

#### KS3 Curriculum

# Subject: Mathematics

|          | 7M1   | 7M2   | 7M3   | 7M4  |
|----------|---|---|---|--|
| Autumn 1 | Negative Numbers                                  | Negative Numbers                                  | Rounding and Place Value                    | Rounding and Place Value                   |
|          | Simplifying Expressions                           | Simplifying Expressions                           | Tables & Charts                             | Tables & Charts                            |
|          | Constructions                                     | Constructions                                     | Negative Numbers                            | Units of Measurement & Reading<br>Scales   |
|          | Pie Charts  | Pie Charts  | Number Properties                           | Introduction to Probability                |
|          | Properties of Number                              | Properties of Number                              | Scales and Graphs                           |  |
|          | Factor Trees                                      | Factor Trees                                      | Fractions                                   |  |
|          | Fractions   | Probability                                       |   |  |
|          | Symmetry  | Symmetry  | Language of Shapes                          | Language of Shapes                         |
|          | Scatter Graphs                                    | Scatter Graphs                                    | Symmetry                                    | Co-ordinates and Symmetry                  |
| 7        | Probability                                       | Fractions   | Metric Conversions                          | Metric Conversions                         |
| Autumn   | Rounding & Estimation                             | Distance Time Graphs                              | Probability                                 | Fraction/Decimal/Percentage<br>Conversions |
|          | Fraction/Decimal/Percentage/<br>Ratio Conversions | Rounding & Estimation                             | Simplifying Expressions                     | Time and Calendars                         |
|          | Percentages with Calculators                      | Fraction/Decimal/Percentage/<br>Ratio Conversions | Time  |  |
| Spring 1 | Distance Time Graphs                              | Percentages with Calculators                      | Averages & Range                            | Calculating Averages                       |
|          | Averages & Range                                  | Averages & Range                                  | Fraction/Decimal/<br>Percentage Conversions | Measuring Lengths and angles               |
|          | Pythagoras  | Plans & Elevations                                | Angles Rules                                | Conversion Graphs                          |
|          | Plans & Elevations                                | Angle Rules                                       | Sequences                                   | Using letters to represent                 |
|          | Angle Rules                                       | Bearings  | Stem & Leaf Diagrams                        | Numbers                                    |
|          | Bearings  | Sequences   |   |  |
|          | Written Calculations                              |   |   |  |
|          | Sequences   | Stem & Leaf Diagrams                              | Equations                                   | Sequences                                  |
| 2        | Stem & Leaf Diagrams                              | Frequency Polygons                                | Area & Perimeter                            | Basic Formulas                             |
| in       | Equations   | Area  | Ratio & Proportion                          | Area & Perimeter                           |
| br       | Iteration   | Translation                                       |   |  |
| •,       | Area  |   |   |  |
| -        | Ratio & Proportion                                | Equations   | Co-ordinates                                | 3-Dimensional Language                     |
| mer      | 3-D Shapes  | Ratio & Proportion                                | 3-D Shapes                                  | Algebraic Expressions                      |
|          | Co-ordinates and Graphs                           | Co-ordinates and Graphs                           | Translation                                 |  |
| un l     | Frequency Polygons                                |   | Formulas                                    |  |
| Š        | Speed & Compound Measures                         |   |   |  |
| ~        | Translation/Enlargement                           | Enlargement                                       | Enlargement                                 | Consolidation                              |
| Summer 2 | Circles   | 3-D Shapes  | BIDMAS                                      |  |
|          | Formulas and Equations of                         | Formulas and Equations of                         | Consolidation                               |  |
|          | Motion  | Motion  |   |  |
|          | Nets & Surface Area                               | Circles   |   |  |
|          | Loci  | Nets & Surface Area                               |   |  |



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|                 | 8M1   | 8M2   | 8M3   | 8M4   |
|-----------------|---|---|---|---|
| tumn 2 Autumn 1 | BivilWritten CalculationsPythagorasSimplifying ExpressionsIndices & Standard FormWriting and solving equationsInequalitiesAverages from Grouped DataDistance Time GraphsSpeed & Compound MeasuresFormulas and Equations ofMotionFractions | Pythagoras<br>Simplifying Expressions<br>Angle Rules<br>Writing and solving equations<br>Construction<br>Fractions<br>Pie Charts<br>Factor Trees<br>Distance Time Graphs<br>Scatter Graphs<br>Probability | Simplifying Expressions<br>Negative Numbers<br>Constructions<br>Pie Charts<br>Properties of Number<br>Factor Trees<br>Probability<br>Symmetry<br>Fractions<br>Scatter Graphs<br>Bounding & Estimation | Sivi4Tables & ChartsRounding and Place ValueNegative NumbersSimplifying ExpressionsScales and GraphsNumber PropertiesFractionsLanguage of ShapesSymmetryMetric ConversionsProbability |
| Aut             | Probability<br>Factor Trees   | Rounding & Estimating<br>Written Calculations   | Distance Time Graphs<br>Fraction/Decimal/Percentage/<br>Ratio Conversions   |   |
| Spring 1        | Iteration (Trial & Improvement)<br>Percentages<br>Quadratic Expressions<br>Loci<br>Venn Diagrams & Frequency<br>Trees<br>Angles in Regular Polygons   | Speed & Compound Measures<br>Percentages with Calculators<br>Plans & Elevations<br>Venn Diagrams & Frequency<br>Trees<br>Bearings<br>Loci   | Percentages with Calculators<br>Averages & Range<br>Plans & Elevations<br>Angle Rules<br>Bearings<br>Stem & Leaf Diagrams   | Time<br>Averages & Range<br>Angles Rules<br>Fraction/Decimal/Percentage<br>Conversions<br>Stem & Leaf Diagrams  |
| Spring 2        | Trigonometry<br>Simultaneous Equations<br>Enlargement, Translation &<br>Reflection  | Reflection/Rotation<br>Stem & Leaf Diagrams<br>Area<br>Equations<br>Iteration   | Sequences<br>Area<br>Equations  | Sequences<br>Area & Perimeter<br>Equations<br>3-D Shapes  |
| Summer 1        | Ratios<br>Similar Shapes<br>Straight Line Graphs  | 3-D Shapes<br>Ratios<br>Straight Line Graphs  | 3-D Shapes<br>Translation/Enlargement<br>Ratio & Proportion   | Ratio & Proportion<br>Translation<br>Enlargement  |
| Summer 2        | Plotting Graphs<br>Circles<br>3-D Shapes<br>Proportionality<br>Quadratic Sequences  | Enlargement and Translation<br>Circles<br>Formulas and Equations of<br>Motion<br>Nets & Surface Area<br>Sequences   | Co-ordinates and Graphs<br>Circles<br>Formulas and Equations of<br>Motion<br>Frequency Polygons<br>Nets & Surface Area  | Co-ordinates<br>Formulas<br>BIDMAS<br>Consolidation   |



