



Co-op Academy Walkden Curriculum Overview 2021-22

Maths

Key Stage 3

Power Concepts: **Number/ Ratio and Proportion** **Algebra** **Shape, Space and Measure** **Statistics and Probability**

Year Group		AU1	AU2	SP1	SP2	SU1	SU2
7	Core Theme	Algebraic Thinking	Place Value and proportion	Applications of number	Directed Number & Fractional Thinking	Lines and Angles	Reasoning with Number
	Units of Work	Sequences Understand and use algebraic notation Equality and Equivalence	Place value and ordering integers and decimals Fraction, decimal and percentage equivalence	Solving Problems with addition and subtraction Solving problems with multiplication and division Fractions and percentages of amounts	Operations and equations with directed number Addition and subtraction of fractions	Constructing, measuring and using geometric notation Developing geometric reasoning	Developing number sense Sets and Probability Prime numbers and proof
8	Core Theme	Proportional Reasoning	Representations	Algebraic Techniques	Developing Number	Developing Geometry	Reasoning with Data
	Units of Work	Ratio and scale Multiplicative change	Working in the cartesian plane Representing data	Brackets, equations and Inequalities Sequences	Fractions and percentages Standard index form	Angles in Parallel lines and polygons	Measures of location The data handling cycle



		Multiplying and dividing fractions	Tables & probability	Indices	Number Sense	Area of trapezia and circles Line symmetry and reflection	
9	Core Theme	Reasoning with Algebra	Constructing in 2 and 3 dimensions	Reasoning with number	Reasoning with geometry	Reasoning with proportion	Representations
	Units of Work	Forming and solving equations Straight line graphs Testing conjectures	Three dimensional shapes Constructions and congruency	Numbers Using Percentages Maths and money	Deduction Rotation and translation Pythagoras Theorem	Enlargement and similarity Solving ratio and proportion problems Rates	Solving problems using graphs, tables and algebra (Mixed Problems)



Key Stage 4

Power Concepts: **Number/ Ratio and Proportion** **Algebra** **Shape, Space and Measure** **Statistics and Probability**

10 2021	Core Theme	AT1: Similarity	AT2: Developing Algebra	SP1: Geometry	SP2: Proportions and proportional change	SU1: Delving into Data	SU2: Using number
	Units of Work	Congruence, similarity and enlargement Trigonometry	Representing solutions of equations and inequalities Simultaneous equations	Angles and bearings Working with circles Vectors	Ratio & Fractions Percentages with interest Probability	Collecting, representing and interpreting data	Non-calculator methods Types of number and sequences Indices and Roots
11 2022	Core Theme	AT1: Algebra QLA and LSQ as well	AT2: Graphs QLA and LSQ as well	SP1: Reasoning QLA and LSQ as well	SP2: Revision and Communication	SU1: Consolidation of gaps	SU2: Examinations
	Units of Work	Expanding & Factorising Changing the subject Functions New content*	Gradients and lines Non-linear graphs Using graphs	Multiplicative Geometric Algebraic	Transforming & Constructing Listing & Describing Show that...		
11 2021		AT1: Algebra, Graphs, Number and Shape QLA and LSQ as well	AT2: Data, Shape and Graphs QLA and LSQ as well	SP1: Number, Shape, Graphs and Algebra QLA and LSQ as well	SP2: Data, Number and Shape QLA and LSQ as well	SU1: Consolidation of gaps	SU2: Examinations



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		<i>Expanding & Factorising Functions Changing the subject Gradients and lines Number Pythagoras and Trigonometry</i>	<i>Listing and Describing Probability Geometric Reasoning Vectors Transforming and constructing Non-linear graphs</i>	<i>Multiplicative Reasoning SDT, MDV and PFA Using Graphs Algebraic Reasoning Gradient and lines</i>	<i>Finding Averages Percentages and Interest Volume, Surface areas Circular Areas and Volumes</i>		
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