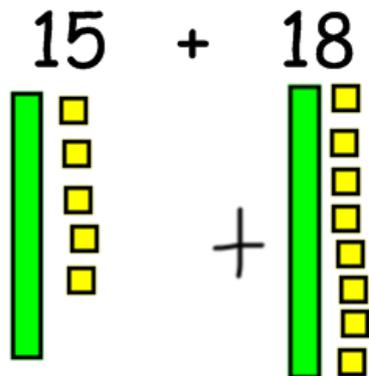
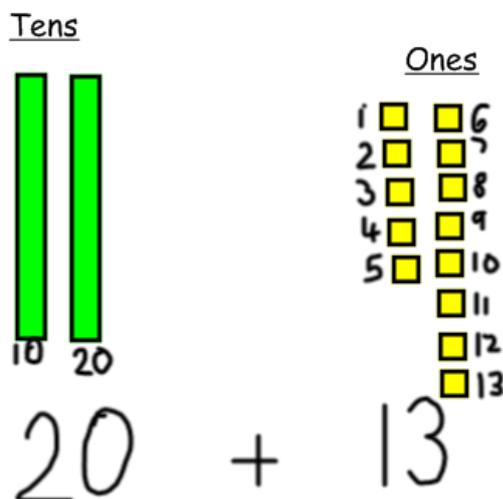


Year 2 Addition Methods

1) Using dienes

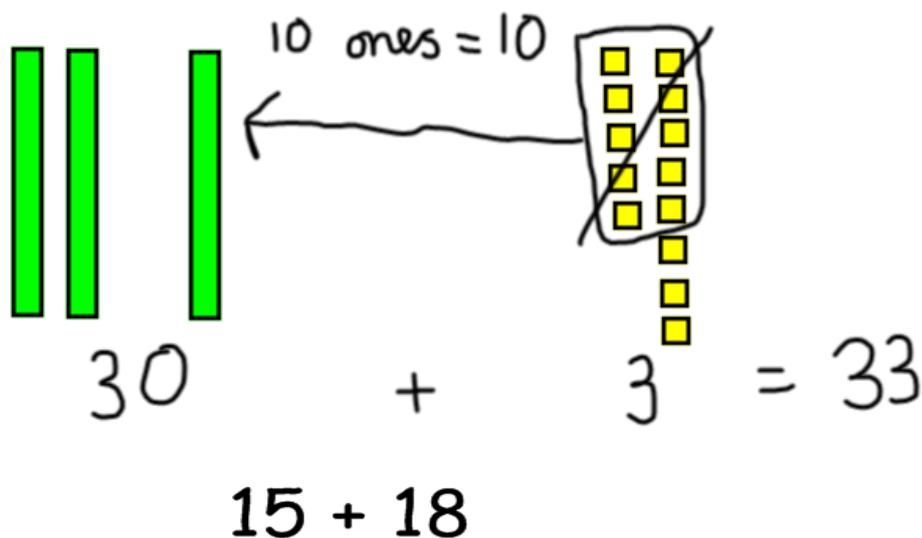


Put the tens together and the ones together.



Children may just count the tens then count on in ones after this.

However some children may recognise that they can swap 10 of the ones for a ten block:



We can swap the numbers around so that the biggest number is first - it doesn't matter which order we add in but it's easiest to add on the smaller number.

$$18 + 15$$

3) Adding mentally after splitting into tens and ones

$$\begin{array}{r} 15 + 18 \\ \swarrow \quad \searrow \quad \swarrow \quad \searrow \\ 10 \quad 5 \quad 10 \quad 8 \end{array}$$

Add the tens:

$$10 + 10 = 20$$

Add the ones:

$$8 + 5 = 13$$

Children may use their fingers to add on 5.



$$\begin{array}{r} 20 + 13 \\ \swarrow \quad \searrow \\ 20 + 10 + 3 = 33 \end{array}$$

Please note:

This method of splitting both numbers into tens and ones works well for addition but it can cause problems when children move onto subtraction. Therefore I prefer children to keep the biggest number whole and just split the smaller one:

$$\begin{array}{r} 18 + 15 \\ \swarrow \quad \searrow \\ 10 \quad 5 \end{array}$$

$$18 + 10 = 28$$

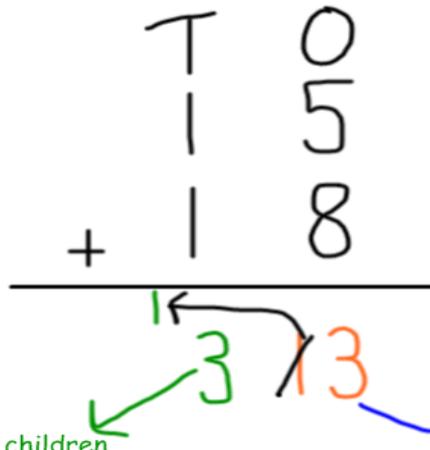
$$28 + 5 = 33$$

Children may use their fingers to add on 5.



4) Column addition

$$15 + 18$$



1 + 1 + 1 = 3 (remind children to add the additional ten from the 13). Write 3 under the tens numbers.

Remind children to always start with the ones. They tend to try adding the tens first which causes problems if the sum of the ones is greater than 10.

$$5 + 8 = 13$$

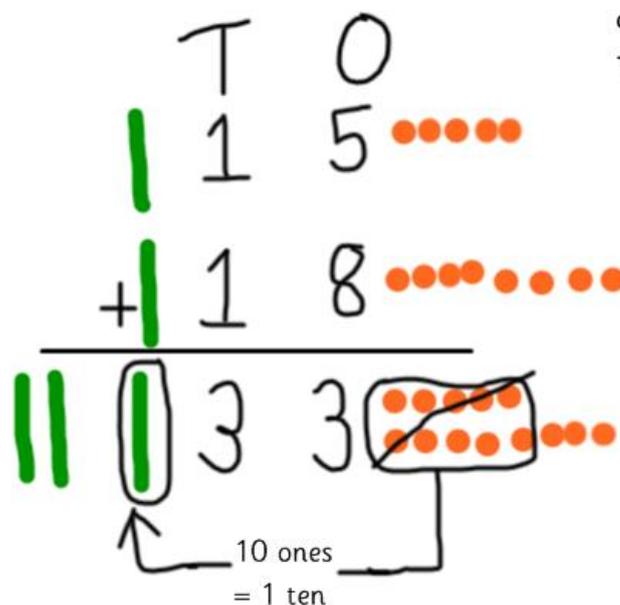
13 has a ten. We cannot have a ten in the ones column so we move that ten to the tens - write a 1 in the tens column.

$$15 + 18 = 33$$

Children don't need to show the one moving (can just write one in the tens) but they should be able to explain it to you.

Column addition with dienes

$$15 + 18$$



Children can use and/or draw dienes to support.

1 ten + 1 ten
+ 1 ten
= 3 tens

$$15 + 18 = 33$$