

## **Griffe Field Primary School**

## Year 4 - Maths non - negotiables

The non – negotiables are generally the essential elements and basics of maths that are crucial for children's mathematical learning and progression.

Knowledge of number facts and fluency in them are a vital part of maths for each year group. Rapid recall of number facts can provide the basic knowledge required for most aspects of primary mathematics, including mental and written calculations, fractions, decimals, percentages and problem solving. Knowing and using number facts can help support children's understanding and progression in Maths.

I can	Maths non - negotiables	Date
	I can read, write and order numbers to 10,000 and know the value of each digit	
	I can calculate the value of each digit in a 4-digit number by partitioning in different ways.	
lue	I can order numbers up to 5000 using =, > and <.	
V۵	I can calculate 1000 more or less than a number.	
စ္ပ	I can read Roman numerals to 20.	
٥la	I can count up and down in tenths and hundredths	
H PI	I can count in multiples of 6s, 7s, 9s, 25s and 1000s	
an	I can round numbers (up to 3 digit ) to the nearest 10,100,1000	
5	I can compare and order numbers with up to 1 decimal place	
qu	I can round decimals with 1 dp to the nearest whole number	
Ν	I can calculate the value of the digits in numbers with units, tenths and hundredths.	
	I can read Roman numerals 1-20, multiples of 10	
	I can count forwards and backwards through zero to include negative numbers	

I can	Maths non - negotiables	Date
+ - X +	I know by heart addition and subtraction facts up to 1000	
	I can mentally add and subtract a 4-digit number and ones	
	E.g. 5457 + 9 (5459 + 10 minus 1), T can mentally add and subtract a 4-diait number and tens e.a. 4657 + 20	
	I can mentally add and subtract a 4-digit number and hundreds	
	I can add two 4 digit numbers using column method with 'carrying' using dienes apparatus e.g 3294 + 5607	
	I can subtract two 4 digit numbers using column method with exchanging using dienes apparatus.	
	I can use efficient written methods to multiply a three digit number by a one digit number	
	I can use mental strategies to multiply a three digit hundreds number with a one digit number e.g. 300 $ imes$ 5	

I can use my knowledge of doubling to make links between 3,6,12 times table	
I can multiply and divide by 0 and 1	
I can answer quickly times table and division facts for the 2, 4, 8, 3, 6, 12, 5, 10,	
7, 9, 11 multiplication tables.	
I can recognise factor pairs	
I can multiply and divide two digit numbers by 10 and 100	
I can divide (up to 4 digit number ) by 10, 100	
I can multiply and divide decimal numbers by 10, 100	
I can divide a 2-digit number by 2, 3, 4, 5, 6, 7 and 8 using short division method	
including remainders	
I can derive related multiplication and division facts e.g. $3x2 = 6$ , 6 divided by $2 = 3$	
30 x 2 = 60, 60 divided by 2 = 30	
I can solve simple two step word problems in context, deciding which of the four	
operations to use.	

I can	Maths non - negotiables	Date
	I can count up and down in hundredths	
	I can make hundredths when dividing an object by a hundred and dividing tenths	
	by ten.	
	I can recognise and find equivalent fractions 2/5 = 6/15	
	I can simplify fractions	
ctions	I can calculate quantities, including non-unit fractions where the answer is a	
	whole number.	
	I can identify pairs of fractions that equal a whole	
ra	I can calculate the equivalent decimal of any tenths and hundredths number.	
L.	I can solve problems including addition and subtraction of fractions	
	I can solve problems using decimal numbers up to 2 decimal places involving	
	money, time	
	I can add and subtract fractions with the same denominator	
	I can recognise the equivalent fraction to a decimal, $\frac{1}{2}$ = 0.5, $\frac{1}{4}$ = 0.25, 1/10 = 0.1,	
	<sup>3</sup> / <sub>4</sub> = 0.75, 1/5 = 0.2	

I can	Maths non - negotiables	Date
Measures	I can measure, compare, add and subtract lengths mm, cm, m, km accurately	
	I can measure accurately in mms and cms	
	I can measure, compare, add and subtract mass g, kg, tonne accurately	
	I can measure, compare, add and subtract capacity cl,l, ml accurately	
	I can convert mm to cm, cm to m, m to km and vice versa	
	I can convert grams to kilograms, ml to litres, seconds to minutes, minutes to	
	hours and vice versa	
	I can find the area of rectilinear shapes by counting squares	
	I can measure and calculate the perimeter of a rectilinear shape (including	

squares) in centimetres and metres	
I can add amounts up to £100.00 and give change.	
I can order a variety of times in different units e.g. 2 hours, 56 mins, 80 secs	
I can order times of a race using a mixture of decimal numbers (1dp and 2 dp)	
I know the number of seconds in a hour, minutes in 2 or more hours, days in a	
fortnight, days in different months	
I know the difference between a decade, a century, a millennium	
I can tell the time using Roman numerals	
I can read both analogue and digital time on a 12 hour clock to nearest minute.	
I can tell the time using 12 and 24-hour clocks and change one to the other.	
I can solve problems reading a bus/ train timetable	
I can calculate intervals of time using a T.V or radio guide	
I know the difference between a,m, p.m, noon, midday and mid night	

I can	Maths non - negotiables	Date
Shape	I can draw, name and identify the properties of 2-D shapes using terms such as lines of symmetry, angles, parallel and perpendicular, regular, irregular, polygon.	
	I can name and identify the properties of 3-D shapes, cube, cuboid, cylinder, prism, pyramid, sphere, square based pyramid, rectangular based pyramid in different orientations	
	I can classify different types of triangles: equilateral, right angle, scalene, isosceles	
	I can identify lines of symmetry in 2-D shapes drawn in different orientations.	
	I can complete a simple symmetrical figure.	
	I can describe positions on a 2-D grid as co-ordinates in the first quadrant.	
	I can plot specified points and draw sides to complete a given polygon	
	I can describe translations to the left / right and up / down.	
	I know there are 360 degrees in a full turn, 270 degrees in $rac{3}{4}$ of a turn, 180	
	degrees in half a turn (same as a straight line angle) and 90 degrees in $rac{1}{4}$ of a	
	turn	
	I can identify acute and obtuse angles and compare and order angles by size	
	I can draw and measure straight lines using a ruler accurately to the nearest cm and mm	