|  |  |  |
| --- | --- | --- |
| **LEWIS STREET LOGO NO LINE** | **Year 4**  **Mathematics Skills Sheet** | **NEW CHRIST CHURCH LOGO NO LINE** |
| **Number and Place Value** | | |
| Count in multiples of 6, 7, 9, 25 and 1,000. | | |
| Find 1,000 more or less than a given number. | | |
| Count backwards through 0 to include negative numbers. | | |
| Recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s). | | |
| Order and compare numbers beyond 1,000. | | |
| Identify, represent and estimate numbers using different representations. | | |
| Round any number to the nearest 10, 100 or 1,000. | | |
| Solve number and practical problems that involve all of the above and with increasingly large positive numbers. | | |
| Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of 0 and place value. | | |
| **4NPV-1 - *Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.*** | | |
| **4NPV-2 - *Recognise the place value of each digit in* four*-digit numbers, and compose and decompose* four*-digit numbers using standard and non-standard partitioning.*** | | |
| **4NPV-3 - *Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.*** | | |
| **4NPV-4 - *Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.*** | | |
| **Addition and Subtraction** | | |
| Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. | | |
| Estimate and use inverse operations to check answers to a calculation. | | |
| Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. | | |
| **Multiplication and Division** | | |
| Recall multiplication and division facts for multiplication tables up to 12 × 12. | | |
| Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers. | | |
| Recognise and use factor pairs and commutativity in mental calculations. | | |
| Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. | | |
| Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects. | | |
| **4NF-1 - *Recall multiplication and division facts up to 12 x 12, and recognise products in multiplication tables as multiples of the corresponding number.*** | | |
| **4NF-2 - *Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, for example: 74 ÷ 9 = 8 r 2  and interpret remainders appropriately according to the context.*** | | |
| **4NF-3 - Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100). For example:** | | |
| **4MD-1 - *Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.*** | | |
| **4MD-2 - *Manipulate multiplication and division equations, and understand and apply the commutative property of multiplication.*** | | |
| **4MD-3 - *Understand and apply the distributive property of multiplication.*** | | |
| **Fractions (including decimals)** | | |
| Recognise and show, using diagrams, families of common equivalent fractions. | | |
| Count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10. | | |
| Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. | | |
| Add and subtract fractions with the same denominator. | | |
| Recognise and write decimal equivalents of any number of tenths or hundreds. | | |
| Recognise and write decimal equivalents to 1/4 , 1/2 , 3/4. | | |
| Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. | | |
| Round decimals with 1 decimal place to the nearest whole number. | | |
| Compare numbers with the same number of decimal places up to 2 decimal places. | | |
| Solve simple measure and money problems involving fractions and decimals to 2 decimal places. | | |
| **4F-1 - *Reason about the location of mixed numbers in the linear number system.*** | | |
| **4F-2 - Convert mixed numbers to improper fractions and vice versa** | | |
| **4F–3 - Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers** | | |
| **Measurement** | | |
| Convert between different units of measure [for example, kilometre to metre; hour to minute]. | | |
| Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. | | |
| Find the area of rectilinear shapes by counting squares. | | |
| Estimate, compare and calculate different measures, including money in pounds and pence. | | |
| Read, write and convert time between analogue and digital 12- and 24-hour clocks. | | |
| Solve problems involving converting from hours to minutes, minutes to seconds, years to months, weeks to days. | | |
| **Properties of Shape** | | |
| Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. | | |
| Identify acute and obtuse angles and compare and order angles up to 2 right angles by size. | | |
| Identify lines of symmetry in 2-D shapes presented in different orientations. | | |
| Complete a simple symmetric figure with respect to a specific line of symmetry. | | |
| **4G-1 - *Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.*** | | |
| **4G-2 - *Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.*** | | |
| **4G-3 - *Identify line symmetry in 2D shapes presented in different orientations. Reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.*** | | |
| **Position and Direction** | | |
| Describe positions on a 2-D grid as coordinates in the first quadrant. | | |
| Describe movements between positions as translations of a given unit to the left/right and up/down. | | |
| Plot specified points and draw sides to complete a given polygon. | | |
| **Statistics** | | |
| Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. | | |
| Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. | | |