| Year 5 - Maths Overview |  |  |  |
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| Term | Topic | Objectives | Mental Maths Objectives |
| Autumn | Number: Place Value Week 1-3 | 1000s, 100s, 10s and 1s <br> Numbers to 10,000 <br> Rounding to the nearest 10 <br> Rounding to the nearest 100 <br> Round to nearest 10, 100 and 1,000 <br> Numbers to 100,000 <br> Compare and order numbers to 100,000 <br> Round numbers within 100,000 <br> Numbers to a million <br> Counting in $10 \mathrm{~s}, 100 \mathrm{~s}, 1,000 \mathrm{~s}, 10,000 \mathrm{~s}$, and 100,000s <br> Compare and order numbers to one million <br> Round numbers to one million <br> Negative numbers <br> Roman Numerals to 1,000 | Count up/down in thousands <br> Read Roman numerals to 1000. <br> Use knowledge of multiples and factors, <br> test for divisibility ( $246 \div 6=123 \div 3$ ) <br> Double and halve money by partitioning <br> (Half of $£ 75.40=$ Half of $£ 75$ (37.50) plus <br> half of 40p) <br> Know $7 x$ and $9 x$ table; apply and extend. |
|  | Number: Addition and subtraction <br> Week 4-5 | Add two 4-digit numbers - one exchange <br> Add two 4-digit numbers - more than one exchange <br> Add whole numbers with more than 4 digits (column method) <br> Subtract two 4-digit numbers - one exchange <br> Subtract two 4-digit numbers - more than one exchange <br> Subtract whole numbers with more than 4 digits (column method) <br> Round to estimate and approximate Inverse operations (addition and subtraction) Multi-step addition and subtraction problems |  |


|  | Statistics | Interpret charts <br> Comparison, sum and difference <br> Introduce line graphs <br> Read and interpret line graphs <br> Draw line graphs <br> Use line graphs to solve problems <br> Read and interpret tables <br> Two-way tables <br> Timetables |
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|  | Number: Multiplication and division | Week 8-10 <br> Multiples <br> Factors <br> Common factors <br> Prime numbers <br> Square numbers <br> Cube numbers <br> Multiply by 10 <br> Multiply by 100 <br> Multiply by 10, 100 and 1,000 <br> Divide by 10 <br> Divide by 100 <br> Divide by 10, 100 and 1,000 <br> Multiples of 10, 100 and 1,000 |
|  | Measurement: Perimeter and area <br> Week 11-12 | Measure perimeter <br> Perimeter on a grid <br> Perimeter of rectangles <br> Perimeter of rectilinear shapes <br> Calculate perimeter <br> Counting squares <br> Area of rectangles <br> Area of compound shapes <br> Area of irregular shapes |


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| Spring | Number: Multiplication and division Week 1-3 | Multiply 2-digits by 1-digit Multiply 3-digits by 1-digit Multiply 4-digits by 1 -digit Multiply 2-digits (area model) Multiply 2-digits by 2-digits Multiply 3-digits by 2-digits Multiply 4-digits by 2-digits Divide 2-digits by 1-digit (1) Divide 2-digits by 1-digit (2) Divide 3-digits by 1-digit Divide 4-digits by 1-digit Divide with remainders | Use doubling and halving as mental division/multi strategies ( $58 \times 5=$ half of $58 \times 10$ ) <br> Use knowledge of factors and multiples in multiplication e.g. ( $43 \times 6$ is double $43 \times 3$ and $28 \times 50$ is half of $28 \times 100=$ 1400) <br> Identify all multiples and factors including finding all factor pairs. <br> Know $3 x, 4 x, 6 x, 8 x$ table. Apply and extend. <br> Know square numbers and square roots up to 144 <br> Recall prime numbers up to 19 |
|  | Number: Fractions <br> Week 4-9 | What is a fraction? <br> Equivalent fractions (1) <br> Equivalent fractions <br> Fractions greater than 1 <br> Improper fractions to mixed numbers <br> Mixed numbers to improper fractions <br> Number sequences <br> Compare and order fractions less than <br> 1 <br> Compare and order fractions greater <br> than 1 <br> Add and subtract fractions <br> Add fractions within 1 <br> Add 3 or more fractions <br> Add fractions <br> Add mixed numbers |  |


|  |  | Subtract fractions <br> Subtract mixed numbers <br> Subtract - breaking the whole <br> Subtract 2 mixed numbers <br> Multiply unit fractions by an integer <br> Multiply non-unit fractions by an integer <br> Multiply mixed numbers by integers <br> Calculate fractions of a quantity <br> Fraction of an amount <br> Using fractions as operators |  |
| :---: | :---: | :---: | :---: |
|  | Number: Decimals and percentages Week 10-12 | Decimals up to 2 d.p. <br> Decimals as fractions (1) <br> Decimals as fractions (2) <br> Understand thousandths <br> Thousandths as decimals <br> Rounding decimals <br> Order and compare decimals <br> Understand percentages <br> Percentages as fractions and decimals Equivalent F.D.P. |  |


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| Summer | Consolidation of week 1 <br> Number: Decimals <br> Week 2-4 | Adding decimals within 1 <br> Subtracting decimals within 1 <br> Complements to 1 <br> Adding decimals - crossing the whole <br> Adding decimals with the same <br> number of decimal places <br> Subtracting decimals with the same number of decimal places <br> Adding decimals with a different number of decimal places <br> Subtracting decimals with a different number of decimal places <br> Adding and subtracting wholes and decimals <br> Decimal sequences <br> Multiplying decimals by 10, 100 and 1,000 <br> Dividing decimals by 10,100 and 1,000 | Use place value and number facts to add two or more friendly numbers including money and decimals (e.g. $3+4+8+6+7,0.6+0.4+0.7$ ) <br> Add and subtract decimal numbers which are near multiples of 1 or 10 including money (e.g. £6.34-1.99 or £34.59-£19.95) <br> Count in 11 's and 12 's and learn the $11 x$ and $12 x$ table <br> Add to the next 10 from a decimal number (e.g. $13.6+6.4=20$ ). <br> Know number bonds to 1 and to the next whole number |
|  | Geometry: Properties of Shape <br> Week 5-7 | Identify angles <br> Compare and order angles <br> Measure angles in degrees <br> Measuring with a protractor (1) <br> Measuring with a protractor (2) <br> Drawing lines and angles accurately <br> Calculating angles on a straight line <br> Calculating angles around a point <br> Triangles <br> Quadrilaterals <br> Calculating lengths and angles in <br> shapes <br> Regular and irregular polygons |  |


|  |  | Reasoning about 3D shapes |  |
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|  | Geometry: Position and Direction Week 8-9 | Describe position <br> Draw on a grid <br> Position in the first quadrant <br> Translation <br> Translation with coordinates <br> Lines of symmetry <br> Complete a symmetric figure <br> Reflection <br> Reflection with coordinates |  |
|  | Measurement: Converting Units Week 10-11 | Kilometres <br> Kilograms and kilometres <br> Millimetres and millilitres <br> Metric units <br> Imperial units <br> Converting units of time <br> Timetables |  |
|  | Measurement: Volume Week 12 | What is volume? <br> Compare volume <br> Estimate volume <br> Estimate capacity |  |

