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| **LEWIS STREET LOGO NO LINE** | **Year 3**  **Mathematics Skills Sheet** | **NEW CHRIST CHURCH LOGO NO LINE** |
| **Number and Place Value** | | |
| Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. | | |
| Recognise the place value of each digit in a 3-digit number (100s, 10s, 1s). | | |
| Compare and order numbers up to 1,000. | | |
| Identify, represent, and estimate numbers using different representations. | | |
| Read and write numbers up to 1,000 in numerals and in words. | | |
| Solve number problems and practical problems involving these ideas. | | |
| **3NPV-1 - *Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.*** | | |
| **3NPV-2 - *Recognise the place value of each digit in* three*-digit numbers, and compose and decompose* three*-digit numbers using standard and non-standard partitioning.*** | | |
| **3NPV-3 - *Reason about the location of any* three*-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.*** | | |
| **3NPV-4 - *Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.*** | | |
| **Addition and Subtraction** | | |
| Add and subtract numbers mentally, including:   * a three-digit number and 1s * a three-digit number and 10s * a three-digit number and 100s | | |
| Add and subtract numbers with up to 3 digits, using formal written methods of columnar addition and subtraction. | | |
| Estimate the answer to a calculation and use inverse operations to check answers. | | |
| Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. | | |
| **3NF-1 - *Secure fluency in addition and subtraction facts that bridge 10, through continued practice.*** | | |
| **3AS-1 - *Calculate complements to 100, for example: 46 + ? = 100*** | | |
| **3AS-2 - *Add and subtract up to three-digit numbers using columnar methods.*** | | |
| **3AS-3 - *Manipulate the additive relationship:  Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure.  Understand and use the commutative property of addition, and understand the related property for subtraction.*** | | |
| **Multiplication and Division** | | |
| Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. | | |
| 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. | | |
| Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. | | |
| **3NF-2 - *Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.*** | | |
| **3NF-3 - *Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10), for example: 80 + 60 = 140 30 × 4 = 120 140 − 60 = 80 120 ÷ 4 = 30*** | | |
| **3MD-1 - *Apply known multiplication and division facts to solve contextual problems with different structures, including quotitive and partitive division.*** | | |
| **Fractions** | | |
| Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. | | |
| Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. | | |
| Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. | | |
| Recognise and show, using diagrams, equivalent fractions with small denominators. | | |
| Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7 ]. | | |
| Compare and order unit fractions, and fractions with the same denominators. | | |
| Solve problems that involve all of the above. | | |
| **3F-1 - *Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.*** | | |
| **3F-2 - *Find unit fractions of quantities using known division facts (multiplication tables fluency).*** | | |
| **3F-3 - *Reason about the location of any fraction within 1 in the linear number system.*** | | |
| **3F-4 - *Add and subtract fractions with the same denominator, within 1.*** | | |
| **Measurement** | | |
| Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). | | |
| Measure the perimeter of simple 2-D shapes. | | |
| Add and subtract amounts of money to give change, using both £ and p in practical contexts. | | |
| Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. | | |
| Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o’clock, am/pm, morning, afternoon, noon and midnight. | | |
| Know the number of seconds in a minute and the number of days in each month, year and leap year. | | |
| Compare durations of events [for example, to calculate the time taken by particular events or tasks]. | | |
| **Properties of Shape** | | |
| Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. | | |
| Recognise angles as a property of shape or a description of a turn. | | |
| Identify right angles, recognise that 2 right angles make a half-turn, 3 make three-quarters of a turn and 4 a complete turn; identify whether angles are greater than or less than a right angle. | | |
| Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | | |
| **3G-1 - *Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.*** | | |
| **3G-2 - *Draw polygons by joining marked points, and identify parallel and perpendicular sides.*** | | |
| **Statistics** | | |
| Interpret and present data using bar charts, pictograms and tables. | | |
| Solve one-step and two-step questions [for example ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables. | | |