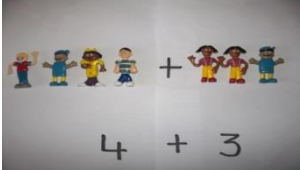
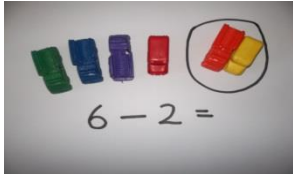
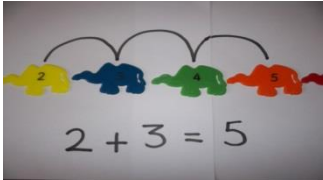
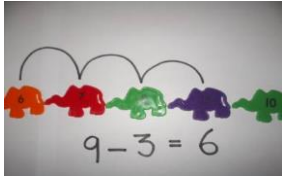
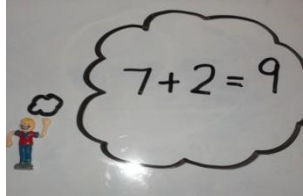




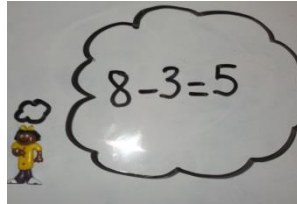
Progression of Written Calculation Strategies – Maths Curriculum 2014

EYFS			
Expected ELG			
Addition	Subtraction	Multiplication	Division
<p>Combine two or more sets of objects up to 10.</p>  <p>4 + 3</p>	<p>Take away objects from a set up to 10.</p>  <p>6 - 2 =</p>	<p>Not required at EYFS</p>	<p>Not required at EYFS</p>
<p>Add using a number line up to 10 and beginning to record.</p>  <p>2 + 3 = 5</p>	<p>Subtract using a number line up to 10 and beginning to record.</p>  <p>9 - 3 = 6</p>	<p>Not required at EYFS</p>	<p>Not required at EYFS</p>

Add by counting on up to 10 without a number line.



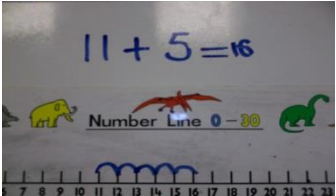
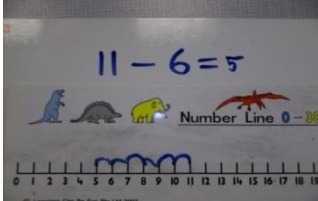
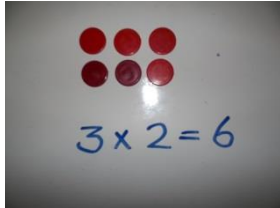
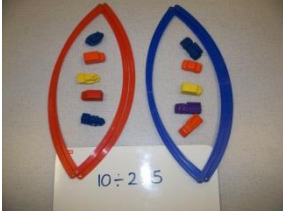
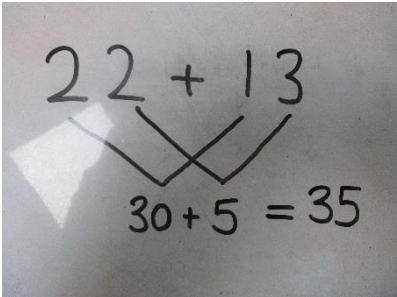
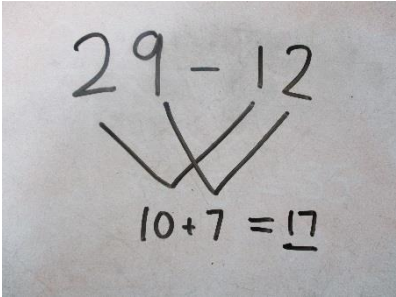
Subtract by counting back up to 10 without a number line.



Not required at EYFS

Not required at EYFS

Year 1 (expected)

Addition	Subtraction	Multiplication	Division
<p>Add a single digit to a 2-digit number up to 20 with a number line.</p> 	<p>Subtract a single digit from a 2-digit number up to 20 with a number line.</p> 	<p>Use arrays up to 20.</p> 	<p>Use concrete objects to divide up to 20.</p> 
<p>Add 2 digit number to a 2 digit number using place value 10s and 1s.</p> 	<p>Subtract 2 digit number to a 2 digit number using place value 10s and 1s.</p> 		

Year 2 (expected)

Addition

Add two 2-digit numbers using column method with no 'carrying'.

$$\begin{array}{r} 43 \\ + 25 \\ \hline 68 \end{array}$$

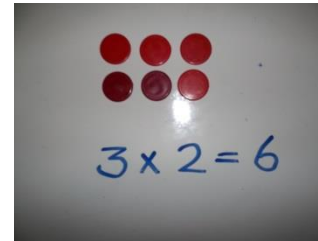
Subtraction

Subtract two 2-digit numbers with no 'exchanging'.

$$\begin{array}{r} 56 \\ - 32 \\ \hline 24 \end{array}$$

Multiplication

Using an array by 2, 5 and 10.

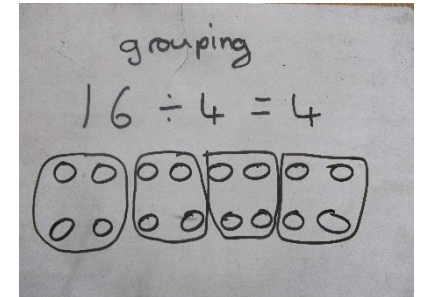


2 digit by 1 digit column multiplication.

$$\begin{array}{r} 15 \\ \times 2 \\ \hline 30 \end{array}$$

Division

Division by grouping



Year 3 (expected)

Addition

Column addition of 3 digit by 2 digit numbers.

