## Planning Guidance

- Ensure each lesson contains an element of counting, which is linked to other areas of your Maths curriculum. For example, counting in 25 s using the measuring cylinder ITP; counting in 5 minutes on a clock to make an hour.
- Ensure each lesson has a taught mental starter to engage the pupils and to help coverage. For example working on prime numbers as a mental starter before a lesson on simplifying fractions. Sometimes the mental starter will be linked to the main, whereas other times it won't
- Every lesson should involve reasoning and problem solving, through both content and questioning techniques.

| Week | Topic | Autumn Term Objectives Covered |
| :---: | :---: | :---: |
| 1-2 | Place Value \& Number | - Count in multiples of 6, 7, 9, 25 and 1000 <br> - Find 1000 more or less than a given number <br> - Count backwards through zero to include negative numbers <br> - Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) <br> - Order and compare numbers beyond 1000 <br> - Identify, represent and estimate numbers using different representations <br> - Round any number to the nearest 10,100 or 1000 <br> - Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. |
| 3 | Mental Addition \& Subtraction with Perimeter | - Addition and subtraction of 2-digit numbers bridging 10s <br> - Addition using near doubles <br> - Addition and subtraction using near tens <br> - Addition and subtraction of 3 -digit multiples of 10 <br> - Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres |
| 4-5 | Written Addition \& Subtraction | - Add and subtract numbers up to 4 digits using columnar methods <br> - Solve addition and subtraction two-step problems in contexts, deciding which operations to use and why <br> - Estimate, compare and calculate different measures, including money in pounds and pence |
| 6 | Statistics | - Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. <br> - Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. |
| 7 | Mental Multiplication \& Division with Area | - use place value, known and derived facts to multiply and divide mentally <br> - Recognise and use factor pairs and commutativity in mental calculations <br> - Find the area of rectilinear shapes by counting squares |
| 8-9 | Written Multiplication \& Division | - Recall multiplication and division facts for multiplication tables up to $12 \times 12$ <br> - Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers |


|  |  | - Recognise and use factor pairs and commutativity in mental calculations <br> - Multiply two-digit and three-digit numbers by a one-digit number using formal written layout <br> - Divide 2-digit and 3-digit numbers by a 1-digit number using a formal layout <br> - Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. <br> - Estimate, compare and calculate different measures, including money in pounds and pence |
| :---: | :---: | :---: |
| 10 | Problem Solving | - Finding all possibilities |
| 11-13 | Fractions \& Decimals | - Recognise and show, using diagrams, families of common equivalent fractions <br> - Add and subtract fractions with the same denominator over one whole <br> - Solve problems involving increasingly harder fractions to calculate quantities and fractions divide quantities, including non-unit fractions where the answer is a whole number |
| 14-15 | Geometry: shape \& Symmetry | - Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes <br> - Identify acute and obtuse angles and compare and order angles up to two right angles by size <br> - Identify lines of symmetry in 2-D shapes presented in different orientations <br> - Complete a simple symmetric figure with respect to a specific line of symmetry. |
| Week | Topic | Spring Term Objectives Covered |
| 1-2 | Place Value \& Number | - Count in multiples of 6, 7, 9, 25 and 1000 <br> - Find 1000 more or less than a given number <br> - Count backwards through zero to include negative numbers <br> - Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) <br> - Order and compare numbers beyond 1000 <br> - Identify, represent and estimate numbers using different representations <br> - Round any number to the nearest 10,100 or 1000 <br> - Read Roman numerals to 100 ( I to C ) and know that over time, the numeral system changed to include the concept of zero and place value. |
| 3-4 | Addition \& Subtraction including statistics, perimeter and money | - Add and subtract numbers up to 4 digits using columnar methods <br> - Solve addition and subtraction two-step problems in contexts, deciding which operations to use and why <br> - Estimate and use inverse operations to check answers to a calculation <br> - Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres <br> - Estimate, compare and calculate different measures, including money in pounds and pence <br> - Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs |
| 5-6 | Multiplication \& Division including area and money | - Use place value, known and derived facts to multiply and divide mentally <br> - Recognise and use factor pairs and commutativity in mental calculations <br> - Find the effect of dividing a one- or two- digit number by 10 and 100 , identifying the value of the digits in the answer as units, tenths and hundredths <br> - Multiply 2-digit and 3-digit numbers by a 1-digit number using a formal layout <br> - Divide 2-digit and 3-digit numbers by a 1-digit number using a formal layout <br> - Solve problems involving multiplying and adding, including integer scaling problems and harder correspondence problems such as n objects are connected to m objects |


|  |  | - | Find the area of rectilinear shapes by counting squares |
| :--- | :--- | :--- | :--- |
|  |  | - | Estimate, compare and calculate different measures, including money in pounds and pence |


|  |  | - Divide 2-digit and 3-digit numbers by a 1-digit number using a formal layout <br> - Solve problems involving multiplying and adding, including integer scaling problems and harder correspondence problems such as $n$ objects are connected to $m$ objects <br> - Find the area of rectilinear shapes by counting squares <br> - Estimate, compare and calculate different measures, including money in pounds and pence |
| :---: | :---: | :---: |
| 6-8 | Fractions \& Decimals | - Recognise and show, using diagrams, families of common equivalent fractions <br> - Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. <br> - Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number <br> - Add and subtract fractions with the same denominator <br> - Recognise and write decimal equivalents of any number of tenths or hundredths <br> - Recognise and write decimal equivalents to $1 / 41 / 23 / 4$ <br> - Find the effect of dividing a one- or two-digit number by 10 and 100 , identifying the value of the digits in the answer as ones, tenths and hundredths <br> - Round decimals with one decimal place to the nearest whole number <br> - Compare numbers with the same number of decimal places up to two decimal places <br> - Solve simple measure and money problems involving fractions and decimals to two decimal places. |
| 9 | Problem Solving | - Logic Puzzles |
| 10-11 | Position \& Direction | - Describe positions on a 2D grids as coordinates in the first quadrant <br> - I can complete a simple symmetric figure with respect to a specific line of symmetry <br> - Plot specified points and draw sides to complete a given polygon <br> - Describe movements between positions as translations of a given unit to the left/right and up/down |

