## Number and Place Value:

|  | Counting | Writing Numbers | Representing Numbers | Place Value | Comparing and Ordering | Rounding | Problems |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \dot{\delta} \\ & \dot{\delta} \\ & \dot{\sim} \end{aligned}$ | - count in multiples of $6,7,9,25$ and 1000 <br> - count backwards through zero to include negative numbers | - 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. | - identify, represent and estimate numbers using different representations | - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) | - find 1000 more or less than a given number <br> - order and compare numbers beyond 1000 | - round any number to the nearest 10 , 100 or 1000 | - solve number and practical problems that involve all of the above and with increasingly large positive numbers |

## Addition and Subtraction:

|  | Number Statements | Mental Recall | Addition | Subtraction | Relationships | Problems |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \dot{+} \\ & \text { ঠ } \\ & \text { 义 } \end{aligned}$ |  |  | - Add numbers with up to 4 digits using the formal written methods of columnar addition where appropriate | - Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate | - Estimate and use inverse operations to check answers to a calculation | - Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. |

## Examples:

Written Methodlss


Children should continue to use the Formal Column method, with numbers up to 4 digits. The Expanded Column method can be used alongside if children show less confidence when working with larger numbers. Children should then apply heir understanding to problems with decimals (in context of money and measures.)

## Wrriten Methodls

Children move into using Compact Column Subtraction with four digit numbers, using the expanded method first if necessary or alongside the compact method.


## Multiplication and Division:

|  | Number Statements | Mental Recall | Written Calculations | Relationships | Numbers | Problems |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \dot{\nabla} \\ & \dot{\delta} \\ & \dot{\sim} \end{aligned}$ | - 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 | - 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 | - Multiply two-digit and three-digit numbers by a onedigit number using formal written layout |  | - Recognise and use factor pairs and commutatively in mental calculations | - 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 which n objects are connected to $m$ objects. |

## Examples: WVritten Methodys

Children should build on their knowledge of multiplication from Year 3 and develop their understanding of Formal Short Multiplication.
Children can continue to use the Expanded Method as an in

 clearly.


Children need to be confident with 'carrying'
tens in Formal addition before moving onto the
Expanded method or the Formal method.

By the end of Year 4, children should be using Formal Short Multiplication numbers by a single digit.

## Written Methodss

Children should continue to use Formal Short Division with increasingly larger numbers.


## Fractions:

|  | Recognising Fractions | Decimals | Finding FDP | Links to Place Value | Comparing and Ordering FDP | Operations | Problems |
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| $\begin{aligned} & \text { 寸 } \\ & \text { ס } \\ & \text { v } \end{aligned}$ | 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 a hundred and dividing tenths by ten | Recognise and write decimal equivalents to $\frac{1}{4} ; \frac{1}{2} ; \frac{3}{4}$ <br> Recognise and write decimal equivalents of any number of tenths or hundredths <br> Round decimals with one decimal place to the nearest whole number | Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten <br> Solve problems involving increasingly harder fractions to calculate quantities, including non-unit fractions where the answer is a whole number | Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten <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 | Recognise and write decimal equivalents of any number of tenths or hundredths <br> Compare numbers with the same number of decimal places up to two decimal places | Add and subtract fractions with the same denominator. | Solve problems involving increasingly harder fractions to calculate quantities, including non-unit fractions where the answer is a whole number <br> Solve simple measures and money problems involving fractions and decimals to two decimal places |

## Non Key Skills Areas:

## Geometry:

|  | 2D Shapes | 3D Shapes | Symmetry | Angles | Coordinates | Translations | Problems |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Compare and classify geometric shapes, including quadrilaterals and triangles, based $n$ their properties and sizes |  | 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. | Identify acute and obtuse angles and compare and order angles up to two right angles by size | Describe positions on a 2-D grid as coordinates in the first quadrant <br> Plot specified points and draw sides to complete a given polygon. | Describe movement between positions as translations of a given unit to the left/right and up/down |  |

## Measures:

|  | Measuring | Units | Money | Area | Perimeter | Capacity | Time | Problems |
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| $\begin{aligned} & \dot{+} \\ & \text { ঠ } \\ & \text { 义 } \end{aligned}$ | Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres | Convert between different units of measure (e.g. kilometre to metre: hour to minute) <br> Estimate, compare and calculate different measures, including money in pounds and pence |  | Find the area of rectilinear shapes by counting | Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres |  | Read, write and convert time between analogue and digital 12 and 24 -hour clocks | Solve problems involving converting from hours to minutes: minutes to seconds: years to months: weeks to days |

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## Statistics:

|  | Constructing Graphs | Interpreting Graphs | Tables | Averages | Problems |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \dot{+} \\ & \text { ঠ } \\ & \dot{\sim} \end{aligned}$ | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs |  |  | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. |

