	Apprenticeship and Workplace 10	Foundations of Mathematics and Pre-calculus 10	Apprenticeship and Workplace 11	Foundations of Mathematics 11	Pre-calculus 11	Apprenticeship and Workplace 12	Foundations of Mathematics 12	Pre-calculus 12
Algebra and Number	• Proportional reasoning including unit pricing • Formula manipulation and application	• Factors of whole numbers • Irrational numbers • Powers with integral and rational exponents • Multiplication of polynomial expressions • Common and trinomial factors	• Proportional reasoning including unit analysis • Formula manipulation and application • Numerical puzzles and games	• Application of rates	• Absolute value • Radicals and radical expressions • Rational expressions and equations		• Numerical puzzles and games	
Financial Mathematics	• Types of income		• Personal budgets • Compound interest • Financial services including credit cards and loans			• Purchasing and leasing a vehicles • Viability of a small business	• Compound interest • Analysis of renting, leasing or buying • Investment portfolio	
Geometry	• Spatial puzzles and games • Pythagorean theorem • Similarity of convex polygons		• Two and three right triangle problems • Scale • Representation of 3-D objects • Exploded views and component parts of 3-D objects	• Scale factors, areas, surface area, volume • Proofs for the properties of angles and triangles • Spatial puzzles and games		• Triangles, quadrilaterals and regular polygons • Transformation of 2-D shapes and 3-D objects		
Logic				• Inductive and deductive reasoning		• Logical reasoning puzzles and games	• Logic puzzles and games • Application of set theory • Conditional statements	
Measurement	• SI and Imperial units and conversions • Linear, area, volume, capacity, mass and temperature	• SI and Imperial units and conversions • Surface area and volume of 3-D objects	• Surface area, volume and capacity in SI and Imperial			• Precision, accuracy, uncertainty and tolerance of instruments		
Permutations, Combinations and Binomial Theorem							• Fundamental counting principle • Permutations and combinations	• Fundamental Counting Principle • Permutations and combinations • Binomial expansion

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Probability						• Interpretation of probability	• Odds and probability statements • Mutually exclusive and non-exclusive events • Probability of two events	
Relations and Functions		• Relationship between data, graphs and situations • Slope • Linear relations and characteristics of their graphs • Function notation • Systems of linear equations	• Slope	• Systems of linear equalities in two variables • Quadratic functions	• 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	• Linear relations	• Polynomials of degree less than or equal to three • Exponential and logarithmic functions • Sinusoidal functions	• 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				• Historical event or area of interest involving mathematics			• Current event or area of interest involving mathematics	
Statistics			• Bar graphs, histograms, line graphs and circle graphs	• Normal distribution, standard deviation and z-scores • Confidence intervals, confidence levels and margin of error		• Measures of central tendency • Percentiles		
Trigonometry	• Primary trigonometry ratios	• Primary trigonometry ratios	• Cosine Law and Sine Law excluding the ambiguous case		• Primary trigonometry ratios • Sine Law and Cosine Law including the ambiguous case	• Cosine Law and Sine Law including the ambiguous case		• Angles in degrees and radians • Unit circle • Six trigonometric ratios • Sine, cosine and tangent functions • First and second degree trigonometric equations • Trigonometric identity proofs