# Progression in Number Small Steps

| | RECEPTION | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 |
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| PLACE VALUE AND NUMBER | Count up to three or four objects by saying one number name for each item<br>Count actions or objects that cannot be moved<br>Recognise numerals 1-5<br>Select the correct numeral to represent 1-5<br>Compare quantities of identical objects<br>Compare quantities of non-identical objects<br>Count objects to 10, and begin to count beyond 10<br>Count an irregular arrangement of up to ten objects<br>Say the number that is one more<br>Find one more or less from a group of up to ten objects<br>Count out up to six objects from a larger group<br>Compare groups up to 10<br>Use the language of 'more' and 'fewer' to compare two sets of objects<br>Count reliably to 20, place numbers in order and say which number is one more or one less | Sort objects<br>Count objects Count objects from a larger group<br>Represent objects<br>Recognise numbers as words<br>Count on from any number 1 more<br>Count backwards within 10 1 less<br>Compare groups by matching Fewer, more, same Less than, greater than, equal to<br>Compare numbers<br>Order objects and numbers<br>The number line<br>Count forwards and backwards and write numbers to 20 in numerals and words<br>Numbers from 11-20<br>Tens and ones<br>Count one more and one less<br>Compare groups of objects<br>Compare numbers<br>Order groups of numbers<br>Order numbers<br>Represent numbers to 50 using tens and ones<br>One more one less<br>Compare objects and numbers within 50<br>Order numbers within 50<br>Count in 2s and 5s<br>Count forwards and backwards within 100<br>Partition numbers<br>Compare and order numbers<br>One more, one less | Numbers to 20<br>Count objects to 100 by making 10s<br>Recognise tens and ones<br>Use a place value chart<br>Partition numbers to 100<br>Write numbers to 100 in words<br>Flexibly partition numbers to 100<br>Write numbers to 100 in expanded form 10s on the number line to 100 10s and 1s on the number line to 100<br>Estimate numbers on a number line<br>Compare objects<br>Compare numbers<br>Order objects and numbers<br>Count in 2s, 5s and 10s<br>Count in 3s | Represent numbers to 100<br>Partition numbers to 100<br>Number line to 100<br>Hundreds<br>Represent numbers to 1,000<br>Partition numbers to 1,000<br>Flexible partitioning of numbers to 1000<br>Hundreds, tens and ones<br>Find 1, 10 or 100 more or less<br>Number line to 1,000<br>Estimating on a number line to 1,000<br>Compare numbers to 1,000<br>Order numbers to 1,000<br>Count in 50s | Represent numbers to 1,000<br>Partition numbers to 1,000<br>Number line to 1,000<br>Thousands<br>Represent numbers to 10,000<br>Partition numbers to 10,000<br>Flexible partitioning of numbers to 10,000<br>Find 1, 10, 100, 1,000 more or less<br>Number line to 10,000<br>Estimate on a number line to 10,000<br>Compare numbers to 10,000<br>Order numbers to 10,000<br>Roman numerals<br>Round to the nearest 10<br>Round to the nearest 100<br>Round to the nearest 1,000<br>Round to the nearest 10, 100 or 1,000 |

