

## Progressive Mathematics curriculum

Yearly overview
The yearly owerview provides suggested timings for each black of learning, which con be adopted to suit different term dates or other requirements.

| $\begin{aligned} & \text { 若 } \\ & \frac{3}{3} \end{aligned}$ | Weak 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week ${ }^{\text {B }}$ | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Getting to know you |  | Match, sort and compare |  | Talk about <br> measure <br> and <br> patterns |  | It's me$1,2,3$ |  |  | 1,2,3, 4, 5 |  |  |
| $\frac{g}{5}$ | Alive in |  |  | $\begin{aligned} & \text { Growi } \\ & 6,7,8 \end{aligned}$ |  | Leng height time | and | Buildi | g9 9 ant | 10 | Explor shape | e 3-D |
| $\begin{aligned} & \text { E } \\ & \frac{5}{E} \end{aligned}$ | To 20 beyon |  |  | Manip comp and decor | ulate, ose <br> pose | Shari and grou |  | Visual and | sc, buid ब |  | $\frac{\frac{y}{0}}{\frac{2}{7}}$ | $\begin{aligned} & \text { 등 } \\ & \text { 흠 } \\ & \text { 훟 } \\ & \text { 흥 } \end{aligned}$ |


| Number-Nursery | Number-Reception |
| :--- | :--- |
| Show 'finger' numbers up to 5. | Count objects, actions and sounds |
| Say one number for each item in order: 1,2,3,4,5. | Link numeral with its cardinal number value |
| Know that the last number reached when counting a small set of objects <br> tells you how many there are in total. (cardinal principal). | Subitise up to 5 |
| Recite numbers past 5 | Compare numbers |
| Fast recognition of up to 3 objects without having to count them <br> individually | Compare quantities up to 10 in different contexts, recognising one quantity <br> is greater than, less than or the same as another <br> (ELG) |
|  | Count beyond 10 |
|  | Understand the 'one more than/one less than' relationship between <br> consecutive numbers |
|  | Explore composition on 10 |
|  | Automatically recall number bonds to 5 and some bonds to 10, including <br> double facts |
|  | Numerical Patterns |


| Talk about and identifies the patterns around them. For example: stripes, clothes, designs on rugs and wallpaper. | Continue, copy and compare patterns |
| :---: | :---: |
| Talk about numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 . | Automatically (without reference to rhymes, counting or other aids), number bonds to 5 (including subtraction facts) and some number bonds to 10. |
| Experiment with their own symbols and marks as well as numerals. | Recall some double facts up to 10 |
| Extend and create $A B A B$ patterns, leaf, stick, leaf, stick | Explore and represent patterns within numbers to 10 including evens, odds, double facts and how quantities can be distributed equally |
| Notice and correct an error in a repeating pattern. | Verbally count beyond 20, recognising the pattern of the counting system |
|  | Compare quantities up to 10 in different contexts, recognising one quantity is greater than, less than or the same as another (ELG) |
|  |  |
|  |  |


| Shape, space and Measure | Shape, space and Measure |
| :--- | :--- |
| Understand position through words alone. For example: The bag is under <br> the table. | Select, rotate and manipulate shapes in order to develop spatial reasoning <br> skills |
| Select shapes appropriately: flat surfaces for a building, a triangular prism <br> for a roof | Compare lengths, weights and capacity |
| Name and recognise some 2D shapes |  |
| Discuss routes and locations using words 'infront, behind'. |  |
| Talk about and explore 2D using informal and mathematical language <br> 'sides', 'corners', 'straight' |  |
| Combine shapes to make new ones-an arch, a bigger triangle etc |  |
| Talk about and explore 3D using informal and using mathematical <br> language: 'sides', 'corners', 'straight', 'flat', 'round.' |  |
| Begin to describe a sequence of events, real or fictional, using words such <br> as 'first', 'then.' |  |
| Solve real world mathematical problems with numbers up to 5 |  |
| Compare quantities using language 'more than', 'fewer than' |  |
| Describe a familiar route |  |
| Make comparisons between objects relating to size, length, weight and <br> capacity |  |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{2}{3} \\ & \frac{3}{3} \\ & \frac{3}{4} \end{aligned}$ | Place Value |  |  |  | $\begin{array}{r} \text { Nur } \\ \text { Addition an } \end{array}$ | Subtraction | Shape |  | Addition and Subtraction |  |  | Multiplication and Division |
|  | Multiplication and division |  |  | Fractions |  |  | Measures <br> (Length, Mass, <br> Capacity - link to fractions) |  |  |  | Addition and <br> Subtracting including estimating |  |
|  | Measures |  |  |  | Problem solving and efficient methods |  | Consolidation <br> Mixed Maths problems |  |  | Investigations linked to measures |  |  |
|  |  |  |  |  |  |  | (Four operations) |  |  |  |  |  |


