The HENRY BEAUFORT School

Maths Curriculum Map

		Year 7	DCE (Diminished Cultural Experiences)	Year 8	DCE	Year 9 Foundation	Year 9 Higher	DCE	Year 10 Foundation	Year 10 Higher	DCE	Year 11 Foundation	Year 11 Higher	DCE
Number / Proprotional Reasoning / Algebra / Geometry / Statistics	Autumn 1	Integers and Place Value: Multiplicitive Reasoning, BIDMAS, Decimals, Rounding	Time?? Timetables - bus/train. Money problems: decorating problems.	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices, Standard Form	Time?? Timetables - bus/train. Money problems: decorating problems. ***Standard Form - Space Project***	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices, Standard Form	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, **Indices, Roots, Standard Form**	Time?? Timetables - bus/train. Money problems: decorating problems	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices, Standard Form, Types of Number	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices **(including fractional and -ve)**, Standard Form, Types of Number, **Algebraic PFD, Surds**	Time?? Timetables - bus/train. Money problems: decorating problems	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices, Standard Form, Types of Number, HCF, LCM, PFD	Integers and Place Value: 4 Operations, Rounding, Estimation, Decimal Arithmetic, Problem Solving, Indices, Reciprocals, Standard Form, Types of Number, HCF, LCM, **Algebraic PFD**	Time?? Timetables - bus/train. Money problems: decorating problems
		Integers and Place Value: Directed number and Inequalties		Introduction to Algebra: Expressions, Substitution and Sequences		Types of number: Factors, Multiples, Primes, LCM, HCF	Types of number: Factors, Multiples, Primes, LCM, HCF, **including PFD with algebra**		Fractions: Sequences, Equivalent, Algebraic, Worded	Fractions: Sequences, Equivalent, Algebraic, Worded, **Recurring Decimals to Fractions**	**Maths in Sport - WLS**	Fractions: Sequences, Equivalent, Algebraic, Worded	**Accuracy and Bounds, Surds**	
		Algebra Basics: Expressions, Substitution and Sequences		Straight Line Graphs: Gradient and Intercept (extension to curved graphs)			**Accuracy and Bounds**		Percentages - FDP, ordering, worded	Percentages - FDP, ordering, worded		Percentages - FDP, ordering, worded, Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Fractions: Sequences, Equivalent, Algebraic, Worded, **Recurring Decimals to Fractions**	Finance: discount, service charge, tax, VAT
				Fractions: Sequences, Equivalent, Algebraic, Worded		Fractions: Sequences, Equivalent, Algebraic, Worded	Fractions: Sequences, Equivalent, Algebraic, Worded, **Reciprocals**		Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Overseas Travel: time zones? Foreign Currency - buy and sell rates. Shopping: best buy/value for money, percentage change, recipes.	Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Percentages - FDP, ordering, worded, Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Finance - bank accounts, loans, overdrafts, credit cards, interest
	Autumn 2	Calculator Skills*		Compound Measures: SDT, DMV. inverse proportion		Percentages - FDP, ordering, worded	Percentages - FDP, ordering, worded		Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Finance: discount, service charge, tax, VAT	Compound Measures: Units, Direct and Inverse Proportion (worded examples)	Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Overseas Travel: time zones? Foreign Currency - buy and sell rates. Shopping: best buy/value for money, percentage change, recipes.