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| **ADDITION AND SUBTRACTION** | **Sorting into groups**<br>**Say the number that is one more or less to 5**<br>**Find one more**<br>**Find one less**<br>**Find the total number of items in two groups by counting all of them**<br>**Say the number that is one more than any number**<br>**Find one more or one less from a group of up to 5 objects**<br>**In practical activities and discussion, is beginning to use the vocabulary involved in adding and subtracting**<br>**Record, using marks that they can interpret and explain**<br>**Combine two groups to find the whole**<br>**Find pairs with a total of 6 or 7**<br>**In practical activities and discussion, begin to use the vocabulary involved in adding and subtracting**<br>**Find number bonds to 10 using a ten frame**<br>**Find number bonds to 10 using a part-whole model**<br>**Begin to subtract by guessing how many are hiding**<br>**Record, using marks that they can interpret and explain**<br>**Add 1,2 or 3 to any number to 10 by counting on**<br>**Taking away by counting back**<br>**Find doubles to 5 +5** | **Introduce parts and wholes**<br>**Part-whole model**<br>**Write number sentences Fact families - addition facts**<br>**Number bonds within 10**<br>**Systematic number bonds within 10**<br>**Number bonds to 10**<br>**Addition - add together**<br>**Addition - add more**<br>**Addition problems**<br>**Find a part Subtraction - find a part**<br>**Fact families - the eight facts**<br>**Subtraction - take away/crossing out (How many left?)**<br>**Subtraction - take away (How many left?)**<br>**Subtraction on a number line**<br>**Add or subtract 1 or 2**<br>**Add by counting on**<br>**Find and make number bonds**<br>**Add by making 10**<br>**Subtraction including crossing 10**<br>**Related facts**<br>**Compare number sentences** | **Bonds to 10**<br>**Fact families – addition and subtraction bonds within 20**<br>**Related facts**<br>**Bonds to 100 (tens)**<br>**Add and subtract 1s**<br>**Add by making 10**<br>**Add three 1-digit numbers**<br>**Add to the next 10**<br>**Add across a 10**<br>**Subtract across 10**<br>**Subtract from a 10**<br>**Subtract a 1-digit number from a 2-digit number (across a 10) 10 more, 10 less**<br>**Add and subtract 10s**<br>**Add two 2-digit numbers (not across a 10)**<br>**Add two 2-digit numbers (across a 10)**<br>**Subtract two 2-digit numbers (not across a 10)**<br>**Subtract two 2-digit numbers (across a 10)**<br>**Mixed addition and subtraction**<br>**Compare number sentences**<br>**Missing number problems** | **Apply number bonds within 10**<br>**Add and subtract 1s**<br>**Add and subtract 10s**<br>**Add and subtract 100s**<br>**Spot the pattern**<br>**Add 1s across a 10**<br>**Add 10s across a 100**<br>**Subtract 1s across a 10**<br>**Subtract 10s across a 100**<br>**Make connections**<br>**Add two numbers (no exchange)**<br>**Subtract two numbers (no exchange)**<br>**Add two numbers (across a 10)**<br>**Add two numbers (across a 100)**<br>**Subtract two numbers (across a 10)**<br>**Subtract two numbers (across a 100)**<br>**Add 2-digit and 3-digit numbers**<br>**Subtract a 2-digit number from a 3-digit number**<br>**Complements to 100**<br>**Estimate answers**<br>**Inverse operations**<br>**Make decisions** | **Add and subtract 1s, 10s, 100s and 1,000s**<br>**Add up to two 4-digit numbers - no exchange**<br>**Add two 4-digit numbers - one exchange**<br>**Add two 4-digit numbers– more than one exchange**<br>**Subtract two 4-digit numbers - no exchange**<br>**Subtract two 4-digit numbers - one exchange**<br>**Subtract two 4-digit numbers – more than one exchange**<br>**Efficient subtraction**<br>**Estimate answers**<br>**Checking strategies** |

