## Year 4 Fluency

## 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. $24 \times 10=240$ );
- 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 |
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| 1 | $1 \times 1$ | 2×1 | 3x1 | $4 \times 1$ | $5 \times 1$ | $6 \times 1$ | 7×1 | $8 \times 1$ | 9×1 | 10x1 | 11×1 | 12×1 |
| 2 | $1 \times 2$ | $2 \times 2$ | $3 \times 2$ | $4 \times 2$ | $5 \times 2$ | $6 \times 2$ | $7 \times 2$ | $8 \times 2$ | $9 \times 2$ | $10 \times 2$ | 11×2 | $12 \times 2$ |
| 3 | 1×3 | 2x3 | $3 \times 3$ | $4 \times 3$ | 5×3 | $6 \times 3$ | 7x3 | $8 \times 3$ | $9 \times 3$ | $10 \times 3$ | 11×3 | $12 \times 3$ |
| 4 | $1 \times 4$ | $2 \times 4$ | $3 \times 4$ | $4 \times 4$ | $5 \times 4$ | $6 \times 4$ | $7 \times 4$ | $8 \times 4$ | $9 \times 4$ | $10 \times 4$ | $11 \times 4$ | $12 \times 4$ |
| 5 | 1×5 | $2 \times 5$ | $3 \times 5$ | $4 \times 5$ | $5 \times 5$ | $6 \times 5$ | $7 \times 5$ | $8 \times 5$ | $9 \times 5$ | $10 \times 5$ | 11×5 | 12×5 |
| 6 | 1×6 | $2 \times 6$ | $3 \times 6$ | $4 \times 6$ | 5×6 | $6 \times 6$ | 7×6 | $8 \times 6$ | $9 \times 6$ | $10 \times 6$ | 11x6 | 12x6 |
| 7 | $1 \times 7$ | $2 \times 7$ | $3 \times 7$ | $4 \times 7$ | $5 \times 7$ | $6 \times 7$ | $7 \times 7$ | $8 \times 7$ | $9 \times 7$ | $10 \times 7$ | 11×7 | $12 \times 7$ |
| 8 | $1 \times 8$ | $2 \times 8$ | $3 \times 8$ | $4 \times 8$ | $5 \times 8$ | 6x8 | $7 \times 8$ | $8 \times 8$ | $9 \times 8$ | $10 \times 8$ | 11×8 | $12 \times 8$ |
| 9 | 1×9 | 2x9 | $3 \times 9$ | $4 \times 9$ | 5x9 | $6 \times 9$ | 7x9 | $8 \times 9$ | $9 \times 9$ | 10x9 | 11×9 | 12x9 |
| 10 | $1 \times 10$ | 2×10 | $3 \times 10$ | $4 \times 10$ | $5 \times 10$ | $6 \times 10$ | $7 \times 10$ | $8 \times 10$ | $9 \times 10$ | $10 \times 10$ | $11 \times 10$ | $12 \times 10$ |
| 11 | $1 \times 11$ | 2×11 | 3×11 | $4 \times 11$ | $5 \times 11$ | $6 \times 11$ | $7 \times 11$ | $8 \times 11$ | $9 \times 11$ | $10 \times 11$ | $11 \times 11$ | $12 \times 11$ |
| 12 | $1 \times 12$ | $2 \times 12$ | $3 \times 12$ | $4 \times 12$ | $5 \times 12$ | $6 \times 12$ | $7 \times 12$ | $8 \times 12$ | $9 \times 12$ | $10 \times 12$ | 11×12 | 12× 12 |

Mental Calculations (Jottings may be needed)

| Addition and Subtraction Mental Calculation Skills (Working mentally with jottings) | Methods or Strategies | Multiplication and Division <br> Mental Calculation Skills <br> (Working mentally with jottings) | Methods or Strategies |
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| - Add any pair of 2 digit numbers that cross the 10 and 100 boundary. $\text { e.g. } 38+76,83-26$ <br> - Add or subtract a near multiple of 10 $\text { e.g. } 34+39,87-49$ <br> - Add near doubles of any 2 digit numbers $\text { e.g. } 66+67,72+73$ <br> - Add or subtract two digit and three - digit multiples of ten $\text { e.g. } 120-40,230+320$ <br> - Count on and back in minutes and hours through 60 (analogue and digital) | Count on or back in hundreds, tens or ones. <br> - Partition: Add tens and ones separately and then recombine. <br> - Partition: <br> Subtract tens and then ones <br> E.g. If you subtract 34 , subtract 30 and then 4. <br> - Subtracting by counting up from the smaller number to the larger number. <br> - Add or subtract a near multiple of 10 and then adjust. <br> e.g. $34+39=34+40-1$ <br> $87-49=87-50+1$ <br> - Double and adjust. <br> - Use knowledge of place value <br> e.g. 120-40 use 12-4 = 8 <br> $230+320$ use $23+32$ | - Double any two-digit number. <br> e.g. double 37 <br> - Double and halve any multiple of 10 and 100 <br> e.g. double or half of 800 , double or half of 420 . <br> - Halve any even number to 200. <br> - Find unit fractions and simple non-unit fractions of quantities. <br> e.g. $1 / 8$ of $32,4 / 8$ of 32 , <br> - Multiply and divide numbers to 1000 by 10 and 100 (answers with whole numbers only) <br> e.g. $456 \times 10,800$ divided by $10,42 \times 100$ <br> - Multiply a multiple of 10 to a hundred by a one-digit number. <br> e.g. $60 \times 3,40 \times 4$ <br> - Multiply numbers to 20 by a one-digit number. <br> e.g. $19 \times 4$ <br> - Identify the remainder when dividing by 2,5 and 10 | - Partition: double the tens and ones separately and then recombine <br> - 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. <br> - Use knowledge of multiplication facts and place value. <br> - Use partitioning and distributive law to multiply. $\text { e.g. } 14 \times 3=(10+4) \times 3$ $\begin{aligned} & 10 \times 3=30 \\ & 4 \times 3=12 \\ & 30+12=42 \end{aligned}$ |


|  |  | Give the factor <br> pair of a number <br> e.g. 6 has a factor pair of <br> 2 and 3. |  |
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