

**Addition**

Method(s) highlighted indicate end of year expectation for year group

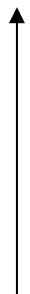




Rapid Recall

Age-related expectations

Estimation and checking

Year Group	Method(s)	Expectations	Resources
YR	<p>Addition finds the total number of items in two groups by counting them all. Find one more from a group of objects up to 20 Add 2 single digit numbers</p>	<p>More than Fewer Less than Estimate Add Subtract Equal Altogether</p> <p>Pictures / Objects I eat 2 cakes and my friend eats 3. How many cakes did we eat altogether? Does it matter which number of cakes is eaten first?</p> <p>Model recording as calculation 2 + 3 = 5</p>	<p>8 people are on the bus. 5 more get on at the next stop. How many people are on the bus now?</p> <p>1 more (nos up to 20) Number facts to 5</p> <p>(see recording)</p> <p>Songs / rhymes Straws Unifix Concrete apparatus</p>
Y1	<p>Addition as 'counting on' U + U (bridging 10) TU + U (bridging 20) U + U + U</p>	<p>Equal to More than Less than Most/least Odd/Even Single digit Two digit Addition Subtraction Equals</p> <p>Number track / Number line – jumps of 1 (modelled using bead strings)</p>	<p>Number line (efficient jumps) 18 + 5</p> <p>Bonds of all numbers to 10 (2 + 8 = 10) Number facts to 10 (2 + 5 = 7) 1 / 10 more than a number to 100</p> <p>U + multiple of 10 TU + multiple of 10</p> <p>Beadstrings e.g. 18 + 5 = 23</p> <p>Numericom</p>
Y2	<p>Multiples of 10s + units TU + a multiple of 10 TU + TU (bridging 10s / 100) U + U + U</p>	<p>Adjust Doubles, near doubles</p> <p>Number line (efficient jumps) 35 + 47 =</p>	<p>Partitioning Supported with practical</p> <p>47 + 35</p> $\begin{array}{r} 30 + 5 \\ 40 + 7 \\ \hline 70 + 12 = 82 \end{array}$ <p>Must bridge ten but not hundreds</p> <p>Number facts of 20 (12 + 8 = 20) Number facts to 20 (12 + 5 = 17) Number facts to 100 (using multiples of 10) Number facts to 100 (using multiples of 10)</p> <p>TU + TU (not bridging 100) U + U + U +9 +11</p> <p>Pictures / symbols e.g. 23 + 12 = 35</p>
Y3	<p>TU + TU (bridging 100) HTU + TU (not bridging 1000) HTU + HTU (not bridging 1000) HTU + U including units of measure &amp; money</p>	<p>Decimal point Decimal places Unit of measurement Pounds &amp; pence Column addition Expanded vertical Compact vertical Inverse Estimate Perimeter</p> <p>Number line. Discuss with pupils why start with 85? Mentally it's easier. 57 + 85 = 142</p> <p>Or 157 + 185 = 342</p>	<p><b>Expanded</b> vertical</p> $\begin{array}{r} 80 + 5 \\ + 50 + 7 \\ \hline 130 + 12 = 142 \end{array}$ <p>Bridging hundreds Using three digit numbers Move to <b>compact</b> vertical</p> <p><b>Compact</b> vertical</p> $\begin{array}{r} 374 \\ + 248 \\ \hline 622 \\ 11 \end{array}$ <p>Add fractions with the same denominators within one whole</p> $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ <p>Number facts of 100 (using multiples of 5) Number facts to 100 (using multiples of 5) Number facts of multiples of 10 that bridge 100</p> <p>TU + near multiple of 10 HTU + multiples of 10 (without bridging the next 100) HTU + multiples of 100</p> <p>Diennes</p> <p>123 + 12 = 135</p>
Y4	<p>THHTU + THHTU (incl bridging 1000) Decimals: money (£7.85 + £3.49)</p>	<p>Partitioning, Rounding Adjusting, Plus, Make Sum, Total, Score, Sign Increase, Boundary Inverse, Operation Negative numbers</p> <p>Number line (only if not secure with Y3 expanded vertical) 374 + 248 =</p>	<p>Expanded vertical</p> $\begin{array}{r} 374 + 248 \\ 300 + 70 + 4 \\ 200 + 40 + 8 \\ \hline 500 + 110 + 12 = 622 \end{array}$ <p><b>Compact</b> vertical</p> $\begin{array}{r} 23.70 \\ + 48.56 \\ \hline 72.26 \\ 11 \end{array}$ <p>Add fractions with the same denominators</p> $\frac{5}{7} + \frac{6}{7} = \frac{11}{7}$ <p>Number facts of 1000 (using multiples of 50, 100) Number facts of 100 (e.g. 34 + 66)</p> <p>TU + TU (bridging 100) securing a range of strategies Add multiples of 10 / 100 / 1000 (e.g. 40 + 50 + 80)</p> <p>Place value counters</p> <p>100 square +/- 10/1</p>



<p>Y5</p>	<p>Addition using more than 4 digits</p> <p>Decimals up to 3dp (23.7 + 48.56)</p> <p>More than 4 digit</p>	<p>Equivalent Numerator Denominator</p>	<p><b>Compact vertical</b></p> $\begin{array}{r} 3243 \\ + 18070 \\ \hline 21313 \\ \hline 1 \end{array}$	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number e.g.</p> $\frac{1}{8} + \frac{1}{4} = \frac{1}{8} + \frac{2}{8} = \frac{3}{8}$ <p>Include totals that will convert to a mixed number.</p>	<p>Add and subtract fractions with different denominators by finding a common denominator,</p> $\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$ <p></p> <p><math>3 \times 4 = 12</math></p> <p>Include examples where a mixed number will be created.</p>	<p>Number facts to 1 (2dp)</p> <p>Number facts to 10 (1dp)</p>	<p>Decimal + Decimal (eg 19.7 + 3.4)</p>	
<p>Y6</p>	<p><i>Consolidate / extend Y5 including:</i></p> <p>Three numbers Decimals up to 3dp (context: measures), including 1dp + 2dp etc.</p>	<p>Equivalent Numerator Denominator</p>	<p><b>Compact vertical</b></p> $\begin{array}{r} 3243 \\ + 18070 \\ \hline 21313 \\ \hline 1 \end{array}$	<p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number e.g.</p> $\frac{1}{8} + \frac{1}{4} = \frac{1}{8} + \frac{2}{8} = \frac{3}{8}$ <p>Include totals that will convert to a mixed number.</p>	<p>Add and subtract fractions with different denominators by finding a common denominator,</p> $\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$ <p></p> <p><math>3 \times 4 = 12</math></p> <p>Encourage children to look for relationships before multiplying denominators</p>	<p>Number facts to 1 (2dp)</p> <p>Number facts to 10 (1dp)</p>	<p>Integer / decimal (1dp) + Integer / decimal (1dp)</p>	