		Types of number: Factors, Multiples, Primes, LCM, HCF		FDP: Equivalence, Recurring Fractions		Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates	Overseas Travel: time zones? Foreign Currency - buy and sell rates. Shopping: best buy/value for money, percentage change, recipes.	Proportion - Finances, Worded Problems	Proportion - Finances, Worded Problems	Finance - bank accounts, loans, overdrafts, credit cards, interest	Algebra Basics: Expressions, Substitution and Sequences, Expanding and Factorising Brackets, Quadratics	Compound Measures: Units, Direct and Inverse Proportion	
		Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates		Ratio and Proportion: Equivalence, Sharing, Expressing as a Fraction, Recipes, Unitary, Best Buy, Exchange Rates, Map Scales	Overseas Travel: time zones Foreign Currency - buy and sell rates. Shopping: best buy/value for money, percentage change, recipes.	Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Finance: discount, service charge, tax, VAT	Algebra Basics: Expanding and Factorising Brackets, Quadratics	Algebra Basics: Expanding and Factorising Brackets, Quadratics, **Difference of Two Squares**		Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Introduce Functions, Inequalities	Algebra Basics: Expressions, Substitution and Sequences, Expanding and Factorising Brackets, Quadratics, Difference of Two Squares	
		**Primary colleagues highlighted that they rarely use calculators so this is crucial toTEACH, not assume.*				Proportion - Finances, Worded Problems	Proportion - Finances, Worded Problems	Finance - bank accounts, loans, overdrafts, credit cards, interest	Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Introduce Functions, Inequalities	Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Introduce Functions, Inequalities		Simultaneous Equations	Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Functions, Inequalities, Algebraic Proof	
	Spring 3	Indices, Powers and Roots: = +ve, -ve and 0	Overseas Travel: time zones? Foreign Currency - buy and sell rates. Shopping: best buy/value for money, percentage change, recipes.	Real-Life Graphs: Distance Time, Real Life Situations, SDT, Exchange Rates		Algebra Basics: Expressions, Substitution and Sequences	Algebra Basics: Expressions, Substitution and Sequences		3D Shapes: Nets, Plans, Elevations, Volume and Surface Area	3D Shapes: Nets, Plans, Elevations, Volume and Surface Area		Real-Life Graphs: Distance Time, Real Life Situations, SDT, Exchange Rates	Simultaneous Equations	
		Fractions: Sequences, Equivalent, Algebraic, Worded		Tables, Charts and Graphs: Pie Charts	Data in the news - misleading graphs	Algebra Basics: Expanding and Factorising Brackets, Quadratics	Algebra Basics: Expanding and Factorising Brackets, Quadratics, **Difference of Two Squares**		Angles: Basic Angles, Parallel lines, Angles in Polygons	Angles: Basic Angles, Parallel lines, Angles in Polygons **Circle Theorems**		Graphs: Straight Line, Quadratic, Cubic, Linear (sequences)	Graphs: Quadratic, Cubic, Linear (sequences) Real-Life Graphs, Distance Time, Real Life Situations, SDT, Exchange Rates, Trig Graphs, Transformations of Graphs	
		FDP: Eqivalence		Algebra Basics: Expanding and Factorising Brackets, Quadratics		Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Functions	Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Functions		Pythagoras and Trigonometry	Pythagoras, Trigonometry and **Advanced Trigonometry**		2D Shapes: Mensuration, 3D Shapes: Nets, Plans, Elevations, Volume and Surface Area	2D Shapes: Mensuration, 3D Shapes: Nets, Plans, Elevations, Volume and Surface Area	
				Indices: Estimating Roots, Laws and Evaluation		Inequalities: Number Lines, Solving	Inequalities: Number Lines, Solving		Constructions, Loci, Bearings, Maps and Scale Drawing	Constructions, Loci, Bearings, Maps and Scale Drawing		Angles: Basic Angles, Parallel lines, Angles in Polygons	Angles: Basic Angles, Parallel lines, Angles in Polygons **Circle Theorems**	
	Spring 4	Percentages: Find, Increase, Decrease	Finance: discount, service charge, tax, VAT	Percentages: Multipliers, Interest, >100%, Expressing as a % of another number	Finance: discount, service charge, tax, VAT, "profit", depreciates	2D Shapes: Mensuration, especially Circles, Trapezium	2D Shapes: Mensuration, especially Circles, Trapezium		Simultaneous Equations: Algebraic	Simultaneous Equations: Algebraic and **Graphical**		Pythagoras and Trigonometry	Pythagoras, Trigonometry and **Advanced Trigonometry**	
