|  | Rapid Recall | Mental Strategies | Mental Calculations | Times Tables |
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| Year <br> 1 | - All pairs of numbers with a total to 10 e.g. 3+7 <br> - Addition and subtraction facts for all numbers to any number to 10 <br> - Addition doubles of all numbers to at least $10+10$ <br> - Halving facts of even numbers to 20 <br> - One and two more/less than any number up to 100 <br> - 10 more/less of multiples of 10 <br> - 5 more/less of multiples of 5 | - Count on or back in ones, twos, fives and tens <br> - Reorder numbers in calculations <br> - Begin to bridge through 10, and later 20, when adding a single-digit number <br> - Use known number facts and place value to add or subtract pairs of single digit numbers <br> - Add 9 to single-digit numbers by adding 10 then subtracting 1 <br> - Subtract 9 by subtracting 10 then adding 1 <br> - Identify near doubles using doubles already known <br> - Use patterns of similar calculations | - Add or subtract a single-digit to or from a single-digit, without crossing 10 e.g. 4+5, 8-3 <br> - Add or subtract a single digit to or from 10 <br> - Add or subtract a single-digit to or from a 'teens' number, without crossing 20 or 10 e.g. $13+5,17-3$ <br> - Doubles of all numbers to 10 e.g. 8 +8 , double 6 | - Count in tens forward and backwards to 150 <br> - Count forwards and backwards in 2's to 50 (count on and back in 2's from odd and even numbers) <br> - Count forward in 5's to 100 <br> - Begin to count in 3's |


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| Year <br> 2 | - Addition and subtraction facts for all numbers to at least 10 <br> - All pairs of numbers with a total of 20 e.g. 13+7 <br> - All pairs of multiples of 10 with a total of 100 e.g. 30+70 <br> - Multiplication facts for the 2 and 10 times tables and corresponding division facts <br> - Double of all numbers to ten and the corresponding halves <br> - Multiplication facts up to $5 \times 5$ e.g. $4 \times 3$ | - Count on or back in tens or ones <br> - Find a small difference by counting up from the smaller number to the larger number <br> - Reorder numbers in a calculation <br> - Add three small numbers by putting the largest number first and/or finding a pair totalling ten <br> - Partition additions into tens and units then recombine <br> - Bridge through 10 or 20 <br> - Use known number facts and place value to add or subtract pairs of numbers <br> - Add or subtract 9, 19, 11 or 21 by rounding and compensation <br> - Identify near doubles <br> - Use patterns of similar calculations <br> - Use the relationship between addition and subtraction <br> - Use knowledge of number facts and place value to multiply and divide by 2,5 and 10 <br> - Use doubles and halves and halving as the inverse of doubling | - Add or subtract any single-digit to or from any two-digit number, without crossing the tens boundary e.g. 62+4, 38-7 <br> - Add or subtract any single-digit to or from a multiple of 10 e.g. 60+5, 807 <br> - Add or subtract any 'teens' number to any two-digit number, without crossing the tens boundary e.g. $23+14,48+13$ <br> - Find what must be added to any two-digit multiple of 10 to make 100 e.g. 70+?=100 <br> - Add or subtract a multiple of 10 to or from any two-digit number without crossing 100 e.g. 47+30, -50 <br> - Subtract any two digit number from any two-digit number when the difference is less than 10 e.g. 78-70, 52-48 <br> - Double of all numbers to at least 15 e.g. double 14 <br> - Double any multiple of 5 up to 50 e.g. double 35 <br> - Halve any multiple of 10 up to 100 e.g. halve 50 | - Known 10x, 2x, $5 x$ tables <br> - Count forward and backwards in 3's to 36 <br> - Know inverse division for 10, 2 and 5 |