|  | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Place Value /Shape |  |  |  |  |  | Addition and Subtraction |  |  |  |  |  |
| $\begin{aligned} & \stackrel{\text { n }}{\substack{1}} \\ & \text { ñ } \end{aligned}$ | Addition and Subtraction <br> Multiplication and division |  |  | Multiplication and division |  |  | Multiplication and division |  |  |  | Fractions |  |
|  | Measure and $m$ | capacity <br> ass | Money |  | Statistics |  | Measures Fractions (Length) |  |  | Measures Time |  |  |

## New

## Primary schemes of learning

National curriculum and 'Ready to progress' mapping

Updated for March 2023

## White

## \#MathsEveryoneCan

## Place value

## Place value: Count

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - Count numbers to 100 in numerals; count in multiples of twos, fives and tens | - count in steps of 2,3 , and 5 from 0 , and in tens from any number, forward and backward | - count from 0 in multiples of $4,8,50$ and 100 ; find 10 or 100 more or less than a given number | - count in multiples of $6,7,9,25$ and 1000 <br> - count backwards through zero to include negative numbers |
| Autumn 1 <br> Spring 1 <br> Spring 3 <br> Summer 4 | Autumn 1 | Autumn 1 <br> Autumn 3 | Autumn 1 <br> Autumn 4 |

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## Place value: Represent

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - identify and represent numbers using objects and pictorial representations <br> - read and write numbers to 100 in numerals <br> - read and write numbers from 1 to 20 in numerals and words | - read and write numbers to at least 100 in numerals and in words <br> - identify, represent and estimate numbers using different representations, including the number line | - identify, represent and estimate numbers using different representations <br> - read and write numbers up to 1000 in numerals and in words | - identify, represent and estimate numbers using different representations <br> - read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value |
| Autumn 1 <br> Spring 1 <br> Spring 3 <br> Summer 4 | Autumn 1 | Autumn 1 | Autumn 1 |

## Place value: Use and compare

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - given a number, identify one more and one less | - recognise the place value of each digit in a two-digit number (tens, ones) <br> - compare and order numbers from 0 up to 100 ; use $<,>$ and $=$ signs | - recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <br> - compare and order numbers up to 1000 | - find 1000 more or less than a given number <br> - recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) <br> - order and compare numbers beyond 1000 |
| Autumn 1 <br> Spring 1 Spring 3 Summer 4 | Autumn 1 | Autumn 1 | Autumn 1 |

## Place value: Problems/Rounding

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | - use place value and <br> number facts to solve <br> problems | - solve number <br> problems and <br> practical problems <br> involving these ideas | -round any number to <br> the nearest 10, 100 <br> or 1000 <br> solve number and <br> practical problems <br> that involve all of the <br> above and with <br> increasingly large <br> positive numbers |
| Autumn 1 | Autumn 1 | Autumn 1 |  |

## Year 1 RTP Place value

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 1NPV-1 Count within 100, forwards and backwards, starting with any number. | Autumn 1 | 6-Count on from any number <br> 8-Count backwards within 10 |
|  | Spring 1 | 1-Count within 20 |
|  | Spring 3 | 1 - Count from 20 to 50 <br> 3 - Count by making groups of tens |
|  | Summer 4 | 1-Count from 50 to 100 |
| 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = | Autumn 1 | 11 - Fewer, more, same <br> 12 - Less than, greater than, equal to <br> 13 - Compare numbers <br> 14 - Order objects and numbers <br> 15 - The number line |
|  | Spring 1 | 8 - The number line to 20 <br> 9 - Use a number line to 20 <br> 11 - Compare numbers to 20 <br> 12 - Order numbers to 20 |
|  | Spring 3 | 6 - The number line to 50 |

## Year 2 RTP Place value

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning. | Autumn 1 | 3 -Recognise tens and ones <br> 4 - Use a place value chart <br> 5 - Partition numbers to 100 <br> 7 - Flexibly partition numbers to 100 <br> $8-$ Write numbers in expanded form |
| 2NPV-2 Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10 | Autumn 1 | $9-10$ s on the number line to 100 <br> $10-10 \mathrm{~s}$ and 1 s on the number line to 100 <br> 11 - Estimate numbers on the number line |

