**Cambois Primary School**

**Long Term Planning – Maths year 3 and 4**

**Autumn Term 1st Half**

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|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | **Addition and Subtraction**  **NC**  y3 – add and subtract using formal methods up to 3 digits.  y4 add and subtract with 4 digits formal methods.  y4 y3 – inverse and estimate.  **MMS**  Copy and calculate vertical + and – with tricky unit columns. | **2d shapes - position**  **NC**  y3 – draw 2d shapes  Recognise and describe shapes and properties.  **MMS**   * Name 2d shapes. * Recognise name and use clockwise and anti-clockwise. | Bar charts & time  **NC**  Y3 – tell and write the time on analogue clock.  Y3 Estimate and read time  Y3 – compare duration of events.  y4 – read write and convert time between 12 24 hours clock.  y4 Solve problems between conversions of time.  **MMS**  Copy grids and bar charts  read analogue  Write and say times in digital form.  Time difference. | **Fractions of quantities**  **NC**  y3 – find fractions using discrete set of objects.  yr. 4 –solve problems involving quantities of number.  **MMS**  Fractions of a quantity. | **NC**  y3 – solve number problems.  y4 – solve number problems involving increasingly large positive numbers.  **MMS**   * Calculate distance suing written method for + and - |
| **MMS link/ Block plans 1st term** | Block 1 – MMS 3  Rather than just copying – teach the skill of carrying and exchange. Yr 3 will have done but not secure. | Block 1 MMS 3– geometry | Block 1 – MMS 3Data and Measure | Block 1 MMS 3 Arithmetic 2  Make sure not just cups. Do it to real quantities and us other apparatus for less able. | Block 1 MMS 3 reasoning |
| **Mental focus/ objectives** | Read, write tens, hundred, thousands and up. Place value – regularly and daily. (23,566 – What is this number? What is the value of?)  y3 – count from 0 in multiples of 4,8, 50 and 100  Find 10 and 100 more and less.  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers. | | | | |

**Cambois Primary School Long Term Planning – Maths**

**Autumn Term 2nd Half – year 3 & 4**

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|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | **Mental arithmetic**  **NC**  Y3 – add and subtract mentally. | **Co-ordinates**  **NC**   * Y4 describe positions in a one quadrant, * Y4 plot specified points and draw sides to complete a given polygon.   **MMS**   * Plot points * Use co-ordinates and draw polygons on grids. | Perimeter  **NC**  y3 – measure perimeter of simple 2d shapes.  y4 – measure and calculate perimeter of shapes. | **Fraction word problems**  **NC**  y3 – solve fraction problems  y4 solve real life problems with fractions.  **MMS**  solve word problems with fractions of quantities | **Products and reasoning**  **NC**  y4 – use the distributive law.  **MMS**   * Calculate products of 2 multiples of 10. 3 x 4 = 12   30 x 4 =  300 x 4 = |
| **MMS link/ Block plans 1st term** | Own lessons – no MMs lessons.   * Use facts and adjust. 23 + 8 = 23 + 7 + 1   34 = 30 + 4, 29 + 5  \*Estimate the answer before calculating.  \* Understanding the inverse. | Block 2 MMS 3  Geometry | Own planned lessons – make sure compound shapes for MA. Reasoning and explaining. | Block 2 - MMS 3 Arithmetic | Block 2 MMS 4 reasoning  Make sure you teach missing values and the reasoning through this. 3 x ? = 12 how do you know? |
| **Mental focus/ objectives** | Rounding to the nearest 10, 100 and 1000 (y4)  y3 – count from 0 in multiples of 4,8, 50 and 100  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers. | | | | |

**Cambois Primary School Long Term Planning – Maths**

**Spring Term 1st Half – year 3 and 4**

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|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | **Addition and Subtraction**  **NC**  y3 - write and calculate mathematical statements  y3 y4 – write and calculate fractions with the same denominator.  **MMS**   * Write maths stories for all four operations including 5ths and 7ths. * Vertical addition and subtraction. | **Angles**  **NC**  y4 – identify acute and obtuse angles and compare angles for size.  **MMS**   * Draw and measure acute angles. Use protractor * Say whether an angle is obtuse, reflex or acute. | Area  **NC**  y4 – calculate area of rectilinear shapes.  **MMS**   * Calculate area   Calculate volume of a picture | **Multiplication getting ready for written**  **NC**  y3 4 formal written layout for x.  **MMS**  Multiply 2 digit whole number by a one digit.  Round numbers. | Multiplication  **NC**  y3 4 formal written layout for x.  **MMS**  Multiply 2 digit whole number by a one digit.  Round numbers. |
| **MMS link/ Block plans 1st term** | Block 3 – MMS 3 Arithmetic | Block 2 MMS 4  Geometry | Block 2 – MMS 4 Data and Measure | Block 3 - MMS 3 Arithmetic 2  Rather than teach in a grid get them ready for written x.  22 x 8 =  20 x 8  2 x 8  and simple written using vertical column. | Block 3 MMS 3 reasoning |
| **Mental focus/ objectives** | Rounding to the nearest 10, 100 and 1000 (y4)  y3 – count from 0 in multiples of 4,8, 50 and 100  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers.  y3 and 4compare and order numbers up to and beyond 1000. | | | | |

