**MATHS PROGRESSION THROUGH FUNCTIONAL SKILLS**

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| **NUMBER** |
| **E1** | **E2** | **E3** | **L1** |
| * Read, write, order and compare numbers up to 20
* Use whole numbers to count up to 20 items including zero
* Add numbers which total up to 20, and subtract numbers from numbers up to 20
* Recognise and interpret the symbols +, – and = appropriately
 | * Count reliably up to 100 items
* Read, write, order and compare numbers up to 200
* Recognise and sequence odd and even numbers up to 100
* Recognise and interpret the symbols +, – , x, ÷ and = appropriately
* Add and subtract 2-digit numbers
* Multiply whole numbers in the range 0x0 to 12x12 (times tables)
* Know the number of hours in a day and weeks in a year. Be able to name
* and sequence
* Divide 2-digit whole numbers by single-digit whole numbers and express
* remainders
* Approximate by rounding to the nearest 10, and use this rounded answer
* to check results
* Recognise simple fractions (halves, quarters and tenths) of whole
* numbers and shapes
* Read, write and use decimals to one decimal place
 | * Count, read, write, order and compare numbers up to 1000
* Add and subtract using 3-digit whole numbers
* Divide 3-digit whole numbers by single and double digit whole numbers
* and express remainders
* Multiply 2-digit whole numbers by single and double digit whole numbers
* Add and subtract 2-digit numbers. Approximate by rounding numbers less
* than 1000 to the nearest 10 or 100 and use this rounded answer to check
* results
* Recognise and continue linear sequences of numbers up to 100
* Read, write and understand thirds, quarters, fifths and tenths including
* equivalent forms
* Read, write and use decimals up to 2 decimal places
* Recognise and continue sequences that involve decimals
 | * Read, write, order and compare large numbers (up to one million).
* Recognise and use positive and negative numbers.
* Multiply and divide whole numbers and decimals by 10, 100, 1000.
* Use multiplication facts and make connections with division facts.
* Use simple formulae expressed in words for one or two-step operations.
* Calculate the squares of one-digit and two-digit numbers.
* Follow the order of precedence of operators.
* Read, write, order and compare common fractions and mixed numbers.
* Find fractions of whole number quantities or measurements.
* Read, write, order and compare decimals up to three decimal places.
* Add, subtract, multiply and divide decimals up to two decimal places.
* Approximate by rounding to a whole number or to one or two decimal places.
* Read, write, order and compare percentages in whole numbers
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| **SHAPE, SPACE AND MEASURES** |
| **E1** | **E2** | **E3** | **L1** |
| * Recognise coins and notes and write them in numbers with the correct symbols (£ & p), where these involve numbers up to 20
* Read 12 hour digital and analogue clocks in hours
* Know the number of days in a week, and months and seasons in a year. Be able to name and sequence
* Describe and make comparisons in words between measures of items including size, length, width, height, weight and capacity
* Identify and recognise common 2-D and 3-D shapes including circle, cube, rectangle (incl. square) and triangle
* Use everyday positional vocabulary to describe position
 | * Calculate money in pence up to one pound and in whole pounds of multiple items and write with the correct symbols (£ or p)
* Read and record time in common date formats, and read time displayed on analogue clocks in hours, half hours and quarter hours, and understand hours from a 24-hour digital clock
* Use metric measures of length including millimetres, centimetres, metres and kilometres
* Use measures of weight including grams and kilograms
* Use measures of capacity including millilitres and litres
* Read and compare positive temperatures
* Read and use simple scales to the nearest labelled division
* Recognise and name 2-D and 3-D shapes including pentagons, hexagons, cylinders, cuboids, pyramids and spheres
* Describe the properties of common 2-D and 3-D shapes including numbers of sides, corners, edges, faces, angles and base
* Use appropriate positional vocabulary to describe position and direction including between, inside, outside, middle, below, on top, forwards and backward
 | * Calculate with money using decimal notation and express money correctly in writing in pounds and pence
* Round amounts of money to the nearest £1 or 10p
* Read, measure and record time using am and pm
* Read time from analogue and 24 hour digital clocks in hours and minutes
* Use and compare measures of length, capacity, weight and temperature using metric or imperial units to the nearest labelled or unlabelled division
* Compare metric measures of length including millimetres, centimetres, metres and kilometres
* Compare measures of weight including grams and kilograms
* Compare measures of capacity including millilitres and litres
* Use a suitable instrument to measure mass and length
* Sort 2-D and 3-D shapes using properties including lines of symmetry, length, right angles, angles including in rectangles and triangles
* Use appropriate positional vocabulary to describe position and direction including eight compass points and including full/half/quarter turns
 | * Calculate simple interest in multiples of 5% on amounts of money 20–30%
* Calculate discounts in multiples of 5% on amounts of money
* Convert between units of length, weight, capacity, money and time, in the same system
* Recognise and make use of simple scales on maps and drawings
* Calculate the area and perimeter of simple shapes including those that are made up of a combination of rectangles
* Calculate the volumes of cubes and cuboids
* Draw 2-D shapes and demonstrate an understanding of line symmetry and knowledge of the relative size of angles
* Interpret plans, elevations and nets of simple 3-D shapes
* Use angles when describing position and direction, and measure angles in degree
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| **USING AND APPLYING** |
| **E1** | **E2** | **E3** | **L1** |
| * Read numerical information from lists
* Sort and classify objects using a single criterion
* Read and draw simple charts and diagrams including a tally chart, block diagram/graph
 | * Extract information from lists, tables, diagrams and bar charts
* Make numerical comparisons from bar charts
* Sort and classify objects using 2 criteria
* Take information from one format and represent the information in another format including use of bar charts
 | * Extract information from lists, tables, diagrams and charts and create frequency tables
* Interpret information, to make comparisons and record changes, from different formats including bar charts and simple line graphs
* Organise and represent information in appropriate ways including tables, diagrams, simple line graphs and bar charts
 | * Represent discrete data in tables, diagrams and charts including pie charts, bar charts and line graphs
* Group discrete data and represent grouped data
* Find the mean and range of a set of quantities
* Understand probability on a scale from 0 (impossible) to 1 (certain) and use probabilities to compare the likelihood of events
* Use equally likely outcomes to find the probabilities of simple events and express them as fractions
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