Strands with year group identifiers

When planning, ensure that age expected objectives are linked in a progressive manner – eg To know place value to of a two-digit number (Year Two) has the progression objective To recognise value of each digit in a three-digit number (Year Three). The Year 3 objective would be the challenge objective to follow the Year Two objective.

Arithmetic (Number, Calculations, Fractions, Decimals & Percentages)

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| Year One | Year Two | Year Three |
| To write number from 1-20 in words.  To represent numbers using objects and pictorial representations including number lines.  To use the language of: equal to, more than, less than (fewer), most and least.  To read, write and interpret statements involving addition, subtraction and equals signs  To solve one-digit and two-digit addition and subtraction problems to 20, including 0.  To solve one-step word problems, using concrete objects and pictorial representations.  To solve missing number problems. 7= - 9  To solve one-step problems involving multiplication and division using concrete objects, pictorial representations and arrays with support from teacher.    To begin to use the fraction, one-half and  one-quarter, recognise, find and name a quarter as  one equal part of an object, shape or quantity. | To know place value of a two-digit number.  To identify, represent and estimate numbers using different representations, including the number line.  To use place value and number facts to solve  problems.  To solve addition and subtraction involving numbers, quantities and measures.  To know number bonds 20 fluently and begin to  derive related facts to 100.  To add and subtract numbers (two-digit and ones,  two-digit and tens, two two-digit and three  one-digit numbers).  To know addition and multiplication can be done  in any order (Commutative) and subtraction and division cannot.  To be able to use inverse to solve missing number problems and to check calculations.  To recall and use multiplication and division facts  for 2, 5, 10 tables.  To calculate mathematical statements, within  tables, and write them using x,÷ and =  To solve problems involving multiplication and division using materials, arrays, repeated addition and multiplication and division facts, including  problems in context.  To solve simple money problems of the same unit  ( addition and subtraction) including giving change  To recognise, name and write fractions , ,  and  of length, shape or quantity.  To know simple equivalent fractions  and .  To write simple fractions of number (eg ½ of  numbers to 20 and then to 50) .  To recognise simple decimals in the context of  money | Number & Place Value Skills:  To recognise value of each digit in a three-digit  number.  To identify, represent and estimate numbers using different representation.  To recognise and complete a wider range of sequences eg multiples of 4/8/50)  To add and subtract numbers with up to three digits, using formal written methods of columnar  addition and subtraction.  To estimate answers to calculations  To use inverse operations to check answers.  To solve problems involving all four operations, including missing number  (inverse ? x 1digit = 2digit))  problems, using number facts, place value, more complex addition and subtraction,  To recall and use multiplication facts for 3,4 and 8. Multiplication tables.  To use formal written methods to multiply (short 2x1 digit with carrying) and divide - including remainders and decimals in the context of money  To solve problems, including missing number  problems, involving multiplication and division, including balancing equations  To add and subtract amounts of money to give  Change, using both £ and P in practical contexts.  To count up and down in tenths; recognise tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10.  To recognise, find and write fractions of a set of  objects  To recognise and use fractions as numbers  To recognise and show, using diagrams, equivalent fractions with small denominators.  To add and subtract fractions with the same  denominator within one whole (2/6 + 3/6 = 5/6, including 3 fractions)  Balancing fraction statements with subtraction and addition.  Fractions of number inc inverse fractions of amount  (3/5 of? = 15)  To compare and order unit fractions, and fractions  with the same denominator. |

Measures

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| Year One | Year Two | Year Three |
| To compare, describe and solve practical problems  For:  Lengths and height (long/short, tall/short,  double/half.  Mass/weight (heavier than / lighter than)  Capacity and volume (full/empty,  more than/less than, half full/quarter full).  Time (Quicker, slower, earlier, later)  To measure and begin to record the following: lengths,  Height, mass/weight, capacity and time (hours,  Minutes and seconds).  To recognise and know the values of different coins  and notes.  To sequence events in chronological order using language (eg before, after, today...)  To recognise and use language relating to dates  (days, weeks, months and years).  To know time to the hour and half past the hour. | To use appropriate standard units of measure to estimate length, height, mass, temperature and  capacity to the nearest unit.  To be able to compare and order measures using ≤, ≥ and =  To recognise the symbols for £ and P and use them to make particular values.  To find different combinations of coins that equal the same amounts.  To compare and sequence intervals of time.  To 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.  To know the number of minutes in an hour and the number of hours in a day. | To measure, compare, add and subtract: lengths,  mass, volume/capacity.  To measure the perimeter of simple 2D shapes.  To tell and write the time from an analogue clock, including using Roman numerals from I to XII and 12/24 hour clocks.  To estimate and read time with increasing accuracy to the nearest minute.  To begin to compare time in terms of seconds,  minutes and hours.  To use vocabulary of time such as o’clock, am/pm, morning, afternoon, noon and midnight.  To know the number of seconds in a minute and the number of days in each month, year and leap year.  To compare durations of events (for example to calculate the time taken by particular events or tasks). |

Shape

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| Year One | Year Two | Year Three |
| To recognise and name common 2D and 3D shapes.  2D – rectangles, circles, triangles  3D – Cuboids, pyramids, spheres.  To recognise simple properties of 2D & 3 D shape (sides/corners)  To describe position, direction and movement up  to ¾ turns. | To identify the properties of 2D shapes, including  lines of symmetry.  To identify the properties of 3D shapes, including  the number of edges, vertices and faces.  To identify 2D shapes on the surface of 3D shapes (for example a circle on a cylinder).  To compare and sort common 2D and 3D shapes, including everyday objects.  To order and arrange combinations of mathematical objects in patterns and sequences.  To use mathematical vocabulary to describe position, direction and movement. | To draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in  different orientations and describe them.  T o recognise angles as a property of shape or description of a turn.  To identify right angles, recognise that two right  angles make a half turn, three make three quarters of a turn and four a complete turn. (including degrees – 90/360)  To recognise clockwise and anti-clockwise  To identify whether angles are ≥ or ≤ a right angle.  To identify horizontal and vertical lines and pairs  of perpendicular and parallel lines.  To reflect shape in vertical and horizontal mirror  lines |

Handling & Interpreting Data

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| Year One | Year Two | Year Three |
| To sort and classify objects with 1 criterion  To use and interpret venn and carroll diagrams  To use and interpret simple block graphs | To construct simple pictograms, tally charts, block diagrams and tables.  To interpret data by counting categories, totalling  and comparing categories and ask these types of questions.  To sort an classify objects with more than1criterion | To interpret and present data using bar charts, pictograms and tables of more than one unit  (eg scales of 2 or 5 or 10)  To use a key to represent data  To solve one-step and two-step problems on bar  charts, pictograms and tables.  To compare data from 2 charts /different types of chart |