

YEAR GROUP	RECALL TO PRACTISE	MENTAL STRATEGIES	CALCULATIONS TO CARRY OUT MENTALLY
ONE	<p>*develop fluency in addition and subtraction facts within ten</p> <ul style="list-style-type: none"> * All pairs of numbers with a total to 10 e.g. 3+7 * Addition and subtraction facts for all numbers to any number to 10. * Addition doubles of all numbers to at least 10+10 * Halving facts of even numbers to 20. * One and two more/ less than any number up to 100. * 10 more/less of multiples of 10 * 5 more/ less of multiples of 5 * count forwards and backwards in multiples of 2,5,10 up to 10 multiples beginning with any multiple and count forwards and backwards through the odd numbers 	<ul style="list-style-type: none"> *Count on or back in ones, twos, fives and tens * Begin to bridge through 10, and later 20, when adding a single-digit number * Use known number facts and place value to add or subtract pairs of single-digit numbers *Identify near doubles using doubles already know 	<p>Add or subtract a single digit to or from a single digit , without crossing 10 e.g. 4 + 5 , 8-3</p> <ul style="list-style-type: none"> * Add or subtract a single digit to or from 10 * Add or subtract a single digit to or from a 'teens' number, without crossing 20 or 10 e.g. 13 + 5, 17 – 3 * Double of all numbers to 10 e.g. 8+8, double
TWO	<p>*secure fluency in addition and subtraction facts within ten through continued practice</p> <ul style="list-style-type: none"> * All pairs of numbers with a total of 20 e.g. 13 +7 *All pairs of multiples of 10 with a total of 100 e.g. 30+70 * Multiplication facts for the 2 and 10 times tables and corresponding division facts 	<ul style="list-style-type: none"> * count on or back in tens or ones * find a small difference by counting up from the smaller to the larger number * add three small numbers by putting the largest number first and/or finding a pair totalling 10 * partition additions into tens and units then recombine bridge through 10 or 20 * add or subtract 9, 19, 11 or 21 by rounding and compensating 	<p>add or subtract any single-digit to or from any two-digit number, without crossing the tens boundary, e.g. 62 + 4, 38 – 7 / add or subtract any single-digit to or from a multiple of 10, e.g. 60 + 5, 80 – 7 /add or subtract any 'teens' number to any two-digit number, without crossing the tens boundary, e.g. 23 + 14, 48 – 13</p>

	<ul style="list-style-type: none"> *Double of all numbers to ten and the corresponding halves *Know 10x, 2x, 5x tables *Count forwards and backwards in 3's to 36 * Know inverse \div for 10, 2 and 5 	<ul style="list-style-type: none"> * identify near doubles * use knowledge of number facts and place value to multiply or divide by 2, 5 or 10 * use doubles and halves and halving as the inverse of doubling 	<ul style="list-style-type: none"> * add or subtract a multiple of 10 to or from any two-digit number, without crossing 100, e.g. $47 + 30$, $82 - 50$ *subtract any two-digit number from any two-digit number when the difference is less than 10, e.g. $78 - 71$ or $52 - 48$ * doubles of all numbers to at least 15, e.g. double 14 / double any multiple of 5 up to 50, e.g. double 35 / halve any multiple of 10 up to 100, e.g. halve 50
THREE	<p><i>*secure fluency in addition and subtraction facts that bridge 10 through continued practice</i></p> <ul style="list-style-type: none"> * addition and subtraction facts for each number to 20, e.g. $13 + 4$ * sums and differences of multiples of 10, e.g. $70 + 20$ or $80 - 30$ * number pairs that total 100, e.g. $46 + 54$ <p><i>*recall multiplication facts and corresponding division facts in the 10 5 2 4 and 8 multiplication tables and recognise products in these multiplication tables as multiples of the corresponding number</i></p>	<ul style="list-style-type: none"> *add three or four small numbers by putting the largest number first and/or by finding pairs totalling 9, 10 or 11 * partition into tens and units then recombine *say or write a subtraction statement corresponding to a given addition statement * to multiply a number by 10/100, shift its digits one/two places to the left *use doubling or halving *say or write a division statement corresponding to a given multiplication statement <p><i>*apply place value knowledge to known additive and multiplicative number facts (scaling facts by ten)</i></p>	<ul style="list-style-type: none"> * add or subtract any single-digit to any two-digit number, including crossing the tens boundary, e.g. $67 + 5$, $82 - 7$ * find what must be added to/subtracted from any two-digit number to make the next higher/lower multiple of 10. e.g. $64 + ? = 70$, $56 - ? = 50$ * subtract any three-digit number from any three-digit number when the difference is less than 10, e.g. $458 - 451$, or $603 - 597$ * find what must be added to/subtracted from any three-digit number to make the next higher/lower multiple of 10, e.g. $647 + ? = 650$, $246 - ? = 240$ *multiply single-digit numbers by 10 or 100, e.g. $6 \times 100 \square$ divide any multiple of 10 by 10, e.g. $60 \div 10$, and any multiple of 100 by 100, e.g. $700 \div 100$