		Proportion - Finances, Worded Problems	Finance - bank accounts, loans, overdrafts, credit cards, interest, "profit"	Algebra Basics: Forming and Solving Equations, Rearranging Formulae, Introduce Functions		3D Shapes: Volume, Surface Area	3D Shapes: Volume, Surface Area, **(circles, cylinders, cones, spheres)**		Graphs: Quadratic, Cubic, Linear (sequences)	Graphs: Quadratic, Cubic, Linear (sequences) **Trig Graphs, Transformations of Graphs**		Constructions, Loci, Bearings, Maps and Scale Drawing	Constructions, Loci, Bearings, Maps and Scale Drawing	
		Algebra Basics: Expanding and Factorising Brackets		Inequalities: Number Lines, Solving		Angles: Basic Angles, Parallel lines	Angles: Basic Angles, Parallel lines		Compound Measures: Units, Direct and Inverse Proportion (worded examples)	Compound Measures: Units, Direct and Inverse Proportion		Transformations: Drawing and Describing, Symmetry, Similarity and Scale Factors	Transformations: Drawing and Describing, Symmetry, Similarity, Congruence and Scale Factors including Frustums	
		(Revision and Testing)		(Revision and Testing)		(Revision and Testing)	(Revision and Testing)		(Revision and Testing)	(Revision and Testing)		Vectors: Column, Addition	**Vectors**	
	Summer 5	Algebra Basics: Solving Equations, Rearranging Formulae	Future Study: reference to extension of algebra	Transformations: Drawing and Describing, Symmetry, Similarity and Congruence	Real life examples	Pythagoras	Pythagoras		Transformations: Drawing and Describing, Symmetry	Transformations: Drawing and Describing, Symmetry		Data Collection: Principles, Questionnaires	Data Collection: Principles, Questionnaires, Sampling	Data in the news - misleading graphs
		Inequalities: Number Lines, Solving		3D Shapes: Volume	Rates of fill	Constructions, Loci, Bearings, Maps and Scale Drawing	Constructions, Loci, Bearings, Maps and Scale Drawing		Similarity and Scale Factors	Similarity, Congruence and Scale Factors **including Frustums**		Averages: Frequency Tables, Stem and Leaf	Tables, Charts and Graphs: Two-Way Tables, Scatter Graphs, Pie Charts, **Histograms, Frequency Polygon**	Data in the news - misleading graphs
		Sequences and Straight Line Graphs: Term to Term, Arithmetic, Special, Straight Line Graphs	Real life graphs	Data Handling: Averages from Frequency Tables (extend to Cumulative Frequency)		Trigonometry	Trigonometry		Vectors: Column, Addition	**Vectors**		Tables, Charts and Graphs: Two-Way Tables, Scatter Graphs, Pie Charts,	Averages: Frequency Tables, Stem and Leaf, **Cumulative Frequency**	Timetables: bus/train
		Averages: Frequency Tables		Tables, Charts and Graphs: extension Histograms	Data in the news - misleading graphs	Sequences and Straight Line Graphs: nth Term, Gradient and Intercept	Sequences and Straight Line Graphs: nth Term, Gradient and Intercept		Probability and Frequency Trees, Venn Diagrams	Probability and Frequency Trees, Venn Diagrams: **including Conditional**	Gambling	Probability and Frequency Trees, Venn Diagrams	Probability and Frequency Trees, Venn Diagrams: **including Conditional**	Gambling
	Summer 6	Probability	Gambling Careers: statistician	Angles: Basic Angles, Parallel lines		Graphs: Quadratic, Cubic, Linear	Graphs: Non-Linear (Quadratic, Cubic, Linear)		Real-Life Graphs: Distance Time, Real Life Situations	Real-Life Graphs: Distance Time, Real Life Situations				
		Angles: Basic Angle Facts, Parallel lines, Symmetry		3D Shapes: Nets, Plans, Elevations, FEV, Symmetry, Surface Area	Real life examples		**Solving Quadratics: Simultaneous Equations**		Data Collection: Principles, Questionnaires	Data Collection: Principles, Questionnaires	Data in the news - misleading graphs			
		Mixed Ability Classes Topic Data: Definitions, Collection and Display	Use of News Articles to compare data presentation.	Pythagoras		Compound Measures: Units, Direct and Inverse Proportion (worded examples)	Compound Measures: Units, Direct and Inverse Proportion (worded examples)		Tables, Charts and Graphs: Two-Way Tables, Scatter Graphs, Pie Charts,	Tables, Charts and Graphs: Two-Way Tables, Scatter Graphs, Pie Charts, **Histograms, Frequency Polygon**	Timetables: bus/train			
		Mixed Ability Classes Topic Data: Definitions, Collection and Display				Probability and Frequency Trees	Probability and Frequency Trees	Gambling	Averages: Frequency Tables, Stem and Leaf	Averages: Frequency Tables, Stem and Leaf, **Cumulative Frequency**	Data in the news - misleading graphs			
						Averages: Frequency Tables, Stem and Leaf	Averages: Frequency Tables, Stem and Leaf	Data in the news - misleading graphs		**Introduction to Proof**				

Career Reference