

MENTAL MATHS PROGRESSION

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

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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>	Double and halve to 100	<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>	Add and subtract 3 digit number by ones, tens and 100s	<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>	Doubles and halves to 1000	<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 ($4 \times 6 = 24$, $40 \times 6 = 240$, $400 \times 6 = 2400$, $2400 / 6 = 400$, $2400 / 60 = 4$)</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>	Recognise the place value of each digit in a four digit number	Add and subtract 4 digit number by ones, tens, hundreds and thousands	<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>	Doubles and halves for any given number	<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>	Add and subtract numbers mentally with increasingly larger numbers.	<p>Compare and order numbers beyond 1000</p> <p>Understand inverse operations</p> <p>Recognise time on 24hr clock</p>