**Step 4 and 5 – Number**

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| **Curriculum Statement** | **Step 4 Exploring** | **Step 4 Achieving** | **Step 4 Exceeding** | **Curriculum Statement** | **Step 5 Exploring** | **Step 5 Achieving** | **Step 5 Exceeding** |
| Count from 0 in multiples of 100 | I can count forwards and backwards in 100s. | I can count forwards and backwards in multiples of 100. | I can spot patterns in sequences counting in different multiples of 100. | Count in multiples of 1000; count backwards through zero to include negative numbers | I can count forwards and backwards in 1000s. | I can count forwards and backwards in multiples of 1000. | I can count forwards and backwards in 1000s, including negative numbers. |
|  |  |  |  | I can count backwards from 0 using negative numbers. | I can count backwards and forwards through 0 using negative numbers. | I can extend sequences of numbers including negative numbers. |
| Find 10 or 100 more or less than a given number | I can find 100 more or less than a 3-digit number. | I can find 100 more or less than a 4-digit number. | I can find multiples of 100 more or less than a number.  | Find 1000 more or less than a given number | I can find 1000 more or less than a 4-digit number. | I can find 1000 more or less than any given number. | I can find multiples of 1000 more or less than a number. |
| Count from 0 in multiples of 4, 8 and 50 | I can count forwards in 4s. | I can count forwards in 8s and 50s. | I can count forwards and backwards in 4s, 8s and 50s. | Count in multiples of 6, 7, 9 and 25 | I can count forwards in 6s and 7s. | I can count forwards in 9s and 25s. | I can spot relationships between sequences counting in different steps. |
| Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) | I can spot the hundreds, tens and units in a number. | I can say the value of each digit in a 3-digit number. | I can use my understanding of place value to solve problems, such as making the largest number from 3 given digits. | Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, ones) | I can spot the thousands, hundreds, tens and units in a number. | I can say the value of each digit in a 4-digit number. | I can use my understanding of place value to solve problems, such as making a number closest to a target from 4 given digits. |
| Read and write numbers up to 100 in numerals and words. | I can read and write most 3-digit numbers in words. | I can read and write all 3-digit numbers in words. | I can read and write some 4-digit numbers in words. | 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. | I can convert I to X in Romans numerals into our numbers. | I can convert I to C in Roman numerals into our numbers, and say why they are difficult to calculate with. | I can explain how the Roman number system does not have place value, and the importance of 0 for this. |
| Identify, represent and estimate numbers to 1000 using different representations and partitioning in different ways. | I can partition 3-digit numbers into hundreds, tens and units. | I can partition 3-digit numbers in different ways, for example *462 = 450 + 12.* | I can use different partitions of 3-digit numbers to help me in calculations. | Identify, represent and estimate numbers to 10000 using different representations.  | I can partition 4-digit numbers into thousands, hundreds, tens and units. | I can use units, tens, hundreds and thousands to help me estimate. | I can solve problems in which I need to estimate large numbers. |
| Compare and order numbers to 1000 | I can order 2 3-digit numbers by size. | I can use the signs < > and = when I am ordering 3-digit numbers. | I can solve problems in which I need to order numbers up to 1000 by size. | Compare and order numbers beyond 1000 | I can order 2 4-digit numbers by size. | I can use the signs < > and = when I am ordering 4-digit numbers. | I can solve problems in which I need to order numbers up to 10000 by size. |
| Solve number problems and practical problems with number and place value from Year 3 curriculum | I can solve a problem using numbers and facts that I know, involving addition, subtraction, multiplication, division and fractions. | I can solve a problem using numbers and facts that I know, involving addition, subtraction, multiplication, division and fractions. | I can solve a problem using numbers and facts that I know, and explain how and why I have chosen a particular strategy | Solve number problems and practical problems with number and place value from Year 4 curriculum | I can solve a problem using numbers and facts that I know, including 2-step problems, involving addition, subtraction, multiplication, division and fractions and decimals (to 2 decimal places). | I can solve a problem using numbers and facts that I know, including 2-step problems with larger numbers, involving addition, subtraction, multiplication, division and fractions and decimals (to 2 decimal places). | I can solve a problem using numbers and facts that I know, and explain how and why I have chosen a particular strategy. |
