## Maths: Year 1 - Year 6

Our teaching of maths in Year 1 - Year 6 is based on White Rose Maths.
This is supplemented with the NCETM spine materials, which break the national curriculum objectives down into smaller steps, ensuring that pupils are provided with clear and sequential steps that support their learning. Our medium term plans are all linked to the NCETM Ready to Progress materials.
In addition to this, Year 1 and 2 use the Mastering Number programme which is aimed at strengthening the understanding of number, and fluency within number facts. From September 2023, year 3 and 4 will also be trialling this programme.

| Year Group | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Year 1 | Place value <br> Addition and subtraction (within 10) | Addition and subtraction (within 10) <br> Shape | Place value (within 20) <br> Addition and subtraction (within 20) | Place value (within 50) <br> Length and height Mass and Volume | Multiplication and division Fractions Position and direction | Place value (within 100) <br> Money <br> Time |
| Year 2 | Place value Addition and subtraction | Addition and subtraction Shape | Money Multiplication and division | Fractions <br> Mass, capacity and temperature | Length and height Time | Statistics <br> Position and direction |
| Year 3 | Place value Addition and subtraction | Addition and subtraction Multiplication and division A | Multiplication and division B Length and perimeter | Fractions A Mass and capacity | Fractions B Money | Time Shape Statistics |
| Year 4 | Place value Addition and subtraction | Addition and subtraction <br> Area <br> Multiplication and division A | Multiplication and division B Length and perimeter | Fractions <br> Decimals A | Decimals B <br> Money <br> Time | Shape <br> Statistics <br> Position and direction |
| Year 5 | Place value <br> Addition and subtraction Multiplication and division A | Multiplication and division A Fractions A | Multiplication and division B Fractions B Decimals and percentages | Decimals and percentages Perimeter and area Statistics | Shape <br> Position and direction Decimals | Decimals <br> Negative numbers Converting units Volume |
| Year 6 | Place value Addition, subtraction, multiplication and division | Fractions A <br> Fractions B Converting units | Ratio <br> Algebra <br> Decimals | Fractions, decimals and percentages Area, perimeter and volume Statistics | Shape <br> Position and direction | Themed projects, consolidation and problem solving |


| Autumn | Spring | Summer |
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| - subitise within 5 , including when using a rekenrek, and re-cap the composition of 5 <br> - develop their understanding of the numbers 6 to 9 using the ' 5 and a bit' structure <br> - compare numbers within 10 and use precise mathematical language when doing so <br> - re-cap the order of numbers within 10 and connect this to ' 1 more' and ' 1 less' than a given number <br> - explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2 s ) <br> - explore the structure of the odd numbers as being composed of 2 s and 1 more <br> - explore the composition of each of the numbers 6,8 , and 10 <br> - explore number tracks and number lines and identify the differences between them | - explore the composition of each of the numbers 7 and 9 <br> - explore the composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part <br> - identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number <br> - explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes <br> - explore the augmentation and reduction structures of addition and reduction using number stories, including introducing the 'first, then, now' language structure | - explore the composition of the numbers 11 to 19 as ' 10 and a bit' and compare numbers within 20 <br> - connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15 <br> - compare numbers within 20 <br> - understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction) <br> - practise retrieving previously taught facts and reason about these |
| This term will build and consolidate the Early Learning Goals and support the teaching and consolidation of the following RtP criteria: <br> - 1AS-1 <br> - 1NF-1 <br> -1NPV-2 | This term will particularly support the teaching and consolidation of the following RtP criteria: <br> - 1AS-1 <br> - 1NF-1 | This term will particularly support the teaching and consolidation of the following RtP criteria: <br> 1AS-2 <br> 1NF-1 <br> 1NPV-2 |


| Autumn | Spring | Summer |
| :---: | :---: | :---: |
| - review the composition of the numbers 6 to 9 as ' 5 and a bit' <br> - compare numbers using the language of comparison and use the symbols < > = <br> - review the structure of even numbers (including exploring how even numbers can be composed of two odd parts or two even parts) and the composition of each of 6,8 and 10 <br> - review the structure of odd numbers (including exploring how odd numbers can be composed of one odd part and one even part) and the composition of each of 7 and 9 <br> - consolidate their understanding of the numbers 10 and 20 as ' 10 and a bit' <br> - consolidate their understanding of the linear number system to 20 and reason about midpoints | - explore how the numbers 6 to 9 can be doubled using the ' 5 and a bit' and ' 10 and a bit' structure <br> - use doubles to calculate near doubles <br> - use bonds of 10 to reason about bonds of 20 , in which the given addend is greater than 10 <br> - use known number bonds within 10 to calculate within 20 , working within the 10-boundary <br> - use their knowledge of bonds of 10 to find three addends that sum to 10 <br> - use their knowledge of the composition of numbers within 20 to add and subtract across the 10-boundary <br> - use their understanding of the linear number system to 10 to position multiples of 10 on a 0-100 number line and reason about midpoints | - continue to explore a range of strategies to subtract across the 10-boundary <br> - review bonds of 20 in which the given addend is greater than 10, and reason about bonds of 20 , in which the given addend is less than 10 <br> - practise previously explored strategies to support their reasoning about inequalities and equations <br> - review doubles and near doubles and transform additions in which two addends are adjacent odd/ even numbers into doubles <br> - consolidate previously taught facts and strategies through continued, varied practice |
| This term will particularly support the teaching and consolidation of the following RtP criteria: <br> - 1NPV-2 <br> - 2NF-1 | This term will particularly support the teaching and consolidation of the following RtP criteria: <br> - 2NPV-2 <br> - 2NF-1 <br> - 2AS-1 | This term will particularly support the teaching and consolidation of the following RtP criteria: <br> - 2NF-1 <br> - 2AS-1 <br> - 2AS-2 |

