



Subject Knowledge Audit - Maths

Please decide on your ability to teach the content/skills listed below at KS3/KS4	
<b>KEY:</b>	
4	No knowledge – Currently a gap in my subject area
3	Limited knowledge – Would not feel confident to teach this content
2	Good knowledge – Confident in ability to teach with some guidance
1	Expert knowledge - Confident to teach
The completed subject audit will be used by your Mentor to create your Individual Training Plan. Your progress will be reviewed on a fortnightly basis.	
<b>You should review and record your progress at each review window below (and share this with your Mentor)</b>	

Topic	Content	Content	Baseline (4 -1)	Dec. (3 -1)	May (3 -1)	Target for ECT year if applicable
Number	Place Value	1				
	Ordering Integers and decimals	1				
	Reading Scales	1				
	Interpreting Real-Life Tables - Time	1				
	Interpreting Real-Life Tables - Timetables and Distance Tables	1				
	Adding Integers and Decimals	2				
	Subtracting Integers and Decimals	2				
	Multiplying and Dividing Integers	2				
	Inverse Operations	2				
	Money Questions - Non-Calculator Questions	2				
	Money Questions - Calculator Questions	2				
	Negatives in Real Life	2				
	Equivalent Fractions	2				
	Simplifying Fractions	2				
	Factors, Multiples and Primes	2				
	Introduction to Powers/Indices	2				
	Multiplying and Dividing by Powers of 10	2				
	Rounding to the Nearest 10, 100, 1000	2				
	Rounding to Decimal places	2				
	Multiplying Decimals	3				
Dividing Decimals	3					
Four Rules of Negatives - Adding and Subtracting	3					



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Four Rules of Negatives - Multiplying and Dividing	3				
Listing Strategies	3				
Comparing Fractions	3				
Adding and Subtracting Fractions	3				
Finding a Fraction of an Amount	3				
Multiplying Fractions	3				
Dividing Fractions	3				
BODMAS/BIDMAS	3				
Reciprocals	3				
Product of Primes	3				
Highest Common Factor (HCF)	3				
Lowest Common Multiple (LCM)	3				
Squares, Cubes and Roots	3				
Working with Indices	3				
Standard Form	3				
Fractions, Percentages, Decimals conversions	3				
Percentage of an Amount	3				
Change to a Percentage	3				
Rounding to Significant Figures	3				
Estimating Answers	3				
Using Place Value	3				
Index Notation	4				
Introduction to Bounds	4				
Negative Indices	5				
Error Intervals	5				
Recurring Decimals to Fractions	6				
Fractional Indices	7				
Recurring Decimals - Proof	7				
Upper and Lower Bounds	8 - 9				
Surds - Introduction to Surds	8 - 9				
Surds - Surd Expressions	8 - 9				
Surds - Rationalising the Denominator	8 - 9				



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Topic	Content	Content	Baseline (4 -1)	Dec. (3 -1)	May (3 -1)	Target for ECT year if applicable
Algebra	Introduction to Algebraic Conventions	1				
	Coordinates	1				
	Simplifying - Addition and Subtraction	2				
	Simplifying - Multiplication	2				
	Simplifying - Division	2				
	Function Machines	2				
	Generating a Sequence - Term to Term	2				
	Expanding Brackets	3				
	Simple Factorisation	3				
	Substitution	3				
	Straight Line Graphs	3				
	The Gradient of a Line	3				
	Drawing Quadratic Graphs	3				
	Sketching Functions	3				
	Solving Equations using Flowcharts	3				
	Subject of a Formula using Flowcharts	3				
	Generating a Sequence from the nth Term	3				
	Finding the nth Term	3				
	Midpoint of a Line on a Graph	4				
	Expanding and Simplifying Brackets - Single Set of Brackets	4				
	Expanding and Simplifying Brackets - Double Set of Brackets	4				
	Solving Equations - Balancing	4				
	Rearranging Simple Formulae	4				
	Forming Formulae and Equations	4				
	Inequalities on a Number Line	4				
	Solve Linear Inequalities	4				
	Simultaneous Equations Graphically	4				
	Fibonacci Sequences	4				
	Factorising and Solving Quadratics	5				
	The Difference of Two Squares	5				
	Finding the Equation of a Straight Line - $y=mx+c$	5				
	Roots and Turning Points of Quadratics	5				
Cubic and Reciprocal Graphs	5					
Simultaneous Equations Algebraically	5					
Geometric Progressions	5					



