**Maths Overview for the Autumn Term**

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| **Reception**  | **Year 1** | **Year 2** |
| Children count reliably with numbers from 1 to 20, place them in order.Children explore characteristics of everyday objects.Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer.Say which number is one more or one less than a given number.Children use everyday language to talk about time to solve problems. | Identify and represent numbers using concrete objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.Read and write numbers from 1 to 20 in numerals and words.Given a number, identify one more and one less.Count to and across 100, forwards and backwards, beginning with 0 or 1, or fromany given number.Represent and use number bonds and related subtraction facts within 20.Read, write and interpret mathematical statements involving addition (+),subtraction (–) and equals (=) signs.Solve one-step problems that involve addition andsubtraction, using concrete objects and pictorialrepresentations, and missing number problems such as 7 = \_ – 9.Add and subtract one-digit and two-digit numbers to 20, including zeroRecognise and name common 2-D and 3-D shapes, including: 3-D shapes [for example,cuboids (including cubes), pyramids and spheres] 2-D shapes [for example, rectangles (including squares), circles and triangles] | Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10sIdentify, represent and estimate numbers using different representations, including the number lineRecognise the place value of each digit in a 2-digit number(10s, 1s)Compare and order numbers from 0 up to 100; use <, > and signsCount in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backwardRecall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problemsShow that + of two numbers can be done in any order (commutative) and - of one number from another cannotAdd and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1sSolve problems with addition and subtraction: applying their increasing knowledge of mental and written methodsSolve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measuresRecognise and use signs for pounds (£) and pence (p); combine amounts to make a particular valueRecognise and know the value of different denominations of coins and notes Find different combinations of coins that equal the same amounts of moneySolve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving changeSolve one-step problems involving X and ÷ by calculating the answer usingconcrete objects, pictorial representations and arraysCalculate mathematical statements for X and ÷ within the X tables and write them using the multiplication (×), division (÷) and equals (=) signsSolve problems involving X and division, using materials, arrays, repeated addition, mental methods, and X and ÷ facts, including problems in contextsRecall and use X and ÷ facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers |

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| **Year 3** | **Year 4** |
| Recognise the place value of each digit in a three digit number (hundreds, tens, ones)Read and write numbers up to 1,000 in numeralsand in wordsIdentify, represent and estimate numbers usingdifferent representationsCompare and order numbers up to 1,000Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given numberSolve number problems and practical problemsinvolving these ideasAdd and subtract numbers mentally, including: athree-digit number and ones, a three-digit numberand tens, a three-digit number and hundredsSolve problems, including missing number problems, using number facts, place value, and more complex addition and subtractionAdd and subtract numbers with up to three digits, using formal written methods of columnar addition and subtractionEstimate the answer to a calculation and use inverse operations to check answers addition and subtractionWrite and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including fortwo-digit numbers times one-digit numbers, using mental and progressing to formal written methodsRecall and use multiplication and division facts for the 3, 4 and 8multiplication tablesSolve problems, including missing number problems, involving multiplicationand division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. | Recognise the place value of each digit in a four-digit number (thousands,hundreds, tens, and ones)Round any number to the nearest 10, 100 or 1,000Count in multiples of 6, 7, 9, 25 and 1,000Identify, represent and estimate numbers using different representationsOrder and compare numbers beyond 1,000Read roman numerals to 100 (i to c) and know that over time, the numeralsystem changed to include the concept of zero and place valueFind 1,000 more or less than a given numberRound any number to the nearest 10, 100 or 1,000Solve number and practical problems that involve all of the above and with increasingly large positive numbersCount backwards through zero to include negative numbersInterpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zeroAdd and subtract numbers with up to 4 digits using the formal writtenmethods of columnar addition and subtraction where appropriateSolve number and practical problems that involve all of the above and with increasingly large positive numbersEstimate and use inverse operations to check answers to a calculationSolve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and whyConvert between different units of measure [for example, kilometre tometre; hour to minute]Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metresRecall multiplication and division facts for multiplication tables up to12 × 12Use place value, known and derived facts to X and ÷ mentally, including:multiplying by 0 and 1; dividing by 1;multiplying together three numbersSolve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. |

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| **Year 5**  | **Year 6** |
| Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digitCount forwards or backwards in steps of powers of 10 for any given number up to 1,000,000 Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100,000Solve number problems and practical problemsRead roman numerals to 1,000 (m) and recognise years written in romannumeralsInterpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zeroAdd 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 accuracyAdd and subtract numbers mentally with increasingly large numbersEstimate and use inverse operations to check answers to a calculationSolve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and whyComplete, read and interpret information in tables, including timetablesSolve comparison, sum and difference problems using information presented in a line graph Identify multiples and factors, including finding all factor pairs of a number,and common factors of two numbersKnow and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbersEstablish whether a number up to 100 is prime and recall prime numbers up to 19Solve problems involving X and ÷ including using their knowledge of factors and multiples, squares and cubesRecognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)Solve problems involving X and ÷ , including scaling by simple fractions and problems involving simple ratesX and ÷ whole numbers and those involving decimals by 10, 100 and 1,000Measure and calculate the perimeter of composite rectilinear shapes incentimetres and metresCalculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes. | Read, write, order and compare numbers up to 10,000,000 and determine the value of each digitSolve number and practical problems that involve all of the aboveRound any whole number to a required degree of accuracyUse negative numbers in context, and calculate intervals across zeroSolve addition and subtraction multi-stepproblems in contexts, deciding which operations and methods to use and whyMultiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplicationDivide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the contextIdentify common factors, common multiples and prime numbersRecognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3Use their knowledge of the of operations to carry out calculations involving the four operationsPerform mental calculations, including with mixed operations and largenumbersUse common factors to simplify fractions; use common multiples toexpress fractions in the same denominationCompare and order fractions, including fractions > 1Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractionsMultiply proper fractions and mixed numbers by whole numbers, supported by materials and diagramsMultiply simple pairs of proper fractions, writing the answer in its simplest form (for example, ¼ × ½ = 1/8 )Divide proper fractions by whole numbers (for example,1/3 ÷ 2 = 1/6)Use written division methods in cases where the answer has up to two decimal placesDescribe positions on the full coordinate grid (all four quadrants)Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. |