**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 |