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| **MULTIPLICATION AND DIVISION** | **Count in 1s and 10s to 100**<br>**Double numbers to 5 +5**<br>**Solve practical problems involving halving and sharing**<br>**Use practical resources to find odd and even numbers** | **Count in 2s, 5s, 10s**<br>**Make and add equal groups**<br>**Make arrays**<br>**Make doubles**<br>**Make equal groups-grouping and sharing** | **Make and add equal groups**<br>**Make arrays**<br>**Recognise, make and add equal groups**<br>**Multiplication sentences using x symbol**<br>**Multiplication sentences from pictures**<br>**Use arrays**<br>**Make doubles**<br>**2,5, and 10 times table**<br>**Make equal groups-sharing and grouping**<br>**Divide by 2**<br>**Odd and even numbers**<br>**Divide by 5 and 10** | **Divide by 3**<br>**The 3 times-table**<br>**Multiply by 4**<br>**Divide by 4**<br>**The 4 times-table**<br>**Multiply by 8**<br>**Divide by 8**<br>**The 8 times-table**<br>**The 2, 4 and 8 times-tables**<br>**Consolidate 2,4 and 8 times tables**<br>**Compare statements**<br>**Related calculations**<br>**Multiply and divide 2 digit by 1 digit**<br>**Scaling**<br>**How many ways?** | **Multiples of 3**<br>**Multiply and divide by 6**<br>**6 times-table and division facts**<br>**Multiply and divide by 9**<br>**9 times-table and division facts**<br>**The 3, 6 and 9 times-tables**<br>**Multiply and divide by 7**<br>**7 times-table and division facts**<br>**11 times-table and division facts**<br>**12 times-table and division facts**<br>**Multiply by 1 and 0**<br>**Divide by 1 and itself**<br>**Multiply three numbers Factor pairs**<br>**Efficient multiplication**<br>**Written methods**<br>**Multiply 2 digits by 1 digit**<br>**Multiply 3 digits by 1 digit**<br>**Divide 2 digits by 1 digit** |
| **FRACTIONS AND DECIMALS** | | **Find halves and quarters** | **Make equal parts**<br>**Recognise and find half and quarter**<br>**Recognise and find one third**<br>**Unit and non-unit fractions**<br>**Equivalence of ½ and 2/4**<br>**Find three-quarters**<br>**Count in fractions** | **Make equal parts**<br>**Recognise and find half, quarter and third**<br>**Unit and non-unit fractions**<br>**Equivalence of ½ and 2/4**<br>**Count in fractions**<br>**Making the whole**<br>**Count in tenths**<br>**Tenths as decimals**<br>**Fractions on a number line**<br>**Fractions of a set of objects**<br>**Equivalent fractions**<br>**Compare and order fractions**<br>**Add and subtract fractions** | **Unit and non-unit fractions**<br>**Tenths –count in tenths**<br>**Equivalent fractions**<br>**Fractions greater than 1**<br>**Count in fractions**<br>**Add fractions**<br>**Add 2 or more fractions**<br>**Recognise tenths and hundredths**<br>**Tenths as decimals**<br>**Tenths on a place value grid and number line**<br>**Divide 1 then 2 digits by 10**<br>**Hundredths as decimals**<br>**Hundredths on a place value grid**<br>**Divide 1 or 2 digits by 100**<br>**Bonds to 10 and 100**<br>**Make a whole**<br>**Write, compare and order decimals**<br>**Round decimals**<br>**Halves and quarters** |

# Progression in Measurement Small Steps

| | Reception | Year 1 | Year 2 | Year 3 | Year 4 |
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| **Length and Height** | Order two or three items by length or height | Compare lengths and heights<br>Measure length | Compare lengths and heights<br>Measure lengths in cm and m<br>Compare and order lengths<br>Four operations with lengths | Measure length (m)<br>Equivalent lengths m, cm and mm<br>Compare lengths<br>Add and subtract lengths | Equivalent lengths-m and cm, mm and cm<br>Kilometres<br>Add lengths<br>Subtract lengths |
| **Perimeter and Area** | | | | Measure and calculate perimeter | What is area?<br>Counting squares<br>Making shapes<br>Comparing area<br>Measure perimeter<br>Perimeter on a grid<br>Perimeter or rectangles and rectilinear shapes |
| **Weight and Volume** | Order two items by weight or capacity | Introduce weight and mass<br>Measure and compare mass<br>Introduce capacity and volume<br>Measure capacity and volume | | | |
| **Mass, Capacity and Temperature** | Order two items by weight or capacity | | Introduce weight and mass<br>Measure and compare mass<br>Measure mass in grams<br>Introduce capacity and volume<br>Measure capacity<br>Compare volume<br>Millilitres and litres<br>Temperature | Compare and measure mass<br>Add and subtract mass<br>Compare volume<br>Measure and compare capacity<br>Add and subtract capacity<br>Temperature | |
| **Money** | | Recognise coins and notes<br>Count in coins | Recognise coins and notes<br>Count money-pence and pounds<br>Select money<br>Make the same amount<br>Compare money<br>Find the total, difference, change<br>Two step problems | Convert pounds and pence<br>Add and subtract money<br>Give change | Pounds and pence<br>Ordering money<br>Estimating money<br>Convert pounds and pence<br>Add and subtract money<br>Find change<br>Four operations |