FOUR	<p>*recall multiplication and division facts up to 12 x 12 and recognise products in multiplication tables as multiples of the corresponding number</p>	<p>*use knowledge of number facts and place value to add or subtract any pair of two-digit numbers *add or subtract 9, 19, 29, 11, 21 or 31 by rounding and compensating * add or subtract the nearest multiple of 10 then adjust *double any two-digit number by doubling tens first * use known number facts and place value to multiply or divide, including multiplying and dividing by 10 and then 100 * partition to carry out multiplication</p> <p>*solve division problems with 2 digit dividends and one digit divisors that involve remainders and interpret remainders appropriately according to the context</p> <p>*apply place value knowledge to known additive and multiplicative number facts (scaling facts by 100)</p>	<p>* find out what must be added to/subtracted from any two- or three-digit number to make the next higher/lower multiple of 100, e.g. $374 + ? = 400$, $826 - ? = 800$ * subtract any four-digit number from any four-digit number when the difference is small, e.g. $3641 - 3628$, $6002 - 5991$ * double any whole number from 1 to 50, e.g. double 36, and find all the corresponding halves, e.g. $96 \div 2$ * double any multiple of 10 to 500, e.g. 380×2, and find all the corresponding halves, e.g. $760 \div 2$, $130 \div 2$ *double any multiple of 5 to 100, e.g. 65×2 *multiply any two-digit number by 10, e.g. 26×10 /divide a multiple of 100 by 10, e.g. $600 \div 10$ /multiply any two-digit multiple of 10 by any single-digit number</p>
FIVE	<p>* secure fluency in multiplication table facts up to 12 x 12 and corresponding division facts through continued practice *sums and differences of decimals to 1dp/ doubles and halves of decimals, e.g. half of 5.6</p>	<p>*count up through the next multiple of 10, 100 or 1000 *partition into hundreds, tens and units, adding the most significant digit first * use known number facts and place value to add or subtract pairs of three-digit multiples of 10 and two-digit numbers with one decimal place * add or subtract the nearest multiple of 10 or 100 then adjust *identify near doubles</p>	<p>add or subtract any pair of three-digit multiples of 10, e.g. $570 + 250$, $620 - 380$ * find what must be added to a decimal fraction with units and tenths to make the next higher whole number, e.g. $4.3 + ? = 5$ *add or subtract any pair of decimal fractions each with units and tenths, or</p>

		<ul style="list-style-type: none"> * add several numbers * use factors * partition to carry out multiplication <p>use closely related facts to carry out multiplication and division</p> <ul style="list-style-type: none"> *use knowledge of number facts and place value to multiply or divide *apply place value knowledge to known additive and multiplicative number facts (scaling facts by 100) 	<p>each with tenths and hundredths, e.g. $5.7 + 2.5$, $0.63 - 0.48$</p> <ul style="list-style-type: none"> * subtract a four-digit number just less than a multiple of 1000 from a four-digit number just more than a multiple of 1000, e.g. 5001-1997 * multiply any two- or three-digit number by 10 or 100, e.g. 79×100, 363×100 / divide a multiple of 100 by 10 or 100, e.g. $4000 \div 10$, $3600 \div 100$ /multiply any two-digit multiple of 10 by a single-digit, e.g. 60×7, 90×6 * double any whole number from 1 to 100, multiples of 10 to 1000, and find corresponding halves * find 50%, 25%, 10% of small whole numbers or quantities by knowing fraction equivalent and dividing by denominator, e.g. 25% or £8
SIX	<p>multiplication and division facts involving decimals, e.g. 0.8×7 and $4.8 \div 6$</p> <ul style="list-style-type: none"> * squares of numbers to 12 x 12 and the corresponding squares of multiples of 10 	<p>consolidate all strategies from previous years:</p> <ul style="list-style-type: none"> * use knowledge of number facts and place value to add or subtract pairs of three-digit multiples of 10 and two-digit numbers with one decimal place * add or subtract the nearest multiple of 10, 100 or 1000, then adjust *continue to use the relationship between addition and subtraction *use factors * partition to carry out multiplication * use doubling and halving *use closely related facts to carry out multiplication and division 	<p>multiply any two-digit number by a single-digit, e.g. 34×6 (by partitioning and using times table knowledge)</p> <ul style="list-style-type: none"> *multiply any two-digit number by 50 or 25, e.g. 23×50, 47×25 (by \times by 100 then adjusting) * multiply or divide any whole number by 10 or 100, giving any remainder as a decimal, e.g. $47 \div 10 = 4.7$, $1763 \div 100 = 17.63$ *find squares of multiples of 10 to 100 * find any multiple of 10% of a whole number or quantity, e.g. 70% of £20, 50% of 5kg, 20% of 2 metres (by

		<ul style="list-style-type: none">* use the relationship between multiplication and division* use knowledge of number facts and place value to multiply or divide	knowing LBH conversions of key percentages to fractions: (1% 10% 20% 25% 75% 50%)
--	--	--	---