

## <u>Year 4 Fluency</u>

## Rapid Recall

- Addition and subtraction of multiples of 10 (e.g. 70 + 30 = 100, 50 + 60 = 110, 20 + 40 = 60);
- Addition and subtraction of multiples of 100 where the answer is 1,000 or less (e.g. 300 + 400 = 700, 400 + 600 = 1,000);
- Double and halves of multiples of 10 to 100 (e.g. double 60 = 120, half 50 = 25);
- Multiplying two-digit numbers by 10 (e.g. 24 x 10 = 240);
- Halves of any even number to 100 (e.g. half of 22 = 11);
- And multiplying any two and three-digit number by 10 and 100 (e.g. 24 x 100 = 2,400)

	1	2	3	4	5	6	7	8	9	10	11	12
1	1 x1	2x1	3x1	4x1	5x1	6x1	7x1	8x1	9x1	10x1	11x1	12x1
2	1x2	2x2	3x2	4x2	5x2	6x2	7x2	8x2	9x2	10x2	11x2	12x2
3	1x3	2x3	3x3	4x3	5x3	6x3	7x3	8x3	9x3	10x3	11x3	12x3
4	1x4	2x4	3x4	4x4	5x4	6x4	7x4	8x4	9x4	10x4	11x4	12x4
5	1x5	2x5	3x5	4x5	5x5	6x5	7x5	8x5	9x5	10x5	11x5	12x5
6	1x6	2x6	3x6	4x6	5x6	6x6	7x6	8x6	9x6	10x6	11x6	12x6
7	1x7	2x7	3x7	4x7	5x7	6x7	7x7	8x7	9x7	10x7	11x7	12x7
8	1x8	2x8	3x8	4x8	5x8	6x8	7x8	8x8	9x8	10x8	11x8	12x8
9	1x9	2x9	3x9	4x9	5x9	6x9	7x9	8x9	9x9	10x9	11x9	12x9
10	1x10	2x10	3x10	4x10	5x10	6x10	7x10	8x10	9x10	10x10	11x10	12x10
11	1x11	2x11	3x11	4x11	5x11	6x11	7x11	8x11	9x11	10x11	11x 11	12x11
12	1x12	2x12	3x12	4x12	5x12	6x12	7x12	8x12	9x12	10x12	11x12	12x 12
1 x facts Doubles Squares New Facts Known Facts												

## Mental Calculations (Jottings may be needed)

Addition and Subtraction Mental Calculation Skills (Working mentally with jottings)	Methods or Strategies	Multiplication and Division Mental Calculation Skills (Working mentally with jottings)	Methods or Strategies
<ul> <li>Add any pair of 2 digit numbers that cross the 10 and 100 boundary.</li> <li>e.g. 38 + 76, 83 - 26</li> <li>Add or subtract a near multiple of 10</li> <li>e.g. 34 + 39, 87 - 49</li> <li>Add near doubles of any 2 digit numbers</li> <li>e.g. 66 + 67, 72 + 73</li> <li>Add or subtract two - digit and three - digit multiples of ten</li> <li>e.g. 120 - 40, 230 + 320</li> <li>Count on and back in minutes and hours through 60 (analogue and digital)</li> </ul>	Count on or back in hundreds, tens or ones. - Partition: Add tens and ones separately and then recombine. - Partition: Subtract tens and then ones E.g. If you subtract 34, subtract 30 and then 4. - Subtracting by counting up from the smaller number to the larger number. - Add or subtract a near multiple of 10 and then adjust. e.g. 34 + 39 = 34 + 40 - 1 87 - 49 = 87 - 50 + 1 - Double and adjust. - Use knowledge of place value e.g. 120 - 40 use 12 - 4 = 8 230 + 320 use 23 + 32	<ul> <li>Double any two-digit number.</li> <li>e.g. double 37 <ul> <li>Double and halve any multiple of 10 and 100</li> </ul> </li> <li>e.g. double or half of 800, double or half of 420. <ul> <li>Halve any even number to 200.</li> <li>Find unit fractions and simple non-unit fractions of quantities.</li> </ul> </li> <li>e.g. 1/8 of 32, 4/8 of 32, <ul> <li>Multiply and divide numbers to 1000 by 10 and 100 (answers with whole numbers only)</li> </ul> </li> <li>e.g. 456 x 10, 800 divided by 10, 42 x 100 <ul> <li>Multiply a multiple of 10 to a hundred by a one-digit number.</li> <li>e.g. 60 x 3, 40 x 4</li> <li>Multiply numbers to 20 by a one-digit number.</li> </ul> </li> </ul>	<ul> <li>Partition: double the tens and ones separately and then recombine</li> <li>Recognise that when a number is multiplied or divided by 10 or 100 the digits move one or two places to the left or right and 0 is used as a placeholder.</li> <li>Use knowledge of multiplication facts and place value.</li> <li>Use partitioning and distributive law to multiply.</li> <li>e.g. 14 x 3 = (10 + 4) x 3</li> <li>10 x 3 = 30 4 x 3 = 12 30 + 12 = 42</li> </ul>

	- Give the factor pair of a number e.g. 6 has a factor pair of	
	2 and 3.	