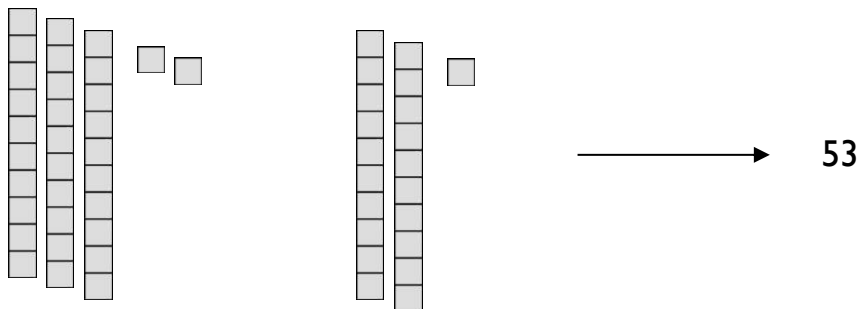


YEAR 2

End of Year Objective:

Add numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; three one-digit numbers.

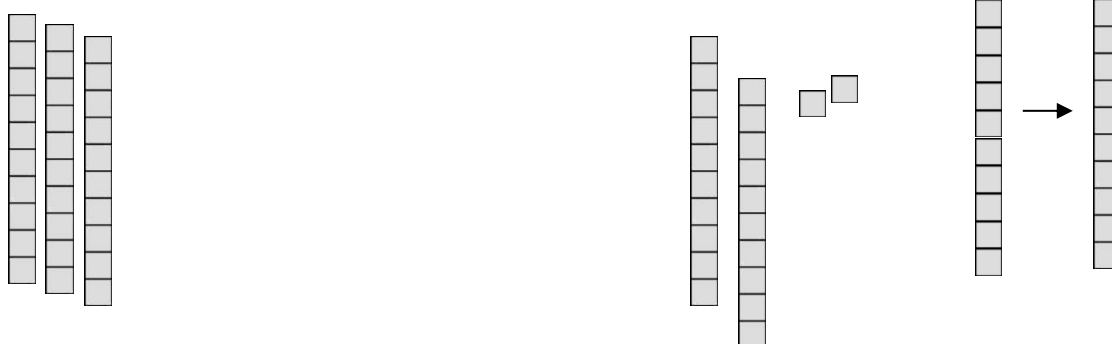
Children will continue to use the Base 10 equipment to support their calculations. For example, to calculate $32 + 21$, they can make the individual amounts, counting the tens first and then count on the units.



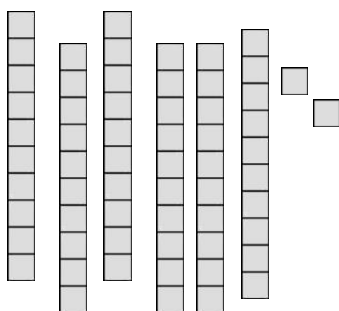
When the units total more than 10, children should be encouraged to exchange 10 units/ones for 1 ten. This is the start of children understanding 'carrying' in vertical addition. For example, when calculating $35 + 27$, they can represent the amounts using Base 10 as shown:



Then, identifying the fact that there are enough units/ones to exchange for a ten, they can carry out this exchange:

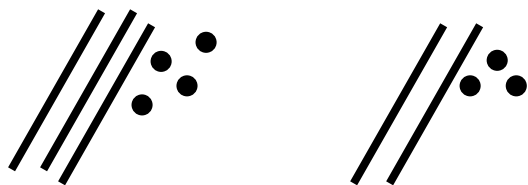


To leave:



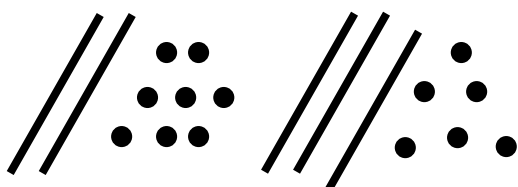
Children can also record the calculations using their own drawings of the Base 10 equipment (as slanted lines for the 10 rods and dots for the unit blocks).

e.g. $34 + 23 =$

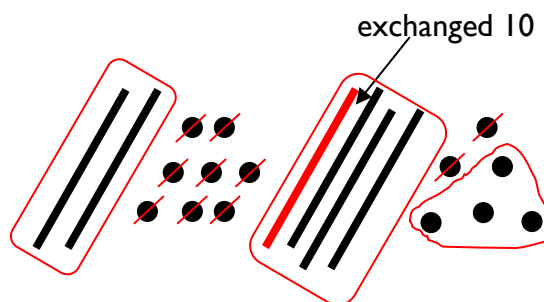


With exchange:

e.g. $28 + 36 =$



will become



so $28 + 36 = 64$

It is important that children circle the remaining tens and units/ones after exchange to identify the amount remaining.

This method can also be used with adding three digit numbers, e.g. $122 + 217$ using a square as the representation of 100.

