



















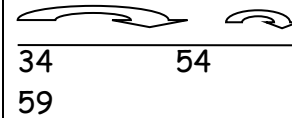
Ivy Lane School Calculation Policy

Addition

Revised & Re-issued November 2019

Ivy Lane Progression of calculation-Addition

Key objective(s).	Year Group Expectation	Examples of Methods	Vocabulary.	Manipulatives.	Mastery Resources & Server location
1) Find one more than a number (1-30) →	Year R		add sum and more altogether total		Place Value IseereasoningKS1 (T:/curriculum/Maths)
2) Combine two sets of objects practically, using cubes/counters etc.	Year 1	<p>Step A</p> <p> Draw objects     Plus</p> <p>+ =</p> <p>Step B</p> <p> Number sentence with objects drawn</p> <p>3 + 2 = 5</p> <p>         </p>	One more Two more Plus How many?	Cubes Counters Diennes	IseereasoningKS1 (T:/curriculum/Maths) White Rose
3) Put larger number in your head and count on (know addition can be done in any order) To know number bonds to 20 To know two multiples of 10 to make 100	Year 1/2	<p>4+7=11 7 goes in my head 8,9,10,11. 7+4=11 as above.</p> <p>To add 3 single digit numbers 4+6+5=</p>	How many more is? Increase Single digit tens count on	Cubes Counters Diennes	IseereasoningKS1 (T:/curriculum/Maths) White Rose

4) Find 10 more than a number (0-30) up to (1-100)	Year 1/2		double	Cubes Counters Diennes	
5) Jump along empty number lines.	Year 2	$34+25=59$ 	number line smallest largest add plus make altogether	100 squares Cubes Counters Diennes	

PLEASE SEE YEAR R-2 FOR MANIPULATIVES

<p>6) Partition a two digit number into tens and units to add.</p> <p>Extend to partitioning 2 and 3 digit numbers</p>	<p>Year 3</p>	$ \begin{array}{l} 23+46= \\ 20+40=60 \\ 3+6=9 \\ 60+9=69 \end{array} $ $ \begin{array}{l} 47 = 40 + 7 \\ +76 \quad \underline{70 + 6} \\ 110 + 13 = 123 \end{array} $	$ \begin{array}{l} 23+46= \\ \underline{60+9=} \\ 69 \end{array} $	<p>Partition Hundreds Tens Units</p> <p>Two digit Three digit</p> <p>Add Plus Altogether Total Sum of</p>	<p>IseereasoningLKS2</p> <p>White Rose</p> <p>+(T;/curriculum/Maths/ Reasoning T&L)</p>
<p>7) Expanded method in columns Add the least significant digit first</p>	<p>Year 3 and 4</p>	$ \begin{array}{r} 347 \\ +\underline{215} \\ 12 \\ 50 \\ \underline{500} \\ \underline{562} \end{array} $	<p>written method</p>	<p>IseereasoningLKS2</p> <p>White Rose</p> <p>+(T;/curriculum/Maths/ Reasoning T&L)</p>	

8) Standard column method Extend to multiple numbers (minimum 3 lots of 4 digit numbers)	Year 4 and 5	$ \begin{array}{r} 2347 \\ +1265 \\ \hline 3612 \\ 11 \\ \hline \end{array} $ Initially, no carrying, then crossing to 10-100-1000 etc	Row Column Carrying Multiple numbers	IseereasoningLKS2/UKS2 White Rose +(T;/curriculum/Maths/ Reasoning T&L)
9) Extend method to include decimal numbers (initially 1 decimal place then 2 in context of money)	Year 5 and 6	$ \begin{array}{r} 2347.23 \\ +1265.23 \\ \hline 3612.46 \\ 11 \\ \hline \end{array} $	Decimal point Zero Tenths Hundredths Thousandths	IseereasoningLKS2/UKS2 White Rose +(T;/curriculum/Maths/ Reasoning T&L)