Year 5

Small Steps Summary

Block 1: Place Value

White Rose Maths
### Overview

#### Small Steps

- Number to 10,000
- Roman numerals to 1,000
- Round to the nearest 10, 100 and 1,000
- Number to 100,000
- Compare and order numbers to 100,000
- Round numbers within 100,000
- Numbers to a million
- Counting in 10s, 100s, 1,000s, 10,000s and 100,000s
- Compare and order numbers to a million
- Round numbers to a million
- Negative numbers

### NC Objectives

- Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.
- Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.
- Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000.
- Solve number problems and practical problems that involve all of the above.
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
Add whole numbers with more than 4-digits (column method)

Subtract whole numbers with more than 4-digits (column method)

Round to estimate and approximate

Inverse operations (addition and subtraction)

Multi-step addition and subtraction problems

Add and subtract numbers mentally with increasingly large numbers.

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Overview

Small Steps

- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Read and interpret tables
- Two way tables
- Timetables

NC Objectives

Solve comparison, sum and difference problems using information presented in a line graph.

Complete, read and interpret information in tables including timetables.
Multiples
Factors
Common factors
Prime numbers
Square numbers
Cube numbers
Inverse operations (Multiplication and Division)
Multiply by 10, 100 and 1,000
Divide by 10, 100 and 1,000
Multiply and divide by multiples of 10, 100 and 1,000

Multiply and divide numbers mentally drawing upon known facts.

Multiply and divide whole numbers by 10, 100 and 1000.

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

Recognise and use square numbers and cube numbers and the notation for squared ($^2$) and cubed ($^3$)

Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.

Establish whether a number up to 100 is prime and recall prime numbers up to 19.
<table>
<thead>
<tr>
<th>Small Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure perimeter</td>
</tr>
<tr>
<td>Calculate perimeter</td>
</tr>
<tr>
<td>Find unknown lengths</td>
</tr>
<tr>
<td>Area of rectangles</td>
</tr>
<tr>
<td>Area of compound shapes</td>
</tr>
<tr>
<td>Estimate and approximate area</td>
</tr>
</tbody>
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### NC Objectives

- Measure and calculate the perimeter of composite rectilinear shapes in cm and m.
- Calculate and compare the area of rectangles (including squares), and including using standard units, cm², m² estimate the area of irregular shapes.