**Cambois Primary School Long Term Planning – Maths**

**Spring Term 2nd Half – year 3 and 4**

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| --- | --- | --- | --- | --- | --- |
|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | **Short Division**  **NC**  Begin to use formal methods for division using X facts they know. | **SYMMETRY and lines**  **NC**  y4 – complete simply symmetry and specific lines of symmetry.  Identify lines of symmetry in 2d shapes.  y3 – identify horizontal and vertical, pairs of perpendicular and parallel lines.  **MMS** | **Length and Mass**  **NC**  y3 – measure and compare lengths, mass and volume  Y4 convert between units of measure.  **MMS**   * Decide what units to use measurements. | **Word problems with Division**  **NC**  y3 y4 – solve problems involving division  **MMS**  solve word problems including remainders. | **Number puzzles**  **NC**  solve a range of number puzzles and problems. |
| **MMS link/ Block plans 1st term** | No MMS lessons – own lessons. Short division. Begin to prepare them for larger numbers. | Use this as a guide and adapt accordingly. Block 4 MMS 4  Geometry.  Block 4 MMS 3 – and focus on the parallel and perpendicular lines. | Block 4 MMS 3 | Block 4 MMS 3 | own lessons based on the fluency and mastery work throughout school. |
| **Mental focus/ objectives** | y3 – count from 0 in multiples of 4,8, 50 and 100  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers.  y3 and 4compare and order numbers up to and beyond 1000. | | | | |

**Cambois Primary School Long Term Planning – Maths**

**Summer Term 1st Half – Year 3 and 4**

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| --- | --- | --- | --- | --- | --- |
|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | X and divide by 10 and 100.  **NC**  Understand place value and number system to x by 10 and 100. | 3d shapes and properties.  **NC**  y3 – recognise shapes in different orientation and describe them. | **Fractions equivalence and ratio.**  **NC**   * Recognise and show diagrams equivalent fractions Y3 * Y4recongise common equivalent fractions.   **MMS**   * Equivalent fractions and drawing ratio sticks. | **Decimal fractions and square roots**  **NC**  y4 – recognise and write decimal equivalents of any number of tenths and hundredths.  **MMS**  Square roots | **Fractions**  **NC**  recognise and show families of common fractions Y4  **MMS**   * Complements * Fractions shaded and comparing. |
| **MMS link/ Block plans 1st term** | own lessons embedding this key skill and methods. | Own lessons | Block 5 – MMS 2 | Block 5 – MMS 3 arithmetic 2. | Block 5 MMS 3 Reasoning |
| **Mental focus/ objectives** | **NC**  y3 – count from 0 in multiples of 4,8, 50 and 100  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers.  y3 and 4compare and order numbers up to and beyond 1000.  round decimals to the whole number. | | | | |

**Cambois Primary School Long Term Planning – Maths**

**Summer Term 2nd half – year 3 and 4**

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| --- | --- | --- | --- | --- | --- |
|  | **Arithmetic** | **Geometry** | **Data and Measure** | **Arithmetic 2** | **Reasoning** |
| **Main learning objectives** | **Maths stories with all four operations including negatives.**  **NC**  add subtract , x and divide mentally (y3 and 4)  **MMS**  all four operations maths stories | **Measure angles with a protractor**  **NC**  identify and compare angles Y4  **MMS**   * Measure angles with a protractor | Bar Charts  **NC**  .  y3 – plot and present data in bar charts. | **Steps to solve a word problem and what operation**  **NC**  solve problems with all four operations Y3 and Y4.  **MMS**  solve steps to a word problem | **Solving problems odd and even**  **NC**  **solve range of problems and puzzles.**  **MMS**   * Odd and even numbers * Sequences * Patterns and relationships. |
| **MMS link/ Block plans 1st term** | BLOCK 6 – MMS 3 | Block 6 MMS 4 | Own lessons based upon  topic work. Interpreting and drawing. Frequency tables and then plotting. | Block 6 MMs 3 Arithmetic | Block 6 MMS 3 Reasoning |
| **Mental focus/ objectives** | **NC**  y3 – count from 0 in multiples of 4,8, 50 and 100  y4 – count multiples of 6, 7, 9 25.  y4 count backwards through 0 inducing negative numbers.  Y3 and 4compare and order numbers up to and beyond 1000.  read and write numbers in words.  compare numbers with the same number of decimal places. | | | | |

N.B – to be covered the following year.

Expression and terms

Algebra

Factor pairs

Pictograms questioning about data.