## Year 8 Westbourne Curriculum Plan – Maths Delta

| Timescale                       | Autumn  |   | Spring  |  | Summer   |   |  |
|---------------------------------|---|---|---|--|--|---|--|
| Prior Learning<br>(from KS2/3)  | KS2: Coordinates in all 4<br>Quadrants.<br>KS2: Graphs and Charts.<br>KS3: Parallel Lines<br>KS2: Basic Angle Facts.<br>KS3: Measuring Angles.<br>KS3: Understanding of Angle<br>Facts. | KS3: Squares, Cubes and<br>Roots.<br>KS3: Laws of Indices.<br>KS3: Number and Pattern<br>Sequences.<br>KS3: Algebraic Notation.     | KS2: Inequality Notation.<br>KS3: Equivalence.<br>KS2: Area of shape .  | KS3: FDP Equivalence.<br>KS2: Simple transformations<br>KS2: Representing Graphs   | KS3: Probability Terminology.<br>KS3: Algebraic Notation.                                    | KS2: Volume of shapes<br>KS3: Algebraic Notation.   |  |
| Topic/ Unit title               | Angles, Scale<br>Drawing & Graphs   | Indices, Sequences,<br>solving equations,<br>Expanding and<br>Factorising & Real<br>Life Graphs                                     | Inequalities, Ratio<br>and Proportion,<br>Higher Order Graphs<br>& Area of shapes   | Bounds,<br>Transformations,<br>Percentages and<br>Representing data.   | Probability,<br>Simultaneous<br>Equations and<br>Trigonometry                                | Solving complex<br>equations<br>including<br>quadratics,<br>Volume of shapes,<br>Compound<br>Measures                           |  |
| Assessment<br>Opportunities     | Each block is assessed by an orange book assessment.<br>Each term is assessed using an end of termly test.<br>The whole year is assessed using an end of year test.                     |   |   |  |  |   |  |
| Links to other units in<br>KS4. | KS4: Multi-step Angle<br>Problems.<br>KS4: Maps and Scales.<br>KS4: Gradients of Lines.<br>KS4: Similar Shapes.<br>KS4: Equation of a line in the<br>form $y = mx + c$ .                | KS4: Negative and Fractional<br>Indices.<br>KS4: Nth term of Quadratic<br>Sequences.<br>KS4: Expanding and<br>Factorising Binomials | KS4: Direct and Inverse<br>Proportion<br>KS4: Representing Inequalities<br>Graphically.<br>KS4: Area of Compound<br>Shapes.<br>KS4: Area of Sectors | KS4: Reverse Percentages.<br>KS4: Drawing Pie Charts.<br>KS4: Averages from Frequency<br>Tables.<br>KS4: Cumulative Frequency<br>Graphs, Histograms and<br>Boxplots. | KS4: Sample Space Diagrams<br>and Probability Trees.<br>KS4: Pythagoras and<br>Trigonometry. | KS4: Solving quadratics,<br>quadratic formula &<br>completing the square<br>KS4 Converting between<br>units of Area and Volume. |  |

## Year 8 Westbourne Curriculum Plan – Maths Pi

| Timescale                       | Autumn  |  | Spring  |   | Summer   |  |  |
|---------------------------------|---|--|---|---|--|--|--|
| Prior Learning<br>(from KS2/3)  | KS2: Place Value<br>KS3: Squares, Cubes and Roots.<br>KS3: Laws of Indices.   | KS2: Coordinates in all 4<br>Quadrants.<br>KS3: Algebraic Notation.<br>KS3: Number and Pattern<br>Sequences<br>KS2 : Averages<br>KS2: Representing Graphs<br>KS2: Graphs and Charts. | KS2: Area & Volume of shapes<br>KS3: FDP Equivalence.<br>KS2: Finding percentages   | KS3: Parallel Lines<br>KS2: Basic Angle Facts.<br>KS3: Measuring Angles.<br>KS3: Understanding of Angle<br>Facts.<br>KS3: Equivalence.<br>KS2: Proportion   | KS2: Perimeter & Area of<br>Shapes<br>KS3: Probability Terminology.<br>KS2: Simple transformations   | KS3: Algebraic Notation.                                 |  |
| Topic/ Unit title               | Place Value,<br>Decimals, BIDMAS,<br>HCF & LCM, Long<br>Multiplication &<br>Division, Indices &<br>Estimating   | Mapping, Solving<br>Equations,<br>Sequences,<br>Representing Data<br>& Averages  | Fractions,<br>Percentages & 3D<br>shapes  | Angles, Graphs, Ratio<br>& Conversions  | Perimeter & Area,<br>Probability &<br>Transformations  | Symmetry,<br>Constructions,<br>Algebraic<br>expressions  |  |
| Assessment<br>Opportunities     | Each block is assessed by an orange book assessment.<br>Each term is assessed using an end of termly test.<br>The whole year is assessed using an end of year test. |  |   |   |  |  |  |
| Links to other units in<br>KS4. | KS4: Negative and Fractional<br>Indices.  | KS4: Averages from Frequency<br>Tables.<br>KS4: Cumulative Frequency<br>Graphs, Histograms and<br>Boxplots.<br>KS4: Nth term of Quadratic<br>Sequences<br>KS4: Solving equations     | KS4: Calculating with Fractions<br>KS4: Reverse & Compound<br>Percentages.<br>KS4: Direct and Inverse<br>Proportion<br>KS4: Converting between units<br>of Area and Volume<br>KS4: Similar Shapes | <ul> <li>KS4: Multi-step Angle Problems.</li> <li>KS4: Equation of a line in the form y = mx + c.</li> <li>KS4: Gradients of Lines.</li> <li>KS4: Reverse Percentages.</li> <li>KS4: MDV, FPA, DST</li> <li>KS4: Conversion Graphs</li> </ul> | KS4: Area of Compound<br>Shapes.<br>KS4: Area of Sectors.<br>KS4: Maps and Scales.<br>KS4: Sample Space Diagrams<br>and Probability Trees.<br>KS4: Negative fractional<br>enlargements | KS4: Loci<br>KS4: Expanding and<br>Factorising Binomials |  |