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|          | 9M1                                   | 9M2                                   | 9M3                                | 9M4   | 9M5   |
|----------|---------------------------------------|---------------------------------------|------------------------------------|---|---|
| Autumn 1 | Pythagoras                            | Written Calculations                  | Pythagoras                         | Simplifying Expressions                           | Tables & Charts                             |
|          | Simplifying Expressions               | Pythagoras                            | Simplifying Expressions            | Negative Numbers                                  | Rounding and Place Value                    |
|          | Indices & Standard Form               | Simplifying Expressions               | Writing and solving equations      | Constructions                                     | Negative Numbers                            |
|          | Averages from Grouped<br>Data         | Writing and solving equations         | Angle Rules                        | Pie Charts  | Simplifying Expressions                     |
|          | Written Calculations                  | Inequalities                          | Construction                       | Properties of Number                              | Scales and Graphs                           |
|          | Fractions                             | Indices & Standard Form               | Pie Charts                         | Factor Trees                                      | Fractions                                   |
|          | Rearranging Formulae                  | Factor Trees                          | Factor Trees                       | Probability                                       |   |
| Autumn 2 | Probability                           | Averages from Grouped<br>Data         | Fractions                          | Symmetry  | Language of Shapes                          |
|          | Tree Diagrams                         | Fractions                             | Distance Time Graphs               | Scatter Graphs                                    | Metric Conversions                          |
|          | Quadratic Expressions                 | Probability                           | Speed & Compound<br>Measures       | Fractions   | Symmetry                                    |
|          | Distance Time Graphs                  | Distance Time Graphs                  | Scatter Graphs                     | Rounding & Estimation                             | Fraction/Decimal/<br>Percentage Conversions |
|          | Iteration (Trial & Improvement)       | Speed & Compound<br>Measures          | Probability                        | Distance Time Graphs                              |   |
|          | Similar Shapes                        | Formulas and Equations of<br>Motion   | Rounding & Estimating              | Fraction/Decimal/Percentage<br>/Ratio Conversions |   |
| ring 1   | Percentages                           | Iteration (Trial & Improvement)       | Percentages with<br>Calculators    | Averages & Range                                  | Time  |
|          | Loci and constructions                | Percentages                           | Venn Diagrams &<br>Frequency Trees | Angle Rules                                       | Averages & Range                            |
|          | Circle Theorems                       | Venn Diagrams &<br>Frequency Trees    | Written Calculations               | Percentages with Calculators                      | Number Properties                           |
| Sp       | Speed & Compound<br>Measures          | Loci                                  | Loci                               | Plans & Elevations                                | Probability                                 |
|          | Proportionality                       | Angles in Regular Polygons            | Plans & Elevations                 | Bearings  | Angles Rules                                |
|          | Angles in Regular Polygons            |                                       | Bearings                           |   |   |
|          | Straight Line Graphs                  | Similar Shapes                        | Sequences                          | Sequences   | Stem & Leaf Diagrams                        |
| g 2      | Simultaneous Equations                | Trigonometry                          | Stem & Leaf Diagrams               | Stem & Leaf Diagrams                              | Sequences                                   |
| rin      | Inequalities                          | Simultaneous Equations                | Area                               | Area  | Area & Perimeter                            |
| Sp       | Cumulative frequency                  |                                       | Iteration                          | Equations   | Equations                                   |
|          |                                       |                                       | Frequency Polygons                 | Frequency Polygons                                | Ratio & Proportion                          |
|          | Plotting Graphs                       | Proportionality                       | Straight Line Graphs               | Co-ordinates and Graphs                           | Ratio & Proportion                          |
| ner 1    | Circles                               | Enlargement, Translation & Reflection | Ratios                             | Ratio & Proportion                                | 3-D Shapes                                  |
| umn      | Ratios                                | Ratios                                | Enlargement and<br>Translation     | Translation/Enlargement                           | Translation                                 |
| S        | Enlargement, Translation & Reflection | Straight Line Graphs                  |                                    |   | Enlargement                                 |
| Summer 2 | Formulas and Equations of<br>Motion   | Quadratic Expressions                 | Formulas and Equations of Motion   | Formulas and Equations of<br>Motion               | Co-ordinates                                |
|          | Quadratic Sequences                   | Plotting Graphs                       | Circles                            | Circles   | BIDMAS                                      |
|          | 3-D Shapes                            | Circles                               | 3-D Shapes                         | Nets & Surface Area                               | Formulas                                    |
|          | Trigonometry                          | 3-D Shapes                            | Nets & Surface Area                | 3-D Shapes  |   |
|          |                                       | Quadratic Sequences                   |                                    |   |   |