

KS3 progression of SOW

Sets 7N2, 7S2, 7N3, 7S3, 7S4, 8N2, 8S2, 9Ma3, 9Ma4a, 9Ma4b

	Year 7	Year 8	Year 9
Number	<p>Positive whole numbers</p> <ul style="list-style-type: none"> ➤ Place value and ordering ➤ 4 operations; BIDMAS ➤ Efficient non-calculator methods ➤ Using a calculator ➤ Factors, multiples and primes ➤ Multiplying by 10, 100, 1000 <p>Rounding and estimation</p> <ul style="list-style-type: none"> ➤ Rounding to nearest 10, 100, 1000 ➤ Estimating by rounding as above <p>Fractions</p> <ul style="list-style-type: none"> ➤ Improper fractions and mixed numbers ➤ Equivalence and comparing ➤ Fractions of a quantity <p>Decimals and percentages</p> <ul style="list-style-type: none"> ➤ Decimal place value ➤ Converting between fractions and decimals ➤ % of a quantity 	<p>Integers</p> <ul style="list-style-type: none"> ➤ Place value and ordering; inequalities ➤ 4 operations; BIDMAS ➤ Squares, cubes and roots <p>Rounding</p> <ul style="list-style-type: none"> ➤ To nearest power of 10 ➤ Significant figures and estimating <p>Fractions</p> <ul style="list-style-type: none"> ➤ Comparing ➤ 4 operations and BIDMAS <p>Percentages</p> <ul style="list-style-type: none"> ➤ % of an amount ➤ Reverse % and VAT ➤ % change 	<p>Factors and Multiples</p> <ul style="list-style-type: none"> ➤ Prime numbers and factors ➤ HCF and LCM <p>Index notation</p> <ul style="list-style-type: none"> ➤ Calculating using integer indices <p>Standard form</p> <ul style="list-style-type: none"> ➤ Converting ➤ Calculating

Algebra	Expressions <ul style="list-style-type: none"> ➤ Use of letters ➤ Substitution 	Expressions and formulae <ul style="list-style-type: none"> ➤ Substitution ➤ Writing and evaluating expressions ➤ Evaluating formulae ➤ Collecting like terms ➤ Expanding single brackets and simplifying Equations and inequalities <ul style="list-style-type: none"> ➤ Solving two step linear equations ➤ Representing and solving inequalities Proof Sequences <ul style="list-style-type: none"> ➤ Number patterns - arithmetic and geometric sequences ➤ General term of a linear sequence 	Expressions <ul style="list-style-type: none"> ➤ Collecting like terms ➤ Substitution ➤ Expanding single and double brackets and simplifying ➤ Factorising linear expressions Equations and Formulae <ul style="list-style-type: none"> ➤ Solving linear equations in one variable with brackets ➤ Rearranging formulae to evaluate Graphs <ul style="list-style-type: none"> ➤ Linear relationships between two variables: $y = mx+c$ ➤ Plotting and interpreting linear graphs ➤ Plotting and interpreting quadratic graphs
Ratio and proportion	Ratio <ul style="list-style-type: none"> ➤ Ratio and fractions ➤ Equivalent ratio and simplifying 	Ratio <ul style="list-style-type: none"> ➤ Simplifying harder ratios ➤ Dividing into a ratio ➤ Scale plans and maps 1:r 	Proportion <ul style="list-style-type: none"> ➤ Direct proportion ➤ Inverse proportion Rate and speed <ul style="list-style-type: none"> ➤ Rate and average rate ➤ Exchange rate ➤ Simple interest ➤ Speed and average speed
Shape and measure	Angles <ul style="list-style-type: none"> ➤ Properties and types Perimeter and area <ul style="list-style-type: none"> ➤ Squares and rectangles ➤ Triangles Volume and surface area <ul style="list-style-type: none"> ➤ Nets of cubes and cuboids ➤ Cubes and cuboids Symmetry <ul style="list-style-type: none"> ➤ Rotational and reflective symmetry 	Angles <ul style="list-style-type: none"> ➤ Properties ➤ Parallel lines Perimeter and area <ul style="list-style-type: none"> ➤ Parallelogram ➤ Trapezia ➤ Circles ➤ Composite shapes Volume and surface area <ul style="list-style-type: none"> ➤ Nets ➤ Prisms ➤ Cylinders Units <ul style="list-style-type: none"> ➤ Conversion of square and cubic units 	2D shapes and Angles <ul style="list-style-type: none"> ➤ Triangles ➤ Quadrilaterals ➤ Polygons ➤ Trigonometry - SOHCAHTOA Pythagoras' Theorem Transformations, symmetry, congruence <ul style="list-style-type: none"> ➤ Translation, reflection, rotation ➤ Congruence ➤ Congruent triangles ➤ Similarity Construction <ul style="list-style-type: none"> ➤ Bisectors ➤ Triangles

Probability and statistics	Data <ul style="list-style-type: none">➤ Collecting and organising data➤ Representing: bar charts, pictograms➤ Grouped data	Graphs <ul style="list-style-type: none">➤ Line graphs➤ Pie charts➤ Scatter graphs	Data analysis <ul style="list-style-type: none">➤ Averages and range of a list of data➤ Averages and range of frequency data Probability <ul style="list-style-type: none">➤ Single events➤ Sample space diagrams Venn diagrams <ul style="list-style-type: none">➤ Set notation➤ Probability
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