| Round whole numbers up to 100 to the nearest 10 | I can round a 2-digit number to the nearest 10 using equipment to help me. | I can round a 2-digit number to the nearest 10. | I can explain why some numbers ‘round up’ and some ‘round down’. | Round whole numbers up to 10000 to the nearest 10, 100 and 1000 | I can round 3- and 4-digit numbers to the nearest 10 and 100. | I can round 3- and 4-digit numbers to the nearest 10, 100 and 1000. | I can solve problems involving rounding numbers. |
| Use understanding of place value and partitioning to develop methods for addition and subtraction with larger numbers. | *Covered by other targets*  | Use the distributive law to multiply two digit numbers by one digit. | *Covered by other targets* |
| Understand the structure of situations that require addition or subtraction. | *Covered by other targets* | Understand the inverse relationship between addition and subtraction | I can use addition and subtraction as opposites to make simple reversals in what I have done. | I can use addition and subtraction as opposites to reverse what I have done. | I can explain how addition and subtraction are inverse operations. |
| Mentally add and subtract numbers including a three-digit number with ones, tens or hundreds. | I can mentally add and subtract a units or a tens number from a 3-digit number. | I can mentally add and subtract a units, tens or hundreds number from a 3-digit number. | I can mentally solve missing number problems.  | Mentally add and subtract pairs of three-digit and four-digit numbers | I can mentally add and subtract 2 3-digit numbers. | I can mentally add and subtract 3- and 4-digit numbers. | I can mentally add a sequence of 3- and 4-digit numbers. |
| Continue to use addition and subtraction facts to 20 and derive related facts up to 100 | I can find some number facts for larger numbers by using what I know for smaller numbers. | I can find lots of number facts for larger numbers using what I know for smaller numbers. | I can explain the relationship between different number facts. | Use addition and subtraction facts to 100 and derive related facts up to 1000 | I can use my knowledge of number facts to 100 to find some related facts for numbers to 1000. | I can use my knowledge of number facts to 100 to find lots of related facts for numbers to 1000. | I can use my knowledge of number facts to help me solve problems. |
| Solve problems including missing number problems, using place value and more complex addition and subtraction. | *Covered by other targets* | Solve calculation problems involving two-step addition and subtraction in context, deciding which operation to use and why. | *Covered by other targets* |
| Solve problems including missing numbers problems, using number facts and more complex addition and subtraction. | *Covered by other targets* | Solve calculation problems involving two-step addition and subtraction in context, deciding which operation to use and why. | *Covered by other targets* |
| Solve calculation problems involving multiplication and division, including missing number problems, simple positive integer scaling and simple correspondence problems in which n objects are connected to m objects. | *Covered by other targets* | Solve problems involving multiplying and adding, including integer scaling and harder correspondence problems such as n objects are connected to m objects. | *Covered by other targets* |
| Add and subtract numbers with up to three digits using formal columnar addition and subtraction. | I can use different strategies to add and subtract 2- and 3-digit numbers. | I can use different strategies to add and subtract 2 3-digit numbers. | I can explain how different strategies work to add and subtract numbers. | Add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction where appropriate. | I can use different strategies to add 3- and 4-digit numbers, including column methods. | I can add and subtract 4-digit numbers using column methods. | I can explain how column methods of addition and subtraction work. |
| Check addition calculations using subtraction, and addition and subtraction calculations using rounding. | I can, with help, use rounding to check answers to addition and subtraction sums. | I can check answers to addition and subtraction sums by using rounding. | I can explain how rounding can help me check if my answers to addition and subtraction sums are right. | Check answers to addition and subtraction calculations by estimating and using inverse operations. | I can, with help, use estimating to check my answers to addition and subtraction sums. | I can use estimating to check my answers to addition and subtraction sums. | I can check my answers to addition and subtraction sums in different ways, explaining why I have chosen a particular method. |