## Year 3 RTP Place value

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 3NPV-1 Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10 ; apply this to identify and work out how many 10 s there are in other three-digit multiples of 10 | Autumn 1 | 4 - Hundreds |
|  | Autumn 2 | 10 - Make connections |
|  | Autumn 3 | 4 - Multiples of 5 and 10 |
|  | Spring 2 | 5 - Equivalent lengths (metres and centimetres) <br> 6 - Equivalent lengths (centimetres and millimetres) |
| 3NPV-2 Recognise the place value of each digit in three-digit numbers, and compose and decompose three-digit numbers using standard and nonstandard partitioning. | Autumn 1 | 5 - Represent numbers to 1,000 <br> 6 - Partition numbers to 1,000 <br> 7 - Flexible partitioning of numbers to 1,000 <br> 8 - Hundreds, tens and ones |
| 3NPV-3 Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10 | Autumn 1 | 9 - Find 1, 10 or 100 more or less <br> 10 - Number line to 1,000 <br> 11 - Estimate on a number line to 1,000 <br> 12 - Compare numbers to 1,000 <br> 13 - Order numbers to 1,000 |
| 3NPV-4 Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with $2,4,5$ and 10 equal parts. | Autumn 1 | 10 - Number line to 1,000 <br> 11 - Estimate on a number line to 1,000 <br> 14 - Count in 50 s |
|  | Spring 2 | 1 - Measure in metres and centimetres <br> 2 - Measure in millimetres <br> 3 - Measure in centimetres and millimetres |

## Year 4 RTP Place value

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 4NPV-1 Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100 ; apply this to identify and work out how many 100s there are in other four-digit multiples of 100 | Autumn 1 | 4 -Thousands |
|  | Spring 1 | 3 - Multiply by 10 <br> 4 - Multiply by 100 <br> 5 - Divide by 10 <br> 6 - Divide by 100 |
| 4NPV-2 Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and non-standard partitioning. | Autumn 1 | 5 - Represent numbers to 10,000 <br> 6 - Partition numbers to 10,000 <br> 7 - Flexible partitioning of numbers to 10,000 |
| 4NPV-3 Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100 , and rounding to the nearest of each. | Autumn 1 | 8 - Find 1, 10, 100, 1,000 more or less <br> 9 - Number line to 10,000 <br> 10 - Estimate on a number line to 10,000 <br> 11 - Compare numbers to 10,000 <br> 12 - Order numbers to 10,000 <br> 14 - Round to the nearest 10 <br> 15 - Round to the nearest 100 <br> 16 - Round to the nearest 1,000 <br> 17 - Round to the nearest 10,000 |
| 4NPV-4 Divide 1,000 into $2,4,5$ and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with $2,4,5$ and 10 equal parts. | Autumn 1 | 9 - Number line to 10,000 <br> 10 - Estimate on a number line to 10,000 |

## Addition and subtraction

## Addition \& subtraction: Calculations

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - add and subtract one-digit and twodigit numbers to 20 , including zero | - add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens two two-digit numbers <br> $>$ adding three onedigit numbers | - add and subtract numbers mentally, including: <br> - a three-digit number and ones <br> a three-digit number and tens a three-digit number and hundreds <br> - add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction | - add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate |
| Autumn 2 <br> Spring 2 | Autumn 2 | Autumn 2 | Autumn 2 |

## Addition \& subtraction: Problems

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - solve one-step <br> problems that <br> involve addition and <br> subtraction, using <br> concrete objects and <br> pictorial <br> representations, and <br> missing number <br> problems such as 7 <br> $\square-9$ | -solve problems with <br> addition and <br> subtraction: <br> using concrete <br> objects and pictorial <br> representations, <br> including those <br> involving numbers, <br> quantities and <br> measures <br> applying their <br> increasing knowledge <br> of mental and <br> written methods | - solve problems, <br> including missing <br> number problems, <br> using number facts, <br> place value, and <br> more complex <br> addition and <br> subtraction | - solve addition and <br> subtraction two-step <br> problems in contexts, <br> deciding which <br> operations and <br> methods to use and <br> why |
| Autumn 2 <br> Spring 2 | Autumn 2 | Autumn 2 | Autumn 2 |

## Year 1 RTP Number facts

| Ready to progress criteria | Block | Steps |  |
| :--- | :--- | :--- | :---: |
| 1NF-1 Develop fluency in addition and subtraction <br> facts within 10 | Autumn 2 | 5-Number bonds within 10 <br> 6-Systematic number bonds within 10 <br> $7-$ Number bonds to 10 |  |
|  | Spring 2 | 2-Add ones using number bonds <br> $6-$ Subtract ones using number bonds |  |
| 1NF-2 Count forwards and backwards in multiples of <br> 2,5 and 10, up to 10 multiples, beginning with any <br> multiple, and count forwards and backwards through <br> the odd numbers. | See under Multiplication \& division |  |  |