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| $\begin{aligned} & \text { Year } \\ & 3 \end{aligned}$ | - Addition and subtraction facts for all numbers to 20 <br> - All pairs of multiples of 100 with a total of 1000 <br> - All pairs of multiples of 5 with a total of 100 <br> - Multiplication facts of the 2, 5 and 10 times table and corresponding division facts | - Count on or back in tens or ones <br> - Find a small difference by counting up from the smaller to the larger number <br> - Reorder numbers in calculations <br> - Add three or four small numbers by putting the largest number first and/or by finding pairs totalling 9, 10 or 11 <br> - Partition into tens and units then recombine <br> - Bridge through a multiple of 10 then adjust <br> - Use knowledge of number facts and place value to add or subtract pairs of numbers <br> - Add or subtract mentally a near multiple of 10 to or from a two-digit number <br> - Identify near doubles <br> - Use patterns of similar calculations <br> - Say or write a subtraction statement corresponding to a given addition statement <br> - To multiply a number by $10 / 100$, shift its digits one/two places to the left <br> - Use knowledge of number facts and place value to multiply or divide by 2,5 , 10 and 100 <br> - Use doubling and halving <br> - Say or write a division statement corresponding to a given multiplication statement | - Find out what must be added to any multiple of 100 to make 1000 e.g. $300+?=1000$ <br> - Add or subtract any pair of two-digit numbers, without crossing a tens boundary to 100 e.g. 33+45, 87-2 <br> - Add or subtract any single-digit to any two digit number, including crossing the tens boundary e.g. 67+5, 82-7 <br> - Find what must be added to/subtracted from any two-digit number to make the next higher/lower multiple of 10 e.g. $64+?=70,56-?=50$ <br> - Subtract any three-digit number from any three-digit number when the difference is less than 10, e.g. 458-451, 603-597 <br> - Find what must be added to/subtracted from any three digit number to make the next higher/lower multiple of 10 e.g. $647+?=650,246-?=240$ <br> - Doubles - double any number to at least 20 e.g. double 18 | - Know $2 x, 5 x, 10 x, 3 x$, $4 x, 8 x$ and $6 x$ tables and related division facts <br> - Derive $8 x$ facts by doubling $4 x$ facts or double and double and double again <br> - Begin to derive $6 x$ facts from doubling $3 x$ facts |


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| Year <br> 4 | - Multiplication facts of the $2,3,4,5,6$, $7,8,9,10,11,12$ times tables <br> - Division facts corresponding to tables of $2,3,4,5,6,7,8,9,10,11$ and 12 | - Count on or back in repeated steps of 1,10 and 100 <br> - Count up through the next multiple of 10 , 100 or 1000 <br> - Reorder numbers in calculations <br> - Add 3 or 4 small numbers, finding pairs totalling 10 <br> - Add 3 or 4,2 digit numbers, finding pairs totalling 100/use near doubles <br> - Add three 2 digit multiples of 10 <br> - Partition into tens and units, adding the tens first <br> - Bridge through 100 and 1000 <br> - Use knowledge of number facts and place value to add or subtract any pair of two digit numbers <br> - Add or subtract $9,19,29,11,21$ or 31 by rounding and compensating <br> - Add or subtract the nearest multiple of 10 then adjust <br> - Identify near doubles <br> - Continue to use the relationship between addition and subtraction <br> - Double any two digit number by doubling the tens first <br> - Use known number facts and place value to multiply or divide, including multiplying and dividing by 10 and then 100 <br> - Partition to carry out multiplication <br> - Use doubling and halving <br> - Use closely related facts to carry out multiplication and division <br> - Use the relationship between multiplication and division | - Find what must be added to any twodigit number to make 100 e.g. $37+?=100$ and to make 1000 <br> - Add or subtract any pair of two-digit numbers e.g. 38+85, 92-47. Repeat for 3 digit numbers <br> - 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 <br> - Subtract any four-digit number from any four digit number when the difference is small e.g. 3641-3628, 6002 - 5991 <br> - Doubles and halves: <br> Double any whole number from 1 to 50 , e.g. double 36, and find all the corresponding halves, e.g. 96/2 Double any multiple of 10 to 500, e.g. 3802 , and find all the corresponding halves e.g. 760/2, 130/2 <br> Double any multiple of 5 to 100 e.g. 65 x2, then to 1000 <br> - Multiply any two-digit number by 10 , e.g. $26 \times 10$ <br> - Divide a multiple of 100 by 10 e.g. 600/10 <br> - Multiply any two-digit multiple of 10 by $2,3,4$ or 5 e.g. $60 \times 4,80 \times 3$. | - Know $2 x, 5 x, 10 x$, $3 x, 4 x, 6 x, 7 x, 8 x, 9 x$, 11 , and $12 x$ tables and related division facts |


