|  |  | Term 1 |  | Term 2 |  | Term 3 |  |
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|  | No. of Weeks | Sense of number (8) | Addition (7) | Subtraction <br> (6) | Multiplication (6) | Multiplication and division (5) | Division <br> (7) |
| $$ | Topic Title and NC link | N1, N2, N3, N8, N9, N14, N16, R3 | N4 | N4, N5, N6, G1, G2 | N3, N4, N5, N7, G1, G2 | N4, N11 | $\begin{aligned} & \text { N4, N5, N6, } \\ & \text { N9 } \end{aligned}$ |
|  | Pupils <br> should <br> know... | - Understand place value <br> - Order positive values <br> - What is a factor/multiple/prime number <br> - Decimal place value <br> - How to round and estimate numbers <br> - Should know the never-ending nature of the number line <br> - How to write a fraction | - Standard procedures for addition <br> - Laws of arithmetic <br> - Partition numbers <br> - Complements <br> - How to make decision about calculating efficiently | - Standard procedures for subtraction <br> - Laws of arithmetic and re-ordering and adjustment strategies for subtraction | - Know what area is <br> - How to find the area of rectangles, triangles and parallelograms <br> - What is a factor/multiple/prime number <br> - The effect of multiplying by tens <br> - Standard procedures for multiplication <br> - Laws of arithmetic including explicitly discussing the distributive law <br> - Hierarchy of multiplication within calculations <br> - How to use known facts to find unknown facts | - How to multiply fractions <br> - How to multiply mixed numbers <br> - How to find fractions of an amount <br> - Use different forms for multiplication (fractions x decimals) <br> - Inverse operations for multiplication <br> - What division means <br> - Key words for division <br> - How to use bus stop <br> - Divisibility tests <br> - Which laws of arithmetic | - Alternative strategies for dividing <br> - How to divide by decimals <br> - How to divide with negatives <br> - How to use BIDMAS <br> - How to find the reciprocal <br> - Divide an integer with a fraction <br> - Divide a fraction with a fraction <br> - Divide with mixed numbers |


|  |  |  |  |  |  | work with division |  |
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|  | Pupils should be able to do... | - Use place value <br> - Order integers, fractions and decimals <br> - Identify prime numbers <br> - Prime factorisation (use index notation) <br> - HCF and LCM <br> - Write place value in terms of times 10 to the power of something <br> - write decimals in terms of decimal fractions <br> - estimate answers <br> - show a representation of a fraction <br> - express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1 | - Use addition, including formal written methods, with integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative | - Use <br> subtraction, including formal written methods, with integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative | - Prime factorisation (use index notation) <br> - HCF and LCM <br> - Multiply all types of numbers by tens <br> - Multiply negative numbers <br> - Multiply decimals <br> - Find areas of rectangles, triangles and parallelograms and compound shapes | - Write mixed fractions as improper fractions <br> - Commute when multiplying with fractions <br> - Simplify fractions <br> - Problem solve with fractions eg with area | - Write decimals in terms of decimal fractions <br> - Calculate using order of operations <br> - Divide using different strategies <br> - Divide fractions in a variety of forms |
|  | Why are we doing this now? <br> How does it build on prior learning and prepare for knowledge | This is being studied so that students have a strong sense of number and are able to manipulate number appropriately. <br> Prior learning that pupils need to remember are: | This is being studied so that students have coherence and fluency with addition and are able to manipulate additions efficiently. This is completed with a variety of number forms such as decimals, fractions, | This is being studied so that students have coherence and fluency with subtraction and are able to manipulate subtractions efficiently. This is completed with a variety of number | This is being studied so that students have coherence and fluency with multiplication and are able to manipulate multiplications efficiently. This is completed with a variety of number forms such as decimals, fractions, integers to | Continued from HT4 with multiplication. <br> Prior learning that pupils need to remember are: <br> - Laws of arithmetic | This is being studied so that students have coherence and fluency with division and are able to manipulate division calculations |