## Year 2 RTP Number facts

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 2NF-1 Secure fluency in addition and subtraction <br> facts within 10, through continued practice. | Autumn Block 2 | $1-$ Bonds to 10 <br> $6-$ Add by making 10 <br> $8-$ Add to the ent 10 <br> $11-$ Subtract from a 10 |

## Year 3 RTP Number facts

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 3NF-1 Secure fluency in addition and subtraction facts that bridge 10 , through continued practice. | Autumn Block 2 | 6 - Add 1s across a 10 <br> 7 - Add 10s across a 100 <br> 8 - Subtract 1s across a 10 <br> 9 - Subtract 1 s across a 100 <br> 13 - Add two numbers (across a 10 ) <br> 14 - Add two numbers (across a 100) <br> 15 - Subtract two numbers (across a 10) <br> 16 - Subtract two numbers (across a 100) |
| 3NF-2 Recall multiplication facts, and corresponding division facts, in the $10,5,2,4$ and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. |  | See under Multiplication \& division |
| 3NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10 ). |  | See under Multiplication \& division |

## Year 1 RTP Addition \& subtraction

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 1AS-1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. | Autumn Block 2 | 5 - Number bonds within 10 <br> 6 - Systematic number bonds within 10 <br> 7 - Number bonds to 10 |
| 1AS-2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. | Autumn Block 2 | 4-Fact families - addition facts <br> 8 - Addition - add together <br> 9 - Addition - add more <br> 10 - Addition problems <br> 11 - Find a part <br> 12 - Subtraction - find a part <br> 13 - Fact families - the eight facts <br> 14 - Subtraction - take away/cross out (How many left?) <br> 15 - Subtraction - take away (How many left?) <br> 16 - Subtraction on a number line |
|  | Spring Block 2 | 1 - Add by counting on within 20 <br> 6 - Subtract ones using number bonds <br> 7 - Subtraction - counting back <br> 8-Subtraction - finding the difference <br> 10 Missing number problems |

## Year 2 RTP Addition \& subtraction

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 2AS-1 Add and subtract across 10 | Autumn 2 | 9 - Add across a 10 <br> 10 - Subtract across a 10 <br> 11 - Subtract from a 10 <br> 12 - Subtract 1-digit number from a 2-digit number (across a 10) |
| 2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?". | Spring 1 | 9 - Find change |
| 2AS-3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a twodigit number. | Autumn 2 | 9 - Add across a 10 <br> 10 - Subtract across a 10 <br> 11 - Subtract from a 10 <br> 12 - Subtract 1-digit number from a 2-digit number (across a 10) <br> 13-10 more, 10 less <br> 14 - Add and subtract 10 s |
| 2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. | Autumn 2 | 15 - Add two 2-digit numbers (not across a 10) <br> 16 - Add two 2-digit numbers (across a 10) <br> 17 - Subtract two 2-digit numbers (not across a 10) <br> 18 - Subtract two 2-digit numbers (across a 10) <br> 19 - Mixed addition and subtraction |
|  | Spring 1 | 8 - Make a pound <br> 9 - Find change |
|  | Spring 3 | 5 - Four operations with lengths and heights |

## Year 3 RTP Addition \& subtraction

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 3AS-1 Calculate complements to 100 | Autumn Block 2 | 19 - Complements to 100 |
|  | Summer 2 | 4 - Subtract money <br> 5 - Find change |
| 3AS-2 Add and subtract up to three-digit numbers using columnar methods. | Autumn Block 2 | 11 - Add two numbers (no exchange) <br> 12 - Subtract two numbers (no exchange) <br> 13 - Add two numbers (across a 10) <br> 14 - Add two numbers (across a 100) <br> 15 - Subtract two numbers (across a 10 ) <br> 16 - Subtract two numbers (across a 100) <br> 17 - Add 2-digit and 3-digit numbers <br> 18 - Subtract a 2-digit number from a 3-digit number |
| 3AS-3 Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. <br> Understand and use the commutative property of addition, and understand the related property for subtraction. | Autumn Block 2 | 21 - Inverse operations <br> 22 - Make decisions |
|  | Summer 2 | 3 - Add money <br> 4 - Subtract money <br> 5 - Find change |

