

KS3 progression of SOW
Sets 7N2, 7S2, 7N3, 7S3, 7S4, 8N2, 8S2, 9Ma5, 9Ma6

	Year 7	Year 8	Year 9 Pre - GCSE
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>Core skills</p> <ul style="list-style-type: none"> ➤ Place value and rounding incl sig figs ➤ Calculating with integers and decimals ➤ BIDMAS <p>Factors, Multiples and Primes</p> <ul style="list-style-type: none"> ➤ Prime numbers, factors and multiples ➤ HCF and LCM ➤ Prime factorisation <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 <p>Fractions</p> <ul style="list-style-type: none"> ➤ Fractions of an amount ➤ 4 operations incl reciprocals ➤ Equivalence and comparing ➤ Fraction/decimal/percentage/ conversion <p>Percentages</p> <ul style="list-style-type: none"> ➤ % of an amount incl simple interest

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 ➤ Simplify using indices ➤ Substitution ➤ Expanding and simplifying single brackets ➤ Factorising linear expressions Equations and Formulae <ul style="list-style-type: none"> ➤ Solving two step linear equations with non-integer solutions ➤ Change the subject of a formula Graphs <ul style="list-style-type: none"> ➤ Plot points in all four quadrants ➤ Linear relationships between two variables: $y = mx+c$ ➤ Plotting and interpreting linear graphs (gradient) ➤ Plotting and interpreting real life 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 	Ratio <ul style="list-style-type: none"> ➤ Simplifying ratio in form 1:n ➤ Sharing into a ratio given one part Proportion <ul style="list-style-type: none"> ➤ Direct proportion
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"> ➤ Properties of triangles and quadrilaterals ➤ Symmetry ➤ Parallel lines Transformations, symmetry, congruence <ul style="list-style-type: none"> ➤ Translation, reflection, rotation ➤ Enlarge with positive scale factor ➤ Congruence ➤ Similarity Construction <ul style="list-style-type: none"> ➤ 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 ➤ Draw and interpret basic charts and graphs incl stem and leaf ➤ Draw and interpret pie charts ➤ Two way tables Probability <ul style="list-style-type: none"> ➤ Single events ➤ Relative frequency ➤ Listing outcomes and frequency trees ➤ Mutually exclusive events Venn diagrams <ul style="list-style-type: none"> ➤ Complete a Venn diagram ➤ Basic set notation
-----------------------------------	--	---	--