



Maths Curriculum Objectives to show progression across the different areas of Maths

Year	Number – place value, addition, subtraction, multiplication, division, fractions (decimals, percentages)	Key Vocabulary
EYF S	<ul style="list-style-type: none"> • Number • Deep understanding of numbers to 10, including the composition of each number • Subitise (recognise quantities without counting) up to 5 • Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) • To recall some number bonds to 10, including double facts • Numerical patterns • To verbally count beyond 20, recognising the pattern of the counting system • Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity • Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally 	<ul style="list-style-type: none"> • Numbers, counting • Equal to, the same as • Greater than, less than, compare • Number bonds • double, odd, even • Pattern • Quantity • Add, subtract, take away
1	<ul style="list-style-type: none"> • Count to and across 100, forwards and backwards, beginning with 0, 1 or any given number. • Count, read and write numbers to 100 • Count in multiples of 2, 5 and 10 • Identify 1 more or less than a given number • Identify and represent numbers using concrete and pictorial representations including a number line • Read and write numbers from 1-20 in numerals and words • Read, write and interpret mathematical statements involving addition, subtraction and equals signs • Represent and use number bonds to 20 and related subtraction facts • Add and subtract one and two-digit numbers to 20 • Solve one-step problems involving addition and subtractions using concrete and pictorial representations • Solve missing number problems using addition and subtraction • Solve one-step problems involving multiplication and division, using concrete and pictorial representations and arrays with support • Recognise, find and name a half as one of two equal parts of an object, shape or quantity • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity 	<ul style="list-style-type: none"> • Equal to, more than, less/fewer than, most, least • First, second, third • Patterns • Odd, even • Number bonds • Addition, subtraction, equals, multiplication, division, arrays • Half, quarter, equal, parts
2	<ul style="list-style-type: none"> • Count in steps of 2, 3 and 5 from 0, forwards and backwards • Count in steps of 10 from any number, forwards and backwards • Recognise the place value of each digit in a two-digit number • Identify, represent and estimate numbers using different representations, including a number line • Compare and order numbers from 0-100 • Read and write number to at least 100 in numerals and words • Use place value and number facts to solve problems 	<ul style="list-style-type: none"> • Tens, units/ones, partition, place holder • Greater than, less than, equal to (including signs) • Number bonds • Commutative • Inverse operations, estimate

*These are the objectives taken from the National Curriculum and to be considered alongside the Calculation Policy, ensuring that methods and strategies are taught consistently.



	<ul style="list-style-type: none"> • Solve problems with addition and subtraction using concrete and pictorial representations and mental and written methods • Recall and use number bonds to 20 fluently • Derive and use number bonds to 100 • Add and subtract mentally (2-digit and ones, 2-digit and tens, two 2-digit numbers and three 1-digit numbers) • Show that addition is commutative but subtraction is not • Recognise and use the inverse relationship between addition and subtraction, use to check calculations and solve missing number problems • Recall and use multiplication and division facts for the 2, 5 and 10 times tables, recognising odd and even numbers • Calculate and write multiplication and division statements for the 2, 5 and 10 times tables, using relevant signs • Show that multiplication is commutative but division is not • Solve multiplication and division problems using concrete resources, arrays, repeated addition, mental methods and times table facts • Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity • Write simple fractions and recognise equivalence of $\frac{2}{4} = \frac{1}{2}$ 	<ul style="list-style-type: none"> • Odd and even • Patterns • Times tables, skip counting • Arrays, repeated addition, times table facts • Half, quarter, third, numerator, denominator, equivalence, equal to
3	<ul style="list-style-type: none"> • Count from 0 in multiples of 4, 8, 50 and 100 • Find 10 or 100 more or less than a given number • Recognise the place value of each digit in a 3-digit number • Compare and order numbers up to 1000 • Identify, represent and estimate numbers using different representations • Read and write numbers up to 1000 in numerals and words • Solve number and practical problems using these concepts • Add and subtract mentally (3-digit number and units/tens/hundreds) • Add and subtract numbers up to 3-digits using formal written methods • Estimate answers to calculations, use the inverse to check • Solve problems, including missing number problems, using number facts, place value and more complex calculations • Recall and use times table facts for 3, 4 and 8 times tables • Write and calculate statements for multiplication and division using times table facts, mental and written methods, including 2-digit x 1-digit • Solve problems using multiplication and division, including missing number problems • Count up and down in tenths • Recognise, find and write fractions of a set of objects, using unit and non-unit fractions • Recognise and use fractions as numbers, unit and non-unit fractions • Recognise and show equivalent fractions • Add and subtract fractions with the same denominator within 1 whole • Compare and order unit fractions and those with the same denominator • Solve problems including the above 	<ul style="list-style-type: none"> • Multiples, skip counting • 10 more, 10 less, 100 more, 100 less • Hundreds, tens, units/ones, place holder, place value grid, partitioning • Greater than, less than, equal • Estimate, inverse operations, number bonds • Column addition, column subtraction, carrying • Multiplication, division, times tables • Grid method, expanded multiplication method • Tenths, dividing by 10 • Numerator, denominator, unit, non-unit fractions, equivalent, whole, parts, greater than, less than