# Multiplication and division 

## Multiplication \& division: Recall/Use

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | - recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers <br> - show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot | - recall and use multiplication and division facts for the 3,4 and 8 multiplication tables | - recall multiplication and division facts for multiplication tables up to $12 \times 12$ <br> - use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1 ; multiplying together three numbers <br> - recognise and use factor pairs and commutativity in mental calculations |
|  | Spring 2 | Autumn 3 <br> Spring 1 | Autumn 4 <br> Spring 1 |

## Multiplication \& division: Calculations

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | - calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division $(\div)$ and equals (=) signs | - write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for twodigit numbers times one-digit numbers, using mental and progressing to formal written methods | - multiply two-digit and three-digit numbers by a onedigit number using formal written layout |
|  | Spring 2 | Autumn 3 <br> Spring 1 | Spring 1 |

## Multiplication \& division: Problems

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher | - solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts | - solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which $n$ objects are connected to $m$ objects | - solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as $n$ objects are connected to m objects |
| Summer 1 | Spring 2 | Spring 1 | Spring 1 |

## Multiplication \& division: Combined

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | - <br>  |  |
| solve problems <br> involving addition, <br> subtraction, <br> multiplication and <br> division and a <br> combination of <br> these, including <br> understanding the <br> meaning of the <br> equals sign | Use their knowledge <br> of the order of <br> operations to carry <br> out calculations <br> involvint the four <br> operations |  |  |  |  |
|  |  |  | Spring 1 | Autumn 2 |  |

## Year 1 RTP Number facts

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 1NF-1 Develop fluency in addition and subtraction <br> facts within 10 | See under Addition \& subtraction |  |
| 1NF-2 Count forwards and backwards in multiples of <br> 2,5 and 10, up to 10 multiples, beginning with any <br> multiple, and count forwards and backwards through <br> the odd numbers. | Summer 1 | $1-$ Count in 2s <br> $2-$ Count in 10s <br> $3-$ Count in 5s |
|  | Summer 4 | 2-Tens to 100 |
|  | Summer 5 | 4-Count in coins |

## Year 3 RTP Number facts

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 3NF-1 Secure fluency in addition and subtraction <br> facts that bridge 10, through continued practice. | See under Addition \& subtraction |  |

## Year 4 RTP Number facts

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 4NF-1 Recall multiplication and division facts up to $12 \times 12$ and recognise products in multiplication tables as multiples of the corresponding number. | Autumn 4 | All 13 steps in this block relate to this criterion |
|  | Spring 1 | 1 - Factor pairs <br> 2 - Use factor pairs <br> 7 - Related facts - multiplication and division <br> 8 - Informal written methods for multiplication <br> 9 - Multiply a 2-digit number by a 1-digit number <br> 10 - Multiply a 3-digit number by a 1-digit number |
| 4NF-2 Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context. | Autumn 4 | All 13 steps in this block relate to this criterion |
|  | Spring 1 | 11 - Divide a 2-digit number by a 1-digit number (1) <br> 12 - Divide a 2-digit number by a 1-digit number (2) <br> 13 - Divide a 3-digit number by a 1-digit number |
| 4NF-3 Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100). | Spring 1 | 4 - Multiply by 100 <br> 6 - Divide by 100 |
|  | Spring 4 | 10 - Divide a 1- or 2-digit number by 100 |

## Year 2 RTP Multiplication \& division

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2,5 and 10 multiplication tables. | Spring 2 | 4-Introduce the multiplication symbol <br> 5 - Multiplication sentences <br> 9 - The 2 times-table <br> 13 - The 10 times-table <br> 15 - The 5 times-table <br> 17 - The 5 and 10 times-tables |
|  | Spring 4 | 8 - Four operations with volume and capacity |
|  | Summer 2 | 5 - Tell the time to 5 minutes <br> 6 - Minutes in an hour |
| 2MD-2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). | Spring 2 | 2 - Make equal groups <br> 7 - Make equal groups - grouping <br> 8 - Make equal groups - sharing <br> 10 - Divide by 2 <br> 14 - Divide by 10 <br> 16 - Divide by 5 |

## Year 3 RTP Multiplication \& division

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 3MD-1 Apply known multiplication and division facts <br> to solve contextual problems with different <br> structures, including quotitive and partitive division. | Autumn 3 | All 15 steps in this block relate to this criterion |
|  | Spring 1 | All 11 steps in this block relate to this criterion |

