## St Vincents - Maths scheme of work

Yearly overview for KS3 and KS4 Maths course (3 lessons/wk)

Year	Sept-Dec (autumn) 70 days – 42 lessons	Jan- April (spring) 67 days – 40 lessons	May-July (summer) 53 days – 32 lessons
7 – S3 (Nat Curr)	<ul> <li>Bodmas</li> <li>Ordering nos and place values</li> <li>Add, subtract, multiply and divide</li> <li>Decimals</li> <li>Multiplying and dividing by 10s and with no calculator</li> <li>Negative numbers, even and odd nos</li> <li>Perimeter and area intro</li> <li>Wordy questions</li> <li>Units and telling the time</li> <li>Simpsons maths project</li> </ul>	<ul> <li>Square and cube nos</li> <li>Prime nos</li> <li>Multiples factors and prime factor</li> <li>LCM and HCF</li> <li>Fractions and Percentages</li> <li>Rounding and estimating</li> <li>Powers</li> <li>Square and cube roots</li> <li>Darts project</li> <li>Lunar theme park project</li> </ul>	<ul> <li>Algebra simplifying and multiplying</li> <li>Formulas</li> <li>Word formulas</li> <li>Solving equations</li> <li>Number patterns and sequences</li> <li>Recap of year 7 work</li> </ul>
8 – S4 (Nat Curr)	<ul> <li>X and Y coordinates</li> <li>Straight line graphs</li> <li>Plotting graphs</li> <li>Travel graphs and reading them</li> <li>Conversion graphs</li> <li>Ratios and proportion</li> <li>Percentage increase and decrease</li> <li>Recap of Year 7 work</li> </ul>	<ul> <li>Units and Conversion factors</li> <li>Reading timetables</li> <li>Maps and scale drawings</li> <li>Speed</li> <li>Symmetry</li> <li>Quadrilaterals</li> <li>Triangles and polygons</li> <li>Recap of Year 7 work</li> </ul>	<ul> <li>Congruence and similarity</li> <li>Perimeter and area</li> <li>Area formulas</li> <li>Area of compound shapes</li> <li>Circles</li> <li>3d shapes</li> <li>Recap of Year 7 work</li> </ul>
9 – \$5	<ul> <li>Nets, surface area and volume</li> <li>Lines and measuring/drawing angles</li> <li>Angle rules</li> <li>Parallel lines</li> </ul>	<ul><li>Constructions</li><li>Probability</li><li>Outcomes</li><li>Venn diagrams</li></ul>	<ul> <li>Frequency tables</li> <li>Scatter graphs</li> <li>Standard form</li> <li>Recap of years 7 and 8</li> </ul>

(Nat Curr)	<ul> <li>Interior and exterior angles</li> <li>Transformations and enlargements</li> <li>Significant figures</li> <li>Estimating in science</li> <li>Mathematical symbols in science</li> <li>Converting between units</li> </ul>	<ul> <li>Line graphs, bar and pie charts</li> <li>Mean mode median range</li> <li>Average student project</li> <li>Plan a holiday project</li> <li>WW2 code cracking</li> </ul>	and consolidation of KS3
10 – S6 (OCR GCSE - J560)	<ul> <li>Four rules and whole number theory</li> <li>Operations and inverse</li> <li>Fractions and percentages</li> <li>Powers and roots</li> <li>Standard form</li> <li>Estimation</li> <li>Ratio</li> <li>Direct and inverse proportion</li> </ul>	<ul> <li>Growth and decay</li> <li>Algebraic expressions</li> <li>Formulae</li> <li>Algebra equations</li> <li>Inequalities</li> <li>Rearranging</li> <li>Functions</li> </ul>	<ul> <li>Conversion rates</li> <li>Compound measures</li> <li>Sequences</li> <li>Simultaneous equations</li> <li>2D and 3D Shapes</li> <li>Transformations, Perimeter and area</li> <li>Year 10 revision</li> </ul>
11 – S7 (OCR GCSE – J560)	<ul> <li>Angles and parallel lines</li> <li>Geometry</li> <li>Polygons</li> <li>Ruler and compass construction</li> <li>Bearings and maps</li> <li>Pythagoras and Trigonometry</li> <li>Vectors</li> <li>Coordinates and midpoints</li> <li>Straight line graphs</li> </ul>	<ul> <li>Interpreting graphs</li> <li>Harder graphs</li> <li>Real life graphs</li> <li>Probability</li> <li>Events and probability diagrams</li> <li>Statistics</li> <li>Collecting and analysing data</li> </ul>	<ul> <li>Revision and past paper practice</li> <li>After exams start maths functional skills</li> </ul>