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| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { Year } \\ & 5 \end{aligned}$ | - Multiplication facts to $12 \times 12$ <br> - Division facts corresponding to tables up to $12 \times 12$ | - Count through the next multiple of $10,100,1000$ or 10,000 <br> - Reorder numbers in calculations <br> - Partition into hundreds, tens and Units, adding the most significant digit first <br> - Use known number facts and place value to add or subtract pairs of three digit multiples of 10 and twodigit numbers with one decimal place <br> - Add or subtract the nearest multiple of 10 or 100 then adjust <br> - Identify near doubles <br> - Add several numbers <br> - Develop further the relationship $n$ Between addition and subtraction <br> - Use factors <br> - Partition to carry out multiplication <br> - Use doubling and halving <br> - Use closely related facts to carry out multiplication and division <br> - Use knowledge of number facts and Place value to multiply or divide | - Add or subtract any pair of three-digit multiples of 10 e.g. $570+250,620-380$ <br> - Find what must be added to a decimal fraction with units and tenths to make the next higher whole number e.g. $4.3+$ ? $=5$ <br> - Add or subtract any pair of decimal fractions each with units and tenths, or each with tenths and hundredths e.g. $5.7+$ 2.5, $0.63-0.48$ <br> - 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 <br> - Multiply any two or three-digit number by 10 or 100 e.g. $79 \times 100,363 \times 100$ <br> - Divide a multiple of 100 by 10 or 100 e.g. 4000/10, 3600/100 <br> - Multiply any two-digit multiple of 10 by a single digit e.g. $60 \times 7,90 \times 6$ <br> - Double any whole number from 1 to 100, multiples of 10 to 1000 and find corresponding halves <br> - Find $50 \%, 25 \%, 10 \%$ of a small whole number or quantities e.g. $25 \%$ of $£ 8$ | - Know $2 x, 3 x, 4 x$, $5 x, 6 x 7 x, 8 x, 9 x, 10 x$, $11 x$, and $12 x$ tables and related division facts |


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| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { Year } \\ & 6 \end{aligned}$ | - All multiplication and corresponding division facts to $12 \times 12$ - squares of all integers from 1-10 | - Consolidate all strategies from previous years <br> - 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 <br> - Add or subtract the nearest multiples of 10, 100, 1000 then adjust <br> - Continue to use the relationship between addition and subtraction <br> - Use factors <br> - Partition to carry out multiplication <br> - Use doubling and halving <br> - Use closely related facts to carry out multiplication and division <br> - Use the relationship between multiplication and division <br> - Use knowledge of number facts and place value to multiply or divide | - Multiply any two-digit numbers by a single digit e.g. $34 \times 6$ <br> - Multiply any two-digit number by 50 or 25 e.g. $23 \times 50,47 \times 25$ <br> - Multiply or divide any whole number by 10 or 100 , giving any remainder as a decimal e.g. $47 / 10=4.7,1763 / 1=17.63$ <br> - Find squares of multiples of 10 to 100 <br> - Find any multiple of $10 \%$ of a whole number or quantity e.g. $70 \%$ of $£ 20,50 \%$ of $5 \mathrm{~kg}, 20 \%$ of 2 meters | - Know $2 x, 3 x, 4 x$, $5 x, 6 x, 7 x, 8 x, 9 x$, $10 x, 11 x$ and $12 x$ tables and related division facts |

