

	Apprenticeship and Workplace 10	Apprenticeship and Workplace 11	Apprenticeship and Workplace 12	Foundations of Mathematics and Pre-calculus 10	Foundations of Mathematics 11	Foundations of Mathematics 12	Pre-calculus 11	Pre-calculus 12
Algebra and Number	<ul style="list-style-type: none"> • Proportional reasoning including unit pricing • Formula manipulation and application 	<ul style="list-style-type: none"> • Proportional reasoning including unit analysis • Formula manipulation and application • Numerical puzzles and games 		<ul style="list-style-type: none"> • Factors of whole numbers • Irrational numbers • Powers with integral and rational exponents • Multiplication of polynomial expressions • Common and trinomial factors 	<ul style="list-style-type: none"> • Application of rates 	<ul style="list-style-type: none"> • Numerical puzzles and games 	<ul style="list-style-type: none"> • Absolute value • Radicals and radical expressions • Rational expressions and equations 	
Financial Mathematics	<ul style="list-style-type: none"> • Types of income 	<ul style="list-style-type: none"> • Personal budgets • Compound interest • Financial services including credit cards and loans 	<ul style="list-style-type: none"> • Purchasing and leasing a vehicles • Viability of a small business 			<ul style="list-style-type: none"> • Compound interest • Analysis of renting, leasing or buying • Investment portfolio 		
Geometry	<ul style="list-style-type: none"> • Spatial puzzles and games • Pythagorean theorem • Similarity of convex polygons 	<ul style="list-style-type: none"> • Two and three right triangle problems • Scale • Representation of 3-D objects • Exploded views and component parts of 3-D objects 	<ul style="list-style-type: none"> • Triangles, quadrilaterals and regular polygons • Transformation of 2-D shapes and 3-D objects 		<ul style="list-style-type: none"> • Scale factors, areas, surface area, volume • Proofs for the properties of angles and triangles • Spatial puzzles and games 			
Logic			<ul style="list-style-type: none"> • Logical reasoning puzzles and games 		<ul style="list-style-type: none"> • Inductive and deductive reasoning 	<ul style="list-style-type: none"> • Logic puzzles and games • Application of set theory • Conditional statements 		
Measurement	<ul style="list-style-type: none"> • SI and Imperial units and conversions • Linear, area, volume, capacity, mass and temperature 	<ul style="list-style-type: none"> • Surface area, volume and capacity in SI and Imperial 	<ul style="list-style-type: none"> • Precision, accuracy, uncertainty and tolerance of instruments 	<ul style="list-style-type: none"> • SI and Imperial units and conversions • Surface area and volume of 3-D objects 				
Permutations, Combinations and Binomial Theorem						<ul style="list-style-type: none"> • Fundamental counting principle • Permutations and combinations 		<ul style="list-style-type: none"> • Fundamental Counting Principle • Permutations and combinations • Binomial expansion

Probability			<ul style="list-style-type: none"> • Interpretation of probability 			<ul style="list-style-type: none"> • Odds and probability statements • Mutually exclusive and non-exclusive events • Probability of two events 		
Relations and Functions		<ul style="list-style-type: none"> • Slope 	<ul style="list-style-type: none"> • Linear relations 	<ul style="list-style-type: none"> • Relationship between data, graphs and situations • Slope • Linear relations and characteristics of their graphs • Function notation • Systems of linear equations 	<ul style="list-style-type: none"> • Systems of linear equalities in two variables • Quadratic functions 	<ul style="list-style-type: none"> • Polynomials of degree less than or equal to three • Exponential and logarithmic functions • Sinusoidal functions 	<ul style="list-style-type: none"> • Polynomial factoring • Graphs of absolute value functions • Quadratic functions • Linear-quadratics and quadratic-quadratic equations • Linear and quadratic inequalities • Arithmetic sequences • Geometric sequences • Reciprocal functions 	<ul style="list-style-type: none"> • Operations and compositions of functions • Stretches and translations of functions • Reflections of functions • Inverse of relations • Exponential and logarithmic functions • Polynomial factoring • Graphs of polynomials of degree less than or equal to five • Radical functions • Rational functions
Research Project					<ul style="list-style-type: none"> • Historical event or area of interest involving mathematics 	<ul style="list-style-type: none"> • Current event or area of interest involving mathematics 		
Statistics		<ul style="list-style-type: none"> • Bar graphs, histograms, line graphs and circle graphs 	<ul style="list-style-type: none"> • Measures of central tendency • Percentiles 		<ul style="list-style-type: none"> • Normal distribution, standard deviation and z-scores • Confidence intervals, confidence levels and margin of error 			
Trigonometry	<ul style="list-style-type: none"> • Primary trigonometry ratios 	<ul style="list-style-type: none"> • Cosine Law and Sine Law excluding the ambiguous case 	<ul style="list-style-type: none"> • Cosine Law and Sine Law including the ambiguous case 	<ul style="list-style-type: none"> • Primary trigonometry ratios 			<ul style="list-style-type: none"> • Primary trigonometry ratios • Sine Law and Cosine Law including the ambiguous case 	<ul style="list-style-type: none"> • Angles in degrees and radians • Unit circle • Six trigonometric ratios • Sine, cosine and tangent functions • First and second degree trigonometric equations • Trigonometric identity proofs