

Calculation Policy

Year 2 Addition

	Mental Strategies	Concrete	Pictorial	Abstract	Vocabulary	Models, Images and resources
Year 2	Add numbers using concrete objects, pictorial representations, and mentally, including: add a single-digit number to a two-digit number, including crossing the tens boundary, e.g. 23 + 5, then 28 + 5 add a multiple of 10 to any two-digit number, e.g. 27 + 60 add two two-digit numbers adding three one-digit numbers add 9, 19, 29, ... or 11, 21, 31, ... add near doubles, e.g. 13 + 14, 39 + 40	<u>TO + O bridging the tens.</u> e.g. 24 added to 7 <u>TO + TO</u> Not crossing the tens E.g. 43 + 24 Can also use Numicon and place value counters	<u>TO + O bridging the tens.</u> e.g. 24 added to 7 <u>TO + TO</u> Not crossing the tens	<u>TO + O bridging the tens.</u> e.g. 24 added to 7 <u>TO + TO</u> Not crossing the tens	Add Sum More than Total Altogether Plus Digit Partition into tens and ones	100 square Number lines Number tracks Bead strings (for children) Bead bar Tens Frame Numicon Place Value Disks Cuisenaire Base hundreds tens and ones Arrow Cards

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

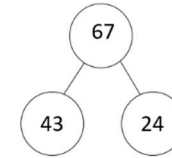
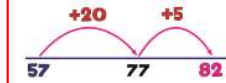
Crossing the tens
57 added to 25

Can also use Numicon and place value counters

10s	1s
	
	
	
	
	

10s	1s
	
	

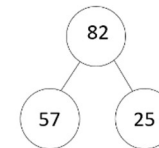
67	
43	24


$$57 + 25 = 82$$

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$70 + 12$

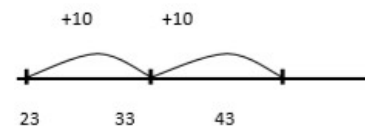
$$57 + 25 = 82$$

$$\begin{array}{r} 50 + 20 = 70 \\ 7 + 5 = 12 \\ \hline 82 \end{array}$$



82	
57	25

Count or add in multiples of 10 using 100 square or number line



Add by using partitioning of tens and ones – see above

Solve simple one-step problems with addition: using concrete objects and pictorial representations, involving numbers, quantities and measures - see above

Recognise and use the inverse relationship between addition and subtraction to check calculations and missing number problems. Check by adding numbers in a different order eg. $5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5$.

Begin recording addition in columns to support place value and prepare for efficient written methods - see above

Useful IWB links for manipulatives

<https://www.coolmath4kids.com/manipulatives/base-ten-blocks>

<https://mathsbot.com/manipulatives/placeValueCounters>

<https://mathsbot.com/manipulatives/bar>

<https://classroomsecrets.co.uk/free-year-1-part-whole-model-iwb-addition-and-subtraction-activity/>

<https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/>

<http://www.ictgames.com/mobilePage/tenFrame/index.html>