*These are the objectives taken from the National Curriculum and to be considered alongside the Calculation Policy, ensuring that methods and strategies are taught consistently.



<p>4</p>	<ul style="list-style-type: none"> • Count in multiples of 6, 7, 9, 25 and 1000 • Find 1000 more or less than a number • Count backwards through 0 to include negative numbers • Recognise the place value of each digit in a 4-digit number • Order and compare numbers beyond 1000 • Identify, represent and estimate numbers using different representations • Round any number to the nearest 10, 100, 1000 • Read Roman numerals to 100 and how the numeral system has changes to include 0 and place value • Add and subtract numbers up to 4-digits using written methods • Estimate and use inverse operations to check answers • Solve addition and subtraction 2-step problems, considering operations and methods to use and why • Recall times table facts up to 12 x 12 • Use place value and times table facts to multiply and divide mentally (including multiplying by 0, multiplying/dividing by 1, multiplying 3 numbers) • Recognise and use factor pairs and commutativity • Multiply using written methods (2-digit x 1-digit, 3-digit x 1digit) • Solve problems involving multiplying and adding – distributive law and scaling problems • Recognise and show common equivalent fractions • Count up and down in hundredths, dividing by 100 • Recognise and write decimal equivalents of tenths and hundredths • Solve problems using harder fractions to calculate quantities and fractions to divide quantities • Add and subtract fractions with the same denominator • Recognise and write decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ • Find the effect of dividing numbers by 10 and 100, identifying the units/ones, tenths and hundredths • Round decimals with 1 decimal place to the nearest whole number • Compare numbers with the same number of decimal places up to 2 decimal places • Solve simple measure and money problems up to 2 decimal places 	<ul style="list-style-type: none"> • Multiples, times tables • 1000 more, 1000 less • Negative numbers, positive numbers • Thousands, hundreds, tens, units/ones, place value grid • Round • Roman numerals • Column addition, column subtraction • Estimate, inverse operations • 2-step problems • Expanded multiplication method, short multiplication method • Distributive law • Tenths, hundredths • Equivalent fractions, equivalent decimals
<p>5</p>	<ul style="list-style-type: none"> • Read, write, order and compare numbers to at least 1,000,000 and identify place value • Count forwards or backwards in steps of 10 for any given number up to 1,000,000 • Interpret negative numbers in context, count forwards/backwards in positive/negative numbers through 0 • Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000, 100000 • Solve number and practical problems using the above • Read Roman numerals to 1000 and recognise years • Add and subtract whole numbers with more than 4 digits using written methods • Add and subtract numbers mentally • Use rounding the check answers and determine level of accuracy • Solve addition and subtraction multi-step problems, considering operations and methods to use and why • Identify multiples and factors (all factor pairs of a number and common factors of 2 numbers) 	<ul style="list-style-type: none"> • Positive numbers, negative numbers, forwards, backwards • Rounding • Roman numerals • Column addition, column subtraction, partitioning • Rounding, accuracy • Multiples, factors, factor pairs, common factors • Prime numbers, prime factors, composite numbers

*These are the objectives taken from the National Curriculum and to be considered alongside the Calculation Policy, ensuring that methods and strategies are taught consistently.