## Year 8 Westbourne Curriculum Plan – Maths Theta

| Timescale                       | Autumn   |  | Spring  |  | Summer   |   |  |
|---------------------------------|--|--|---|--|--|---|--|
| Prior Learning<br>(from KS2/3)  | KS2: Representing Graphs<br>KS2: Graphs and Charts.<br>KS3: Algebraic Notation.<br>KS3: Laws of Indices.<br>KS2 : Averages   | KS2: Simple transformations<br>KS2: Coordinates in all 4<br>Quadrants.<br>KS2: Finding percentages | KS2: Inequality Notation.<br>KS3: Algebraic Notation.<br>KS2: Area & Volume of shapes   | KS3: Number and Pattern<br>Sequences.<br>KS3: FDP Equivalence.   | KS3: Probability Terminology.<br>KS3: Parallel Lines<br>KS2: Basic Angle Facts.<br>KS3: Measuring Angles.<br>KS3: Understanding of Angle<br>Facts. | KS2: Multiples & Factors<br>KS2: Proportion                                   |  |
| Topic/ Unit title               | Indices, Algebraic<br>expressions,<br>Expanding,<br>Factorising,<br>Representing Data &<br>Averages  | Transformations,<br>Percentages,<br>Compound<br>Measures &<br>Construction                         | Solving Equations,<br>Inequalities,<br>Simultaneous<br>Equations, Area &<br>Volume of shapes  | Sequences, Graphs,<br>Fractions, Compound<br>& Reverse<br>Percentages  | Probability, Angles<br>& Bearings  | Pythagoras &<br>Trigonometry, HCF<br>& LCM, Ratio &<br>Conversions            |  |
| Assessment<br>Opportunities     | Each block is assessed by an orange book assessment.<br>Each term is assessed using an end of termly test.<br>The whole year is assessed using an end of year test                                     |  |   |  |  |   |  |
| Links to other units in<br>KS4. | KS4: Averages from Frequency<br>Tables.<br>KS4: Cumulative Frequency<br>Graphs, Histograms and<br>Boxplots.<br>KS4: Negative and Fractional<br>Indices.<br>KS4: Expanding and Factorising<br>Binomials | KS4: Negative fractional<br>enlargements<br>KS4: MDV, FPA, DST<br>KS4: Conversion Graphs           | KS4: Solving quadratics,<br>quadratic formula &<br>completing the square<br>KS4: Representing Inequalities<br>Graphically.<br>KS4: Area of Compound<br>Shapes.<br>KS4: Area of Sectors.<br>KS4 Converting between units<br>of Area and Volume | <ul> <li>KS4: Nth term of Quadratic<br/>Sequences.</li> <li>KS4: Equation of a line in the<br/>form y = mx + c.</li> <li>KS4: Gradients of Lines.</li> <li>KS4: Reverse &amp; Compound<br/>Percentages.</li> </ul> | KS4: Multi-step Angle<br>Problems.<br>KS4: Maps and Scales.<br>KS4: Sample Space Diagrams<br>and Probability Trees.                                | KS4: Direct and Inverse<br>Proportion<br>KS4: Pythagoras and<br>Trigonometry. |  |