## Year 4 RTP Multiplication \& division

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 4MD-1 Multiply and divide whole numbers by 10 and <br> 100 (keeping to whole number quotients); <br> understand this as equivalent to making a number <br> 10 or 100 times the size. | Spring 1 | $3-$ Multiply by 10 <br> $4-$ Multiply by 100 <br> $5-$ Divide by 10 <br> $6-$ Divide by 100 |
| 4MD-2 Manipulate multiplication and division <br> equations, and understand and apply the <br> commutative property of multiplication. | Autumn 4 | All 13 steps in this block relate to this criterion |
| 4MD-3 Understand and apply the distributive <br> property of multiplication. | Spring 1 | 8 - Informal written methods for multiplication <br> $9-$ Multiply a 2-digit number by a 1-digit number <br> $10-$ Multiply a 3-digit number by a 1-digit number |

## Fractions: Recognise and write

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - recognise, find and name a half as one of two equal parts of an object, shape or quantity <br> - recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | - recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{\#},{ }_{\#}^{5}$ and $\frac{3}{\#}$ of a length, shape, set of objects or quantity | - count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 <br> - recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators <br> - recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators | - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. |
| Summer 2 | Summer 1 | Spring 3 | Spring 4 <br> Summer 1 |

## Fractions: Compare

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | - Recognise the <br> equivalence of $\frac{\S}{\#}$ and <br> $\frac{1}{s}$ | - recognise and show, <br> using diagrams, <br> equivalent fractions <br> with small <br> denominators <br> compare and order <br> unit fractions, and <br> fractions with the <br> same denominators | recognise and show, <br> using diagrams, <br> families of common <br> equivalent fractions |

## Fractions: Calculations

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | write simple fractions <br> for example, $\frac{1}{5}$ of 6 $=$ <br> 3 | - add and subtract <br> fractions with the <br> same denominator <br> within one whole [for <br> example, $\left.\frac{5}{7}+\frac{1}{7}=\frac{8}{7}\right]$ | add and subtract <br> fractions with the <br> same denominator |

## Fractions: Solve problems

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  |  | solve problems that <br> innove all of the <br> above | - solve problems <br> involving increasingly <br> harder fractions to <br> calculate quantities, <br> and fractions to <br> divide quantities, <br> including non-unit <br> fractions where the <br> answer is a whole <br> number |
|  |  | Spring 3 <br> Summer 1 | Spring 3 |

## Decimals: Recognise, write, compare

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  |  |  | - recognise and write decimal equivalents of any number of tenths or hundredths <br> - recognise and write decimal equivalents to $1-\frac{1}{\#,}, \frac{3}{\#}$ <br> - round decimals with one decimal place to the nearest whole number <br> - compare numbers with the same number of decimal places up to two decimal places |
|  |  |  | Spring 4 <br> Summer 1 |

## Fractions, decimals and percentages

| Year 1 | Year 2 | Year 3 | Year 4 |
| :--- | :--- | :--- | :---: |
|  |  |  | • solve simple measure <br> and money problems <br> involving fractions <br> and decimals to two <br> decimal places |
|  |  |  |  |
|  |  |  | Spring 3 <br> Spring 4 <br> Summer 1 |

## Year 3 RTP Fractions

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 3F-1 Interpret and write proper fractions to <br> represent 1 or several parts of a whole that is <br> divided into equal parts. | Spring 3 | 1-Understand the denominators of unit fractions <br> 3-Understand the numerators of non-unit fractions <br> 4-Understand the whole |
| 3F-2 Find unit fractions of quantities using known <br> division facts (multiplication tables fluency). | Summer 1 | 4-Unit fractions of a set of objects |
| 3F-3 Reason about the location of any fraction within <br> 1 in the linear number system. | Spring 3 | 2-Compare and order unit fractions <br> 5-Compare and order non-unit fractions <br> 7- Fractions on a number line <br> 8-Count in fractions on a number line |
| 3F-4 Add and subtract fractions with the same <br> denominator, within 1 | Summer 1 | 1-Add fractions <br> 2-Subtract fractions |

## Year 4 RTP Fractions

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 4F-1 Reason about the location of mixed numbers in <br> the linear number system. | Spring 3 | 4-Number lines with mixed numbers <br> 5 -Compare and order mixed numbers |
| 4F-2 Convert mixed numbers to improper fractions <br> and vice versa. | Spring 3 | 7-Convert mixed numbers to improper fractions <br> $8-$ Convert improper fractions to mixed numbers |
| 4F-3 Add and subtract improper and mixed fractions <br> with the same denominator, including bridging <br> whole numbers. | Spring 3 | 12-Add fractions and mixed numbers <br> $14-$ Subtract from whole amounts <br> 15-Subtract from mixed numbers |

