

MENTAL MATHS PROGRESSSION

YEAR GROUP	Number Bonds ( + and – facts)	Doubling and Halving	Times Tables (x and division facts)	Counting	Partitioning / place value	Adding	Other
Nursery				Say numbers in order from 0 - 10			
Reception				Recognise and say numbers beyond 10  Count on and back in 1s from 0 to 20			
Year 1	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
Year 2	Recall and use addition and subtraction facts to 20  Derive and use related facts up to 100 E.g. $3+7 = 10$ so 30 add 70 - 100	Double and halve to 50 (double 25 and half of 50) linked to x2	Recall and use multiplication and division facts for the 2,5 and 10 multiplication	Count in multiples of 2, 3 and 5  Count on and back in 10s from any given number	Recognise the place value of each digit in a two digit number  Flexible partition 2 digit numbers in different ways e.g. $23 = 20 + 3$ $= 10 + 13$	Add and subtract 2 digit number by one digit by counting back and counting on  Add three single digit numbers	Compare and order numbers from 0 – 100  Recognise odd and even numbers  Recognise Time – quarter past and to and half past the hour

MENTAL MATHS PROGRESSION

Year 3	<p>Recall addition and subtraction bonds to 50 (to support money problems)</p> <p>Addition and subtraction of multiples of 10, 100 and 1000</p>	<p>Double and halve to 100</p>	<p>Recall and use multiplication and division facts for 3,4 and 8 multiplication tables</p> <p>Use commutative law and associative laws to support mental methods</p> <p>X and divide by 10</p>	<p>Count in multiples of 3, 4, 8, 50 and 100 from 0</p> <p>Given a number, identify 10 or 100 more or less</p> <p>Compensating for 8 or 9 – adding 10 and subtracting one or two</p>	<p>Recognise the place value of each digit in a three digit number</p> <p>Partition 3 digit numbers in different ways</p>	<p>Add and subtract 3 digit number by ones, tens and 100s</p>	<p>Compare and order numbers to 1000</p> <p>Understand inverse operations</p> <p>Recognise time</p>
Year 4	<p>Recall addition and subtraction bonds 100 / 500 (to support real life money problems)</p> <p>Addition and subtraction of multiples of 10, 100 and 1000</p>	<p>Doubles and halves to 1000</p>	<p>Recall and use multiplication and division facts for multiplication tables up to 12x12</p> <p>X and divide one and two digit numbers by 10 and 100</p> <p>Know multiplication facts (<math>4 \times 6 = 24</math>, <math>40 \times 6 = 240</math>, <math>400 \times 6 = 2400</math>, <math>2400 / 6 = 400</math>, <math>2400 / 60 = 4</math>)</p>	<p>Count in multiples of 6, 7, 9, 11, 12, 25, and 1000</p> <p>Given a number, identify, 10, 100 and 1000 more or less</p> <p>Count backwards through zero to include negative numbers</p>	<p>Recognise the place value of each digit in a four digit number</p>	<p>Add and subtract 4 digit number by ones, tens, hundreds and thousands</p>	<p>Compare and order numbers beyond 1000</p> <p>Understand inverse operations</p> <p>Recognise time</p>
Year 5 Year 6	<p>Addition and subtraction facts to 1 with two decimal places</p> <p>Addition and subtraction of multiples of 10, 100 and 1000</p> <p>Square numbers up to 12, cube numbers 2,3, 4 and 5 prime numbers</p>	<p>Doubles and halves for any given number</p>	<p>Multiply and divide numbers mentally by drawing on known facts</p> <p>X and divide whole numbers and decimals by 10, 100 and 1000</p> <p>Perform mental calculations including with mixed operations and large numbers</p> <p>Use multiplication and division facts for solving percentage, decimal and fraction calculations</p>	<p>Count forwards and backwards in steps of 10, 100, 1000 for any given number up to 1 million</p> <p>Count forwards and backwards with positive and negative whole numbers, including through zero</p>	<p>Recognise the value of each digit in 6 digit number up.</p> <p>Identify the value of each digit to 2 decimal places</p> <p>Identify the value of each digit to 3 decimal places</p>	<p>Add and subtract numbers mentally with increasingly larger numbers.</p>	<p>Compare and order numbers beyond 1000</p> <p>Understand inverse operations</p> <p>Recognise time on 24hr clock</p>