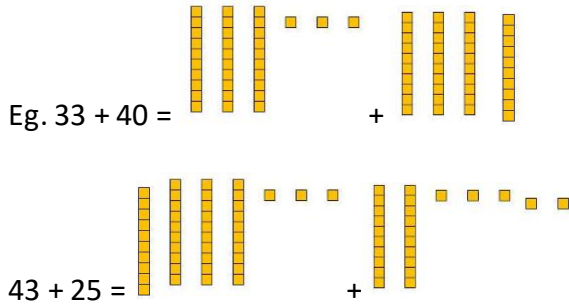


Addition

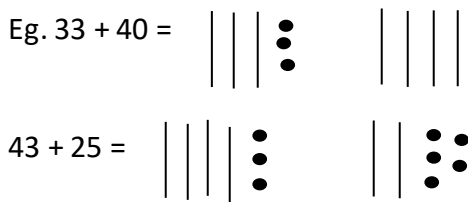
Steps for adding multiples of 10, progressing to adding two digit numbers without crossing 10.

1. We use concrete resources called dienes, to show the tens and ones.



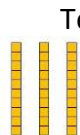

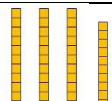
How many tens all together? How many ones altogether? What number does this make?

2. We progress to drawing the dienes as lines and dots instead.



How many tens all together? How many ones altogether? What number does this make?

3. Progress to a formal written method alongside images.

Tens	Ones
	
	

	3	3
+	4	0
	7	3

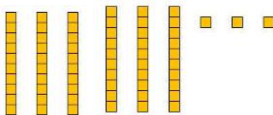
°	4	3
+	2	5
	6	8

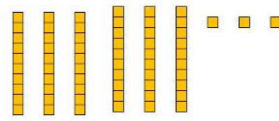
4. Progress to adding mentally, add the tens and add the ones and combine together.

Subtraction

Steps for subtracting multiples of 10, progressing to subtracting two digit numbers without crossing 10.


1. We use concrete resources called dienes, to show the tens and ones.

Eg. $63 - 40 =$  (Take four tens away)

$63 - 32 =$  (Take away two ones, take away three tens)

How many tens left? How many ones left? What number does this make?

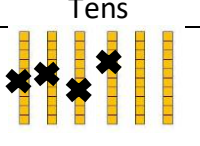

2. We progress to drawing the dienes as lines and dots instead.

Eg. $63 - 40 =$ 

$63 - 32 =$ 

How many tens left? How many ones left? What number does this make?

3. Progress to a formal written method alongside images.

Tens	Ones
	

	6	3
-	4	0
	2	3

	6	3
-	3	2
	3	1

4. Progress to subtracting mentally, take away the one, take away the tens and see what is left.