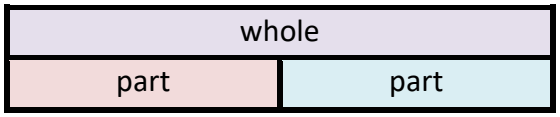
Number Champions
1 2 3 4 5
fun + skills = confidence

Resource for Year 2 Core Curriculum

Year 2: Subtraction: Use bar modelling to solve problems involving subtraction.

Bar Models for Subtraction (exchanging)

The bar model helps us visualise a maths problem. We can use it help us understand what we know, what we don't know and what to do to solve it!

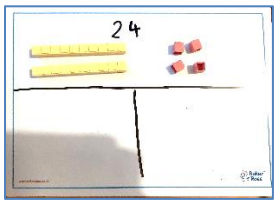


The full bar represents the whole number that they will subtract from. One part will be the number subtracted from the whole and the other will be the number we are trying to find out. The parts add up to the whole.

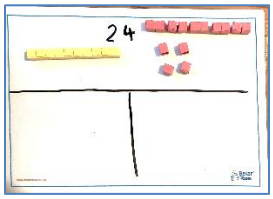
Subtracting 1 digit from 2-digit numbers – with exchanging.

Only attempt these if the child is very confident with the examples with no exchanging. Use base ten to support the child in solving the calculation. They will only need to make the number they are subtracting from. Remember to make sure they subtract the ones first.

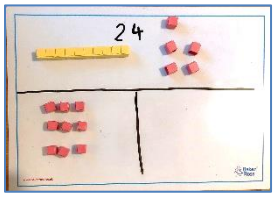
Jane has 24 cookies.
She gives some cookies to Amol.
She now has 9 cookies.
How many did she give to Amol??



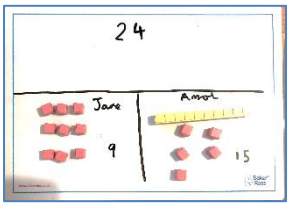
We know Jane starts with 24 cookies – this is the 'whole'.



We know Jane has 9 after giving Amol some.
So, we need to subtract 9 from 24 to make the part that we know.
But, we don't have enough ones!
So we exchange 1 ten for 10 ones.



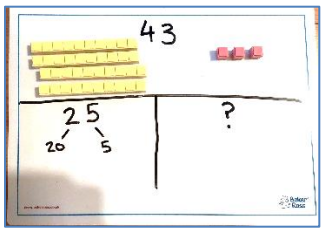
Now we have 14 ones so can subtract 9 and move it to one part.



How many cookies are left?
Count the remaining cookies out for the other part – this is what Jane gave to Amol!
Jane gave Amol 15 cookies.

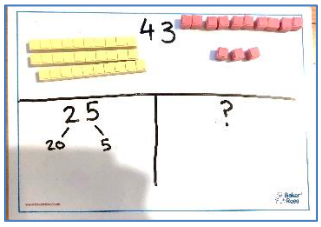
Subtraction – 2 digits subtract 2 digits (exchanging)

Bob has 43 carrots.
He gives Ann 25 carrots.
How many carrots does Bob have now?

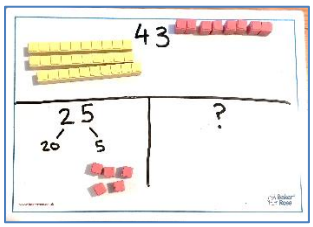


We know Bob has 43 carrots at the start. This is the whole amount.

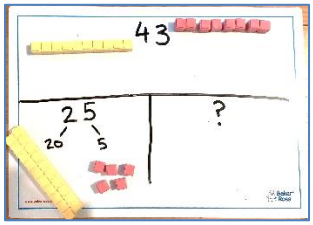
We know Ann gets 25.



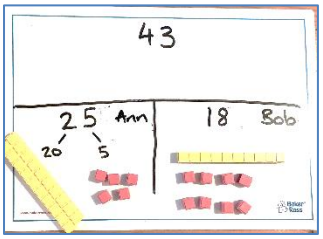
So we need to subtract 25 from 43 and move it to one part.
First subtract the ones - we don't have enough!
We exchange 1 ten for 10 ones.
Now we have 3 tens and 13 ones.



13 subtract 5 equals 8 ones.
Move 5 to one part.



Now we subtract the tens – 3 tens subtract 2 tens is equal to 1 ten.
Move 2 tens to the part.



Move what is left to the other part.
This will tell us how many carrots Bob now has.
There is 1 ten and 8 ones left – that 18.
So Bob now has 18 carrots!