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| **Time** | Use everyday language related to time<br>Order and sequence familiar events<br>Measure short periods of time | Before and after<br>Dates<br>Tell time to the hour and half hour<br>Compare time | Tell time to the hour and half hour<br>clock and half past<br>Quarter past and quarter to<br>Tell time to 5 minutes<br>Hours and days<br>Find and compare durations of time | Clock, half past, quarter to and quarter past<br>Months and years<br>Hours in a day<br>Telling the time to 5 minutes and the minute<br>Using am and pm<br>24 hour clock<br>Find and compare durations<br>Start and end times<br>Measuring time in seconds | Telling the time to 5 minutes<br>Telling the time to the minute<br>Using a.m. and p.m.<br>24 hour clock<br>Hours, minute and seconds<br>Years, months, weeks and days<br>Analogue to digital-12 hour and 24 hour |

# Progression in Geometry and Statistics Small Steps

| | Reception | Year 1 | Year 2 | Year 3 | Year 4 |
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| **Geometry – Shapes and patterns** | Begin to use mathematical names for solid 3D shapes and flat 2D shapes<br>Use mathematical terms to describe shapes<br>Select a particular named shape<br>Use familiar objects and common shapes to create and recreate patterns and build models<br>Describe their relative position such as 'behind' or 'next to'<br>Make simple patterns<br>Explore more complex patterns<br>Continue a repeating pattern with three colours/shapes/objects<br>Recognise and create symmetrical patterns Make simple patterns | Recognise and name 3-D shapes<br>Sort 3-D shapes<br>Recognise, name and sort 2-D shapes<br>Make patterns with 2-D and 3-D shapes | Recognise 2-D and 3-D shapes<br>Count sides on 2-D shapes<br>Count vertices on 2-D shapes<br>Draw 2-D shapes<br>Lines of symmetry on shapes<br>Use lines of symmetry to complete shapes<br>Sort 2-D shapes<br>Count faces on 3-D shapes<br>Count edges on 3-D shapes<br>Count vertices on 3-D shapes<br>Sort and make patterns with 2D and 3-D shapes | Turns and angles<br>Right angles in shapes<br>Compare angles<br>Draw accurately<br>Horizontal, vertical, parallel and perpendicular<br>Recognise and describe 2D and 3D shapes<br>Make 3D shapes | Turns and angles<br>Right angles in shapes<br>Compare, identify and order angles<br>Recognise and describe 2-D shapes<br>Triangles and quadrilaterals<br>Horizontal and vertical<br>Lines of symmetry<br>Complete a symmetrical figure |
| **Geometry – Position and direction** | | Describe turns and position | Describe position, movement and turns<br>Make patterns with shapes | | Describe a position<br>Draw on a grid<br>Move on a grid<br>Describe movement on a grid |
| **Statistics** | | | Make tally charts<br>Draw and interpret pictograms (1-1)<br>Draw and interpret pictograms (2,5 and 10)<br>Block diagrams | Make tally charts<br>Draw and interpret pictograms (2,5 and 10)<br>Pictograms, bar charts, tables | Interpret charts<br>Comparison, sum and difference<br>Introduce line graphs |