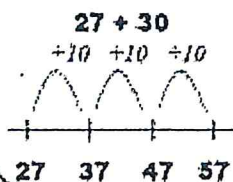


ADDITION +

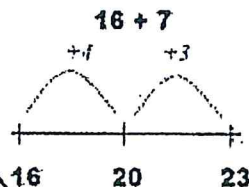
Year 2 Add with 2-digit numbers develop mental fluency with place value and addition using 2-digit numbers, then move to formal methods

Add 2-digit numbers and tens, 2-digits and units, two 2-digit numbers, first practically using equipment (Dienes Base 10, Numicon, 100squares) then using:

Add 2-digit numbers and tens:



Add 2-digit numbers and units:

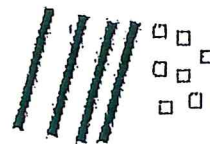


Use empty number lines, concrete equipment, hundred squares etc. to build confidence and fluency in mental addition skills.

Children move to more formal recording using partitioning method, setting out as follows:

$$\begin{array}{r} 25 + 47 \\ \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \\ 20 + 5 \quad 40 + 7 \\ 20 + 40 = 60 \\ 5 + 7 = 12 \end{array}$$

This needs to be modelled using apparatus such as Dienes and Numicon.



Key vocabulary add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, units, partition, addition, column, tens boundary

Key Skills for addition at Year 2

- Locate any 2-digit number on a landmarked line and use this to compare numbers; record comparisons < and >, e.g. $56 > 39$.
- Identify any number on the 1-100 number grid; understand that each number is a multiple of ten and some ones, e.g. 54 is 50 and 4 more.
- Add two single digit numbers ($8 + 7$) by counting up; add two 2-digit numbers which total less than 100 by counting on in tens and ones, e.g. $54 + 37$ as $54 + 30 + 7$.
- Know securely number pairs for all the numbers up to and including 12
- Count in steps of 2, 5, and 10 from 0.
- Know different unit patterns when not crossing a ten, e.g. $4 + 3 = 7$, $14 + 3 = 17$, $24 + 3 = 27$
- Begin to recognise unit patterns when crossing a ten, e.g. $5 + 6 = 11$
- Know pairs with a total of 20 and multiples of 10 to 100
- Count on in ones and tens from any given 2-digit number
- Add two or three single-digit numbers
- Add a single-digit number to any 2-digit number using number facts, including bridging multiples of 10. Add 10 and small multiples of 10 to any given 2-digit number
- Add any pair of 2-digit numbers
- Know that adding can be done in any order
- Solve problems with addition using concrete objects, pictorial representations, involving numbers, quantities and measures, applying written and mental methods