Ashton West End Primary Academy

Progression in Maths – Addition

Year	Addition Progression
R	Practical, counting objects and relating addition to combining two groups of objects Using fingers, counting on technique
1	Counting on or back in heads then introduce number line. I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I
	Record simple number sentences then introduce symbols. $5 + 3 + 1 = 9$ $2 + 3 = \square$
	Practical experiences of addition as counting on, in real life contexts. i.e. There were 5 apples in the fruit bowl. Mum bought 4 more apples. How many apples are in the fruit bowl now?
	Link the practical activity of 'counting on' to using a structured number line. If I have 3 apples in my bag and I pick two more apples. I have five altogether.
	+1 +1
	0 1 2 3 4 5 6 7 8 9 10
	3+2=5 3apples and 2 apples, 5 apples altogether:
2	Then move onto TU + U upto 20. Use a number line to add TU + U including bridging Then use a number line to add TU + TU including bridging. Record number sentences using symbols. Partition numbers to add.
2	(a) 52 + 24 (b) 61 + 14 = □
	$\Box + \Delta = 9$
	$\begin{array}{c} +20 \\ 52 \\ \hline 72 \\ 72 \\ \hline 76 \end{array} \qquad (1+\Delta=9)$
	$\begin{array}{c} +20 +4 \\ 52 & 72 & 76 \end{array}$ (c) $12 + 7 + 4 = \Box$ (d) $15 + 12 = \\ 10 + 10 = 20 \\ 5 + 2 = \underline{7} \end{array}$
	$\begin{array}{c} +20 \\ 52 \\ \hline 72 \\ \hline 72 \\ \hline 76 \\ \hline 72 \\ \hline 76 \\ \hline 76 \\ \hline 72 \\ \hline 76 \\ \hline 76 \\ \hline 76 \\ \hline 72 \\ \hline 76 $
	$\begin{array}{c} \underbrace{+20}_{52} & \underbrace{+4}_{72} & \\ \hline \\ (c) & 12 + 7 + 4 = \Box \\ & 10 + 10 = 20 \\ & 5 + 2 = \frac{7}{27} \end{array}$
3	$\begin{array}{c} \underbrace{+20}_{52} & \underbrace{+4}_{72} & \underbrace{+6}_{76} \\ (c) & 12 + 7 + 4 = \Box & (d) & 15 + 12 = \\ & 10 + 10 = 20 \\ & 5 + 2 = \frac{7}{27} \\ \hline \\ Continue using number lines \\ (a) & 86 + 57 & \underbrace{+50}_{86} & \underbrace{+4}_{136} & \underbrace{+3}_{140} & \underbrace{+3}_{143} \\ \end{array}$
3	$\begin{array}{c} \underbrace{+20}_{52} & \underbrace{+4}_{72} & \underbrace{+6}_{76} \\ (c) & 12 + 7 + 4 = \Box & (d) & 15 + 12 = \\ & 10 + 10 = 20 \\ & 5 + 2 = \frac{7}{27} \\ \hline \\ Continue using number lines \\ (a) & 86 + 57 & \underbrace{+50}_{86} & \underbrace{+4}_{136} & \underbrace{+4}_{140} & \underbrace{+3}_{143} \\ \hline \\ Partition numbers to add \end{array}$
3	$\begin{array}{c} \underbrace{+20}_{52} & \underbrace{+4}_{72} & \underbrace{+6}_{76} \\ (c) & 12 + 7 + 4 = \Box & (d) & 15 + 12 = \\ & 10 + 10 = 20 \\ & 5 + 2 = \frac{7}{27} \\ \end{array}$ Continue using number lines (a) $86 + 57 \qquad \underbrace{+50}_{86} & \underbrace{+4}_{136} & \underbrace{+3}_{140} & \underbrace{+3}_{143} \\ \end{array}$
3	$ \begin{array}{c} \underbrace{+20}_{52} & \underbrace{+4}_{72} & \underbrace{-76}_{76} \\ (c) & 12 + 7 + 4 = \Box & (d) & 15 + 12 = \\& 10 + 10 = 20 \\& 5 + 2 = \underbrace{7}_{27} \\ \end{array} $ Continue using number lines (a) $86 + 57 \qquad \underbrace{+50}_{86} & \underbrace{+40}_{136} & \underbrace{+40}_{143} \\ Partition numbers to add \\ (b) 86 + 57 = 80 + 50 = 130 \\& 6 + 7 = 13 \\ \end{array} $

4	$\begin{array}{cccc} 1 & 11 \\ 625 & 367 \\ + & 48 & + & 85 \\ \hline 673 & 452 \\ \end{array}$ Add numbers with up to four digits using the formal written methods of columnar addition where appropriate.
5	Compact method for integers and decimals with more than four digits. (a) 587 (b) 3587 (c) £ 6.72 +475 $+ 675$ £ 8.56 1062 4262 $+ £2.30£ 17.58$
6	Compact method for integers and decimals with larger numbers. (a) $\begin{array}{c} 111 \\ 7648 \\ + \underline{1486} \\ 9134 \\ 124.90 \\ + \underline{7.25} \\ 132.15 \\ \end{array}$