Handwritten column addition problems:

$$\begin{array}{r} 26 \\ + 8 \\ \hline 34 \end{array}$$

$$\begin{array}{r} 453 \\ + 79 \\ \hline 532 \end{array}$$

Subtraction

Column subtraction of 3 digit by 2 digit numbers,.

Handwritten column subtraction problems:

$$\begin{array}{r} 82 \\ - 7 \\ \hline 75 \end{array}$$

$$\begin{array}{r} 584 \\ - 69 \\ \hline 515 \end{array}$$

Multiplication

Expanded column and short column method TU x U using x2, x3, x4, x5, x6 and x8.

Handwritten multiplication problems:

$$\begin{array}{r} 25 \\ \times 6 \\ \hline 150 \end{array}$$

$$\begin{array}{r} 25 \\ \times 6 \\ \hline 150 \end{array}$$

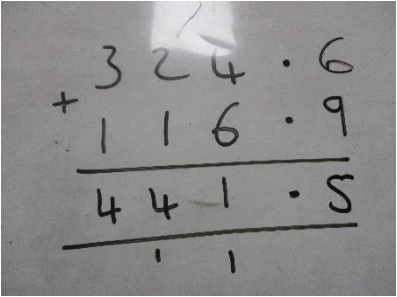
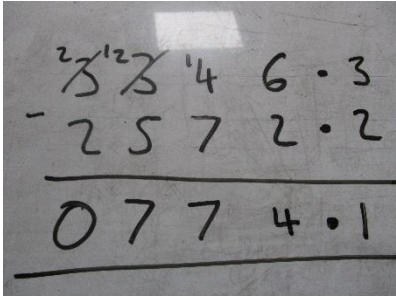
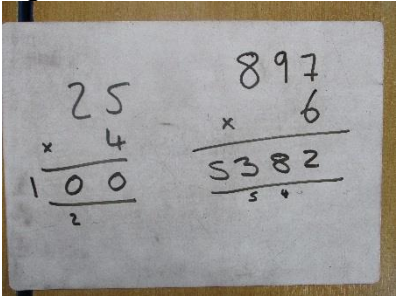
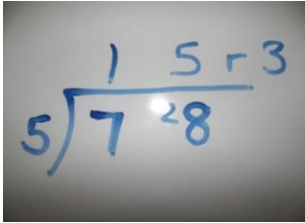
Division

Short division method dividing by 2,3,4,5,6, 7 and 8 with carrying.

Handwritten short division problem:

$$7 \overline{)284} \begin{array}{l} 40 \\ \hline \end{array} r.4$$

Year 4 (expected)

Addition	Subtraction	Multiplication	Division
<p>Column addition of decimal numbers.</p>  $\begin{array}{r} 324.6 \\ + 116.9 \\ \hline 441.5 \end{array}$	<p>Column subtraction of decimal numbers.</p>  $\begin{array}{r} 346.3 \\ - 2572.2 \\ \hline 0774.1 \end{array}$	<p>Multiply 2 and 3 digits by a single digit.</p>  $\begin{array}{r} 25 \\ \times 4 \\ \hline 100 \end{array}$ $\begin{array}{r} 897 \\ \times 6 \\ \hline 5382 \end{array}$	<p>Short division by any single digit with remainders.</p>  $\begin{array}{r} 153 \text{ r } 3 \\ 5 \overline{) 728} \end{array}$

Year 5 (expected)

Addition

Column addition up to 3 d.p.

$$\begin{array}{r} 124.145 \\ + 117.253 \\ \hline 241.398 \end{array}$$

Subtraction

Column subtraction up to 3 d.p.

$$\begin{array}{r} 42.343 \\ - 31.232 \\ \hline 11.111 \end{array}$$

Multiplication

Multiply a 4-digit number by a 2-digit number.

$$\begin{array}{r} 6425 \\ \times 34 \\ \hline 25700 \\ 192750 \\ \hline 218450 \end{array}$$

Multiplying fractions.

$$\frac{6}{8} \times \frac{2}{3} = \frac{12}{24} = \frac{1}{2}$$

Division

Short division – 3-digit by a single digit with answer as a remainder.

$$5 \overline{)432} \begin{array}{l} 086r2 \end{array}$$

Year 6 (expected)

Addition

Adding fractions with different denominators and mixed numbers.

$$\frac{3}{4} + \frac{1}{3}$$

(x3) (x4)

$$\frac{9}{12} + \frac{4}{12} = \frac{13}{12} = 1\frac{1}{12}$$

$$1\frac{3}{5} + 2\frac{1}{10}$$

$$\frac{8}{5} + \frac{21}{10}$$

(x2)

$$\frac{16}{10} + \frac{21}{10} =$$

$$\frac{37}{10} = 3\frac{7}{10}$$

Subtraction

4 digits by 4 digits using exchanging.

$$\begin{array}{r} 34506 \\ - 3659 \\ \hline 0847 \end{array}$$

Multiplication

Multiply 4 digits by 1 digit with a decimal number.

$$\begin{array}{r} 18.39 \\ \times \quad 5 \\ \hline 91.95 \end{array}$$

Division

Divide a 5 digit number by a 2 digit number with a decimal.

$$14 \overline{) 05.201}$$

$$14 \overline{) 72.814}$$

$14 \times 1 = 14$
 $14 \times 2 = 28$
 $14 \times 3 = 42$
 $14 \times 4 = 56$
 $14 \times 5 = 70$