**Lantern Lane Primary**

**School**



**New Maths Curriculum**

**Year 4**

**-Objectives & Methods.**

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During year 4, your child will work on the following objectives:

* Count backwards through zero to include negative numbers.
* Recognise the place value of each digit in a four-digit number.
* Add and subtract numbers up to 4 digits using a formal written method.
* Round any number to the nearest 10, 100 or 1000.
* 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 three 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.
* Use the formal written method for short division with exact answers when dividing by a one-digit number e.g. 456 ÷ 3.
* Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
* Recognise and write decimal equivalents to ¼, ½ and ¾.
* 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 one decimal place to the nearest whole number.
* Compare numbers with the same number of decimal places up to two decimal places.
* Convert between different units of measure; estimate, compare and calculate different measures, including money in pounds and pence.
* Find the area of rectilinear shapes by counting squares.
* Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
* Compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes.
* Complete a simple symmetric figure with respect to a specific line of symmetry. 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.

**Calculation Strategies – Year 4**

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| **Addition:**   * The use of the column method for addition will continue with the children working with whole numbers up to 4 digits including in context. |
| **Subtraction:**  Children will be introduced to and will practise the compact method of column subtraction, beginning with calculations where no decomposition is required and then working with decomposition:  The use of a number line will still be encouraged – to find small differences; where one of the numbers is a multiple of 10, 100, 1000 or when the children are working with money and finding change £5 - £3.35 = £1.65:  +5p +60p +£1  **£3.35 £3.40 £4 £5** |
| **Multiplication:**   * Children will build their confidence using the expanded column method for short multiplication using a larger range of two digit numbers which incorporate the full range of times table facts which are expected at this stage. They will then move to multiplying 3 digit numbers by 1 digit numbers:   **127x6=(100x6)+(20x6)+(7x6)=600+120+42=762**     * Doubling of increasingly large numbers will be done using the partitioning and recombining method:   **Double 2458** 2458  2000 400 50 8  1000 200 25 4  1229 |
| **Division:**   * The children will consolidate their understanding of division through the process of ‘chunking’ on a number line before developing the formal method of short division:   1 x 6 = 6  2 x 6 = 12  10 x 6 = 60  5 x 6 = 30    **96 ÷ 6 = 16**   * Formal method of short division – without a remainder within calculation.  1. ÷ 3 = 32   32  3 96   * Formal method of short division – with remainders within the calculation.     When the children are confident with the method, the dividend can be extended to 3 digit numbers, e.g 744 ÷ 6 = 124 |
| **Calculating with fractions:**   * Find fractions of amounts where the numerator is greater than 0.   of 45  45 ÷ 5 = 9 3 x 9 = 27   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 9 | 9 | 9 | 9 | 9 |  * Addition and subtraction of fractions with the same denominator leading to more complex problems. |