Kirkby-in-Malhamdale Primary School Mental Maths Progression

	Mental Maths is an integral part of the whole maths curriculum, at Kirkby Malham we teach mental maths as part of the daily lesson but also as a discrete part of maths too. We regularly check children's knowledge of mental maths facts for instant recall.						
	Number Bonds (+ and – facts)	**Doubling and Halving**	**Times Tables (x and division facts)**	**Counting**	**Partitioning / place value**	**Adding**	**Other**
N				Say numbers in order from 0 - 10			
R				Recognise and say numbers to 20 and order Count on and back in 1s from 0 to 20			
Y1	Recall number bonds and addition and subtraction facts to 20 Given a number, identify one more and one less	Double and halve to 20 (double 10 and half of 20)	Begin to count in multiples of 2,5 and 10	Count on and back in 1s from 0 to 100 from any given number		Add and subtract within 20	Time to the hour and half past the hour and days/ weeks, months
Y2	Recall and use addition and subtraction facts to 20	Double and halve to 50 (double	Recall and use multiplication and division facts for the 2,5 and 10 multiplication	Count in multiples of 2, 3 and 5	Recognise the place value of each digit in a two digit number	Add and subtract 2 digit number by one digit by counting	Compare and order numbers from 0 – 100

	Derive and use related facts up to 100 E.g. 3+7 = 10 so 30 add 70 - 100	25 and half of 50) linked to x2		Count on and back in 10s from any given number Compensating for 8 or 9 – adding 10 and subtracting one or two	Flexible partition 2 digit numbers in different ways e.g. 23 = 20 + 3 = 10 + 13	back and counting on Add three single digit numbers	Recognise odd and even numbers Recognise Time – quarter past and to and half past the hour
Y3	Recall addition and subtraction bonds to 50 (to support money problems) Addition and subtraction of multiples of 10, 100 and 1000	Double and halve to 100	Recall and use multiplication and division facts for 3,4 and 8 multiplication tables Use commutative law and associative laws to support mental methods X and divide by 10	Count in multiples of 3, 4, 8, 50 and 100 from 0 Given a number, identify 10 or 100 more or less Compensating for 8 or 9 – adding 10 and subtracting one or two	Recognise the place value of each digit in a three digit number Partition 3 digit numbers in different ways	Add and subtract 3 digit number by ones, tens and 100s	Compare and order numbers to 1000 Understand inverse operations Recognise time
Y4	Recall addition and subtraction bonds 100 / 500 (to support real life money problems) Addition and subtraction of multiples of 10, 100 and 1000	Doubles and halves to 1000	Recall and use multiplication and division facts for multiplication tables up to 12x12 X and divide one and two digit numbers by 10 and 100 Know multiplication facts (4 x 6 = 24, 40 x 6 = 240, 400 x 6	Count in multiples of 6, 7, 9, 11, 12, 25, and 1000 Given a number, identify, 10, 100 and 1000 more or less Count backwards through zero to	Recognise the place value of each digit in a four digit number	Add and subtract 4 digit number by ones, tens, hundreds and thousands	Compare and order numbers beyond 1000 Understand inverse operations Recognise time

			= 2400, 2400 / 6 = 400, 2400 / 60 = 4)	include negative numbers			
Y5 **Y6**	Addition and subtraction facts to 1 with two decimal places Addition and subtraction of multiples of 10, 100 and 1000 Square numbers up to 12 , cube numbers 2,3, 4 and 5 prime numbers	Doubles and halves for any given number	Multiply and divide numbers mentally by drawing on known facts X and divide whole numbers and decimals by 10, 100 and 1000 Perform mental calculations including with mixed operations and large numbers Use multiplication and division facts for solving percentage, decimal and fraction calculations	Count forwards and backwards in steps of 10, 100, 1000 for any given number up to 1 million Count forwards and backwards with positive and negative whole numbers, including through zero	Recognise the value of each digit in 6 digit number up. Identify the value of each digit to 2 decimal places Identify the value of each digit to 3 decimal places	Add and subtract numbers mentally with increasingly larger numbers.	Compare and order numbers beyond 1000 Understand inverse operations Recognise time on 24hr clock