|  |  |  |  | Check answers to multiplication and division calculations using rounding. | *Covered by other targets* |
| Use commutativity and associativity and multiplication facts to derived related facts. | I can use my understanding of multiplication being able to be done in any order, to help me find some related facts. | I can use my understanding of multiplication being able to be done in any order, to help me find all related facts. | I can use my understanding of multiplication being able to be done in any order, to help me work with larger numbers. | Use commutativity in mental calculations | I can multiply 3 small numbers together. | I can change the order to make it easier when I multiply 3 small numbers together. | I can use my understanding of how I can change the order within sums to multiply 4 small numbers together. |
| Understand the structure of situations that require multiplication. | *Covered by other targets* | Use factor pairs in mental calculation | I can use some simple factor pairs to help me calculate mentally. | I can use factor pairs to help me calculate mentally. | I can explain how factor pairs help make calculations easier. |
| Calculate mentally using multiplication and division facts for the 3, 4 and 8 multiplication tables, including two-digit numbers times one-digit numbers | I can recall multiplication facts for 3x, 4x and 8x tables. | I can recall division facts for 3x, 4x and 8x tables. | I can solve problems using facts from 3x, 4x and 8x tables. | Use place value, known and derived facts to multiply and divide mentally, including, multiplying by 0 and 1, multiplying together 3 numbers | I can multiply by 0. | I can use my understanding of place value to multiply by multiples of 10. | I can use my understanding of place value to multiply numbers by multiples of 100. |
| Develop recall of number facts linking addition and multiplication | I can use the 2x table to find doubles and halves. | I can spot sequences of numbers I can count in. | I can find patterns by recalling multiplication facts. | Recognise factor pairs | I can find some factor pairs for a number. | I can find all factor pairs for a number. | I can solve problems involving factor pairs. |
| Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. | *Covered by other targets* | Recall multiplication and division facts for multiplication tables up to 12x12 | I can recall multiplication facts for all tables up to 12 x 12. | I can recall division facts for all tables up to 12 x 12. | I can solve problems using facts from all tables up to 12 x 12. |
| Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. | I can use the grid method to help me multiply teens numbers by a 1-digit number. | I can use the grid method to help me multiply 2-digit numbers by a 1-digit number. | I can explain how the grid method works. | Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. | I can use the grid method to help me multiply 3-digit numbers by a 1-digit number. | I can use the grid method to multiply 2- and 3-digit numbers. | I can explain how the grid method is related to formal methods of long multiplication. |
| I can solve division questions that have remainders. | I can use chunking to divide numbers more than 10x the divisor. | I can use chunking to divide numbers more than 20x the divisor. | Divide two-digit and three-digit numbers by a one-digit number using formal written layout | I can use multiples of 10 of the divisor when I am chunking. | I can use chunking to divide any number including where the answer has a remainder. | I can explain how chunking is related to formal methods of long division. |
| Recognise, find and write fractions of a discrete set of objects, unit fractions with small denominatorsRecognise, find and write fractions of a discrete set of objects, non-unit fractions with small denominators | I can find some unit and non-unit fractions of a group of objects. | I can find unit and non-unit fractions of a group of objects. | I can work out what fractions a group of objects can be divided into, and what ones it can’t. | Make connections between fractions of a length, of a shape and as a representation of one whole or a set of quantities | I can group halves and quarters of different shapes and measures according to the fraction they show. | I can group halves, quarters and three-quarters of different shapes and measures according to the fraction they show. | I can explain what I need to do to change between a quarter, a half and three quarters of different shapes and groups. |
| Use factors and multiples to recognise equivalent fractions and simplify where appropriate | I can use times table facts to help me find some equivalents for unit fractions. | I can use times table facts to help me find equivalents for non-unit fractions. | I can use my times table knowledge to simplify fractions. |
| Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and dividing one-digit numbers or quantities by 10. | I can recognise and count in tenths. | I can extend sequences in tenths crossing whole numbers. | I can divide whole numbers by 10 and give the answer in tenths. | Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten | I can recognise and count in hundredths. | I can extend sequences in hundredths. | I can explain the relationship between tenths and hundredths. |
|  |  |  |  | Divide one- or two-digit numbers by 10 and 100, identifying the value of digits in the answer as units, tenths and hundredths. | I can divide numbers by 10 giving answers as decimals. | I can divide numbers by 100 giving answers as decimals. | I can divide numbers by 1000, explaining how this relates to dividing by 10 and 100. |
| Recognise and show, using diagrams, equivalent fractions with small denominators. | I can draw diagrams to show equivalence between 2 simple fractions. | I can draw diagrams to show equivalence between simple fractions. | I can draw diagrams to show equivalence between families of simple fractions. | Recognise and show, using diagrams, families of common equivalent fractions. | I can draw diagrams to show equivalence between 2 more complex fractions. | I can draw diagrams to show equivalence between more complex fractions. | I can draw diagrams to show equivalence between families of more complex fractions. |
|  |  |  |  | Recognise that the denominator of a fraction always tells you the number of equal parts that make one whole. | I can draw a diagram to show what the denominator means. | I can explain what the denominator means. | I can apply my understanding of the denominator to solve problems. |
| Connect tenths to decimal measures and place value | I can convert one decimal place into tenths. | I can name the column after the decimal point. | I can explain how columns after the decimal point relate to place value. | Recognise and write decimal equivalents of any number of tenths or hundredths and ¼, ½ and ¾  | I can convert two decimal places to hundredths, and know that 0.5 = ½. | I know that 0.25 = ¼ and 0.75 = ¾. | I can explain the relationship between tenths, hundredths and how these are written as decimals, and know that 0.125 = ⅛. |
| Compare and order unit fractions and fractions with the same denominator | I can order by size simple fractions with the same denominator. | I can order by size simple unit fractions. | I can explain how to order simple unit fractions and fractions with the same denominator. | Continue to compare and order unit fractions and fractions with the same denominator | I can order by size more complex fractions with the same denominator. | I can order by size more complex unit fractions. | I can explain how to order more complex unit fractions and fractions with the same denominator. |
| Add and subtract fractions with the same denominator within one whole | I can add fractions with the same denominator within one whole. | I can subtract fractions with the same denominator within one whole. | I can explain what I am doing when I add and subtract fractions with the same denominator, | Add and subtract fractions with the same denominator | I can add fractions with the same denominator that are greater than 1. | I can subtract fractions with the same denominator that are greater than 1. | I can add and subtract fractions with the same denominator, spotting when answers are greater than 1. |
| Recognise and use fractions as numbers; unit fractions and non-unit fractions with small denominators. | I can place half and quarters on a number line. | I can place thirds on a number line. | I can place different fractions on a number line. | Understand the relation between non-unit fractions and multiplication and division of quantities | *Covered by other targets* |
|  |  |  |  | Round decimals with one decimal place to the nearest whole number | I can start to round decimals with one decimal place to the nearest number. | I can round decimals with one decimal place to the nearest whole number. | I can explain what I am doing when I am rounding decimals to the nearest whole number. |
|  |  |  |  | Compare numbers with the same number of decimal places up to two decimal places | I can order decimals less than 1 by size. | I can order numbers with decimals by size. | I can explain how to order numbers with decimals by size. |
| Solve problems with fractions from the Year 3 curriculum. | *Covered by other targets* | Solve problems involving harder fractions to calculate and divide quantities, including non-unit fractions where the answer is a whole number. | *Covered by other targets* |
|  |  |  |  | Solve simple measure and money problems involving fractions and decimals to two decimal places. | *Covered by other targets* |