	<ul style="list-style-type: none">• Know and use the vocabulary of prime numbers, prime factors and composite numbers• Establish whether a number up to 100 is prime and recall prime numbers to 19• Multiply numbers up to 4-digit by a 1- or 2-digit number using written methods, including long multiplication• Multiply and divide numbers mentally• Divide numbers up to 4 digits by a 1-digit number using short division and interpret remainders• Multiply and divide whole numbers and decimals by 10, 100, 1000• Recognise and use square and cube numbers, including symbols• Solve problems involving multiplication and division using knowledge of factors, multiples, squares and cubes, including scaling• Solve problems using all or variety of operations• Compare and order fractions whose denominators are all multiples of the same number• Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths• Recognise and convert between mixed numbers and improper fractions• Add and subtract fractions with the same denominator and multiples of the same number• Multiply proper fractions and mixed numbers by whole numbers, supported by concrete/pictorial resources• Read and write decimal numbers as fractions• Recognise and use thousandths and relate to tenths, hundredths and decimal equivalents• Round decimals with 2 decimal places to the nearest whole number and 1 decimal place• Read, write order and compare numbers with up to 3 decimal places• Solve problems involving numbers up to 3 decimal places• Recognise the per cent symbol, relate to number of parts per 100, write percentages as a fraction over 100 and as a decimal• Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25	<ul style="list-style-type: none">• Short multiplication, long multiplication• Short division, remainders• Square numbers, cube numbers• Thousandths, hundredths, tenths• Proper fraction, improper fraction, mixed number• Fraction/decimal/percentage equivalents• Decimal place
6	<ul style="list-style-type: none">• Read, write, order and compare numbers up to 10,000,000 and identify place value accurately• Round any whole number to a required degree of accuracy• Use negative numbers in context and calculate intervals across 0• Solve number and practical problems that involve the above• Multiply multi-digit numbers up to 4-digits by a 2-digit whole number using long multiplication• Divide numbers up to 4-digits by a 2-digit whole number using long division and interpret remainders as whole numbers, fractions or by rounding• Divide numbers up to 4-digits by a 2-digit whole number using short division and interpret remainders as whole numbers, fractions or by rounding• Perform mental calculations, including mixed operations and large numbers• Identify common factors, common multiples and prime numbers• Use knowledge of order of operations to solve calculations involving up to the 4 operations• Solve addition and subtraction multi-step problems, considering which operations and methods to use and why• Solve problems involving all operations	<ul style="list-style-type: none">• Long multiplication• Long division, short division, remainders• Common factors, common multiples, prime numbers, composite numbers• BIDMAS/BODMAS• Estimation, level of accuracy• Simplest form• Specified degrees of accuracy• 3 decimal places

*These are the objectives taken from the National Curriculum and to be considered alongside the Calculation Policy, ensuring that methods and strategies are taught consistently.



<ul style="list-style-type: none">• Use estimation to check answers and determine level of accuracy• Use common factors to simplify fractions• Use common multiples to express fractions in the same denomination• Compare and order fractions, including fractions greater than 1• Add and subtract fractions with different denominators and mixed numbers, using equivalent fractions• Multiply simple pairs of proper fractions, writing the answer in its simplest form• Divide proper fractions by whole numbers• Associate a fraction with division and calculate decimal fraction equivalents• Identify the place value of numbers up to 3 decimal places• Multiply and divide numbers by 10, 100, 1000• Multiply 1-digit numbers with up to 2 decimal places by whole numbers• Use written division methods where the answer has up to 2 decimal places• Solve problems which require answers to be rounded to specified degrees of accuracy• Recall and use equivalences between simple fractions, decimals and percentages	
--	--

*These are the objectives taken from the National Curriculum and to be considered alongside the Calculation Policy, ensuring that methods and strategies are taught consistently.