**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 shapesRecognise 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 timeY3 – 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 chartsread analogueWrite 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 3Rather 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 2Make 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 100Find 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 problemsy4 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 3Geometry  | Own planned lessons – make sure compound shapes for MA. Reasoning and explaining. | Block 2 - MMS 3 Arithmetic | Block 2 MMS 4 reasoningMake 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 100y4 – 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 statementsy3 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 4Geometry  | Block 2 – MMS 4 Data and Measure | Block 3 - MMS 3 Arithmetic 2Rather than teach in a grid get them ready for written x.22 x 8 =20 x 82 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 100y4 – 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 volumeY4 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 4Geometry. 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 100y4 – 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.
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| **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 100y4 – 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 100y4 – 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.