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	Product of Three Binomials	6				
	Iteration - Trial and Improvement	6				
	Iterative Processes	6				
	Rearranging difficult Formulae	7				
	Solving Quadratics with the Formula	7				
	Factorising Hard Quadratics	7				
	Algebraic Proof	7				
	Exponential Functions	7				
	Trigonometric Graphs - Sine and Cosine	7				
	Trigonometric Graphs - Tangent	7				
	Transformation of Functions - Polynomial Functions	7				
	Transformation of Functions - Trigonometric Functions	7				
	Equation of a Circle	7				
	Regions	7				
	Perpendicular Lines	8 - 9				
	Completing the Square	8 - 9				
	Algebraic Fractions - Simplifying	8 - 9				
	Algebraic Fractions - Solving	8 - 9				
	Simultaneous Equations with a Quadratic	8 - 9				
	Solve Quadratic Inequalities	8 - 9				
	Finding the nth Term of a Quadratic	8 - 9				
	Inverse Functions - Introduction	8 - 9				
	Inverse Functions - Harder Questions	8 - 9				
	Composite Functions	8 - 9				
	Velocity-Time Graphs	8 - 9				
Topic	Content	Content	Baseline	Dec.	May	Target for ECT year applicable
			(4 -1)	(3 -1)	(3 -1)	
Probability and Statistics	The Probability Scale	1				
	Tally Charts and Bar Charts	1				
	Pictograms	1				
	Frequency Trees	2				
	Listing Outcomes	2				
	Calculating Probabilities	2				
	Mutually Exclusive Events	2				
	Two-Way Tables	2				
	Averages and the Range	2				
	Data - Discrete and Continuous	2				
	Vertical Line Charts	2				
	Frequency Tables and Diagrams	2				
	Experimental Probabilities	3				



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	Possibility Spaces	3				
	Venn Diagrams - Notation	3				
	Representing Data - Pie Charts	3				
	Representing Data - Stem and Leaf Diagrams	3				
	Averages from a table	3				
	Averages from a grouped table	3				
	Simple Tree Diagrams	4				
	Sampling Populations	4				
	Time Series	4				
	Harder Tree Diagrams	5				
	Stratified sampling	5				
	Probability using Venn Diagrams	6				
	Cumulative Frequency	6				
	Boxplots	6				
	And and Or Probability Questions	7				
	Histograms	7				
Topic	Content	Content	Baseline	Dec.	May	Target for ECT year applicable
			(4 -1)	(3 -1)	(3 -1)	
Ratio	Introduction to Ratio	2				
	Using Ratio for Recipe Questions	2				
	Introduction to Percentages	2				
	Value for Money	2				
	Simple Proportion	2				
	Exchanging Money	3				
	Sharing using Ratio	3				
	Ratios, Fractions and Graphs	3				
	Increase/Decrease by a Percentage	3				
	Percentage Change	3				
	Reverse Percentage Problems	3				
	Simple Interest	3				
	Compound Units	4				
	Distance-Time Graphs	4				
	Similar Shapes	4				
	Compound Interest and Depreciation	5				
Direct and Inverse Proportion	7					



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Topic	Content	Content	Baseline	Dec.	May	Target for ECT year applicable
			(4 -1)	(3 -1)	(3 -1)	
Geometry	Simple Geometric Definitions	1				
	Polygons	1				
	Symmetries	1				
	Tessellations and Congruency - Tessellations	1				
	Names of Angles	1				
	Properties of Solids	2				
	Nets	2				
	Angles on a Line and at a Point	2				
	Measuring and drawing Angles	2				
	Drawing a Triangle Using a Protractor	2				
	Reflections	2				
	Rotations	2				
	Translations	2				
	Plans and Elevations	2				
	Perimeters	2				
	Area of a Rectangle	2				
	Area of a Triangle	2				
	Area of a Parallelogram	2				
	Area of a Trapezium	2				
	Metric conversions	3				
	Surface Area of a Prism	3				
	Volume of a Prism	3				
	Circle Definitions	3				
	Area of a Circle	3				
	Circumference of a Circle	3				
	Angles and Parallel Lines	3				
	Angles in a Triangle	3				
	Properties of Special Triangles	3				
	Angle Sum of Polygons	3				
	Bearings	3				
	Bisecting an Angle	4				
	Constructing Perpendiculars - Bisecting a Line	4				
	Constructing Perpendiculars - From any Point	4				
	Draw a Triangle Using Compasses	4				
Enlargements	4					
Tangents, Arcs, Sectors and Segments	4					
Pythagoras' Theorem	4					
Loci	5					



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Congruent triangles	5				
Sectors of a Circle	5				
Trigonometry	5				
Spheres	5				
Pyramids	5				
Cones	5				
Frustums	5				
Exact Trigonometric Values	5				
Introduction to Vectors	5				
Enlargement - Negative Scale Factor	6				
Combinations of Transformations	6				
Circle Theorems	6				
Proof of Circle Theorems	6				
Similarity - Area and Volume	7				
The Sine Rule	7				
The Cosine Rule	7				
Area of a Triangle Using Sine	7				
Pythagoras in 3D	8 - 9				
Trigonometry in 3D	8 - 9				
Vectors	8 - 9				



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Evidence of subject knowledge development

Record below the things you have **read and researched** to improve your subject knowledge in the boxes below.

Term 1	September/ October	November/ December
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Term 2	January/ February	March/ April
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Term 3	May/ June	June/ July
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Please sign this sheet off at the end of the training year:

Signed: \_\_\_\_\_ (Trainee)      Date: \_\_\_\_\_

Signed: \_\_\_\_\_ (Mentor)      Date: \_\_\_\_\_