
10.2 Sequences	Generating sequences
	Finding the nth term
	Sequences involving triangular, square and cube numbers
	Other sequences
10.3 Probability calculations for more than one event	Mutually exclusive events
	Making estimations with probability
	Relative frequency diagrams
	The addition rule
	The multiplication rule
	Dependent & independent events
	Probability Tree Diagrams

	Solving Probability Problems
	Venn Diagrams & Probability
	Probability in Two-Way tables
	Listing Outcomes of Events
	Probability Sample Spaces

TERM 2

	Identify and Round to Given Degrees of Accuracy
	Identify and Round to Appropriate Degrees of Accuracy
	Accuracy of Measurements
	Calculations Involving Roots
	Calculations Using Index Laws
	Calculations with Fractional Indices
	Estimate Powers and Roots of a given positive number
10.4 Numbers and Accuracy	Standard Form
	Multiplying and dividing numbers in standard form
	Adding and Subtracting numbers in standard form
	Calculate with fractions
	Solving Problems involving Fractions
	Calculate with multiples of Pi
	Simplifying Surds
	Calculating with Surds
	Rationalising Denominators

TERM 3

	Manipulating expressions
10.5 Linear Algebra	Factorising Algebraic Expressions
	Manipulating Binomial Expressions

	Factorising Quadratic Expressions
	Factorising Quadratic Expressions
	Algebraic Fractions
	Writing expressions and Equations
	Using and Rearranging Formulae
	Finding the Equation of a Line (from 2 given points)
	Finding the Equation of a Line (from gradient and one point)
	Equations of Parallel & Perpendicular Lines
	Solving Simultaneous Linear Equations (at least one common coefficient)
	Solving Simultaneous Linear Equations (no common coefficients)
	Forming and Solving Simultaneous Linear Equations
	Simultaneous Linear Equations - Graphical Solutions
	Trial & Improvement
	Recursive Formulae (Iteration)

TERM 4

	Number machines
	Number machines and inverses
	Using Function Notation
	Composite and Inverse Function Notation
	Special Trig Angles
10.6 Functions	Sketching Quadratic and Cubic Functions
	Sketching Reciprocal and Exponential Graphs
	Sketching Trigonometric Graphs
	Plotting Real Life Reciprocal and Exponential Graphs
	Plotting Real Life Kinematic Graphs
	Translating Functions

	Reflecting Functions
	Translating and Reflecting Functions
10.7 Circles	Circle definitions and properties
	Circle theorems: angles
	Circle theorems: angles & Chords
	Circle theorems: tangents
	Circle theorems
	Equation of a Circle
	Finding the Equation of the Tangent

TERM 5

	Pythagoras' theorem
	Sine Ratio
	Cosine Ratio
	Tangent Ratio
	Solving Problems involving Pythagoras' theorem and the Trigonometric Ratios
	Further Problems involving Pythagoras' theorem and the Trigonometric Ratios
10.8 Trigonometry	The Sine Rule
	The Cosine Rule
	Solving Problems involving the Sine and Cosine Rule
	Further Problems involving the Sine and Cosine Rule
	Finding Area of a Triangle using Trigonometry
	Solving Problems involving the Area of a Triangle using Trigonometry
	The Trigonometric Ratios in Similar Shapes
	Solving Problems Using Trigonometric Ratios in Similar Shapes
	Bearings

TERM 6

10.9 Measures and Units	Converting Measures
	Converting Compound Measures
	Converting Compound Measures in Context
	Dimensional Analysis
	Deriving Formulae for Compound Measures
10.10 Quadratic Equations	Solving Quadratic Equations by Factorising
	Solving Quadratic Equations by factorising with Rearrangement
	Approximating Solutions to Quadratic Equations by Graphing
	Solving Quadratic Equations by Completing the Square
	Solving Quadratic Equations using the Quadratic Formula
	Solving Problems involving Quadratic Equations in Context
	Y-intercept of a Quadratic Function
	Roots of a Quadratic Function
	Finding Roots of a Quadratic Function Algebraically
	Turning Points of a Quadratic Function
	Finding Turning Points of a Quadratic Function Algebraically
	Sketching Quadratic Graphs
	Approximating Solutions to Simultaneous Equations involving a Quadratic Graphically
	Approximating Solutions to Simultaneous Equations involving a Quadratic Graphically
	Solving Problems involving Quadratic and Linear Simultaneous Equations Graphically
	Solving Simultaneous Equations involving a Quadratic Algebraically by Factoring
	Solving Simultaneous Equations involving a Quadratic Algebraically by Completing the Square or the Quadratic Formula
	Solve Problems involving Quadratic and Linear Simultaneous Equations Algebraically

TERM 6