## Ratio and

proportion,
algebra

## Algebra

| Year 1 | Year 2 | Year 3 | Year 4 |
| :--- | :--- | :--- | :--- |
| - solve one-step <br> problems that involve <br> addition and <br> subtraction, using <br> concrete objects and <br> pictorial <br> representations, and <br> missing number <br> problems such as 7 <br> $\square-9$ | - recognise and use the <br> inverse relationship <br> between addition <br> and subtraction and <br> use this to check <br> calculations and solve <br> missing number <br> problems | solve problems, <br> including missing <br> number problems |  |

Note - although formal algebraic notation is not introduced until Y6, algebraic thinking starts much earlier as exemplified by the 'missing number' objectives from $\mathrm{Y} 1 / 2 / 3$

Measurement

## Using measures

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - compare, describe and solve practical problems for: <br> $>$ lengths and heights <br> $>$ mass/weight <br> $>$ capacity and volume <br> $>$ time <br> - measure and begin to record the following: <br> > lengths and heights <br> $>$ mass/weight <br> > capacity and volume <br> $>$ time (hours, minutes, seconds) | - choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); temperature $\left({ }^{\circ} \mathrm{C}\right)$; capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels <br> - compare and order lengths, mass, volume/capacity and record the results using >, < and = | - measure, compare, add and subtract: lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ); mass (kg/g); volume/capacity ( $/ / \mathrm{ml}$ ) | - Convert between different units of measure [for example, kilometre to metre; hour to minute] <br> - estimate, compare and calculate different measures |
| Spring 4 <br> Spring 5 <br> Summer 6 | Spring 3 <br> Spring 4 | Spring 2 <br> Spring 4 | Spring 2 <br> Summer 3 |

## Money

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - recognise and know the value of different denominations of coins and notes | - recognise and use symbols for pounds $(\mathrm{f})$ and pence ( p ); combine amounts to make a particular value <br> - find different combinations of coins that equal the same amounts of money <br> - solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | - add and subtract amounts of money to give change, using both $£$ and $p$ in practical contexts | - estimate, compare and calculate different measures, including money in pounds and pence |
| Summer 5 | Spring 1 | Summer 2 | Summer 2 |


| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] <br> - recognise and use language relating to dates, including days of the week, weeks, months and years <br> - tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | - compare and sequence intervals of time <br> - tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times <br> - know the number of minutes in an hour and the number of hours in a day | - tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12 -hour and 24 -hour clocks <br> - estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight <br> - know the number of seconds in a minute and the number of days in each month, year and leap year <br> - compare durations of events [for example to calculate the time taken by particular events or tasks] | - read, write and convert time between analogue and digital 12- and 24-hour clocks <br> - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days |
| Summer 6 | Summer 2 | Summer 3 | Summer 3 |

## Perimeter, area, volume

| Year 1 | Year 2 | Year 3 | Year 4 |
| :--- | :--- | :--- | :--- |
|  |  | - measure the <br> perimeter of simple <br> 2-D shapes | -measure and <br> calculate the <br> perimeter of a <br> rectilinear figure <br> (including squares) in <br> centimetres and <br> metres <br> find the area of <br> rectilinear shapes by <br> counting squares |
|  |  |  | Autumn 3 <br> Spring 2 |

## Geometry

## 2-D shapes

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles] | - identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line <br> - identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] <br> - compare and sort common 2-D shapes and everyday objects | - draw 2-D shapes | - compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes <br> - identify lines of symmetry in 2-D shapes presented in different orientations |
| Autumn 3 | Autumn 3 | Summer 4 | Summer 4 |

## 3-D shapes

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
| - recognise and name <br> common 3-D shapes <br> [for example, cuboids <br> (including cubes), <br> pyramids and <br> spheres] | - recognise and name <br> common 3-D shapes <br> [for example, cuboids <br> (including cubes), <br> pyramids and <br> spheres] <br> compare and sort <br> common 3-D shapes <br> and everyday objects | - make 3-D shapes <br> using modelling <br> materials; recognise <br> 3-D shapes in <br> different orientations <br> and describe them |  |
| Autumn 3 | Autumn 3 | Summer 4 |  |

## Angles and lines

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  |  | - recognise angles as a property of shape or a description of a turn <br> - identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle <br> - identify horizontal and vertical lines and pairs of perpendicular and parallel lines | - identify acute and obtuse angles and compare and order angles up to two right angles by size <br> - identify lines of symmetry in 2-D shapes presented in different orientations <br> - complete a simple symmetric figure with respect to a specific line of symmetry |
|  |  | Summer 4 | Summer 4 |

## Position and direction

| Year 1 | Year 2 | Year 3 | Year 4 |
| :--- | :--- | :--- | :--- |
| - describe position, <br> direction and <br> movement, including <br> whole, half, quarter <br> and three-quarter <br> turns | -order and arrange <br> combinations of <br> mathematical objects <br> in patterns and <br> sequences <br> use mathematical <br> vocabulary to <br> describe position, <br> direction and <br> movement, including <br> movement in a <br> straight line and <br> distinguishing <br> between rotation as <br> a turn and in terms of <br> right angles for <br> quarter, half and <br> three-quarter turns <br> (clockwise and anti- <br> clockwise) | - describe positions on <br> a 2-D grid as <br> coordinates in the <br> first quadrant <br> describe movements <br> between positions as <br> translations of a <br> given unit to the <br> left/right and <br> up/down <br> plot specified points <br> and draw sides to <br> complete a given <br> polygon |  |
| Summer 3 | Summer 4 |  |  |

## Year 1 RTP Geometry

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 1G-1 Recognise common 2D and 3D shapes <br> presented in different orientations, and know that <br> rectangles, triangles, cuboids and pyramids are not <br> always similar to one another. | Autumn 3 | 1-Recognise and name 3-D shapes <br>  |
|  |  | 2-Sort 3-D shapes <br> 3-Recognise and name 2-D shapes |
| 4-Sort 2-D shapes |  |  |
| 5-Patterns with 2-D and 3-D shapes |  |  |

## Year 2 RTP Geometry

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 2G-1 Recognise common 2D and 3D shapes <br> presented in different orientations, and know that <br> rectangles, triangles, cuboids and pyramids are not <br> always similar to one another. | Autumn 3 | 1-Recognise 2-D and 3-D shapes <br>  <br> 2-Count sides on 2-D shapes |
|  |  | 3-Count vertices on 2-D shapes <br> 7-Sort 2-D shapes <br> 8-Count faces on 3-D shapes <br> 9-Cunt edges on 3-D shapes <br> 10-Count vertices on 3-D shapes <br> 11- oort 3-D shapes |

## Year 3 RTP Geometry

| Ready to progress criteria | Block | Steps |
| :--- | :--- | :--- |
| 3G-1 Recognise right angles as a property of shape or <br> a description of a turn, and identify right angles in 2D <br> shapes presented in different orientations. | Summer 4 | 2-Right angles |
| 3G-2 Draw polygons by joining marked points, and <br> identify parallel and perpendicular sides. | Summer 4 | 6-Parallel and perpendicular <br> 8-Draw polygons |

## Year 4 RTP Geometry

| Ready to progress criteria | Block | Steps |
| :---: | :---: | :---: |
| 4G-1 Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant. | Summer 6 | 3 - Draw 2-D shapes on a grid <br> 4 - Translate on a grid |
| 4G-2 Identify regular polygons, including equilateral triangles and squares, as those in which the sidelengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons. | Spring 2 | 8 - Perimeter of regular polygons <br> 9 - Perimeter of polygons |
|  | Summer 4 | $\begin{aligned} & \text { 4-Triangles } \\ & 5 \text {-Quadrilaterals } \\ & 6 \text { - Polygons } \end{aligned}$ |
| 4G-3 Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry. | Summer 4 | 7 - Lines of symmetry <br> 8 - Complete a symmetric figure |

## Statistics

## Present and interpret data

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :---: | :---: | :---: |
|  | - interpret and <br> construct simple <br> pictograms, tally <br> charts, block <br> diagrams and simple <br> tables | - interpret and present <br> data using bar charts, <br> pictograms and <br> tables | - interpret and present <br> discrete and <br> continuous data <br> using appropriate <br> graphical methods, <br> including bar charts <br> and time graphs |
|  | Summer 3 | Summer 5 | Summer 5 |

## Solve statistical problems

| Year 1 | Year 2 | Year 3 | Year 4 |
| :---: | :--- | :---: | :---: |
|  | - ask and answer <br> simple questions by <br> counting the number <br> of objects in each <br> category and sorting <br> the categories by <br> quantity <br> ask and answer <br> questions about <br> totalling and <br> comparing <br> categorical data | - solve one-step and <br> two-step questions <br> [for example, 'How <br> many more?' and <br> 'How many fewer?'] <br> using information <br> presented in scaled <br> bar charts and <br> pictograms and <br> tables | - solve comparison, <br> sum and difference <br> problems using <br> information <br> presented in bar <br> charts, pictograms, <br> tables and other <br> graphs |
|  | Summer 3 | Summer 5 | Summer 5 |


[^0]:    Note - In the WRM
    schemes, negative
    numbers are
    introduced in Year 5

