

Year 2

Subtracting crossing a tens boundary. (Exchanging a ten)

Concrete - This means using objects.

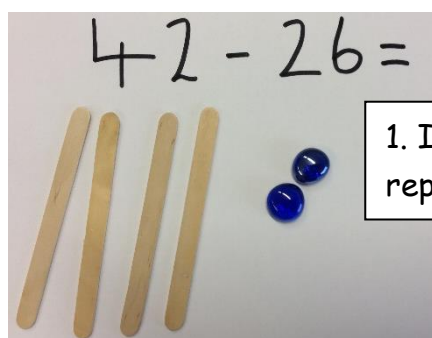
Objects you could use at home:

buttons, stones, sticks, beads, lolly sticks, Lego blocks, pencils, small toys, pom poms

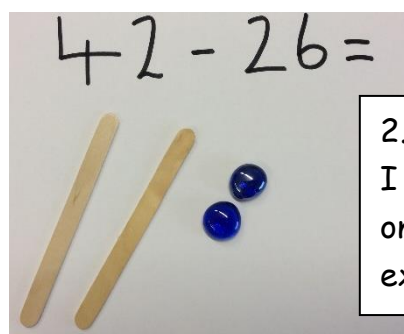
Steps to success:

- Collect some objects from home that you can use.
- Look at your subtraction number sentence.
- Choose the correct number of objects to make the greater number. When you are representing a 2 digit number use objects to represent the tens and the ones. You could use a longer object like a stick, pencil or lolly stick to represent the tens and smaller objects for the ones.
- Take away the right amount of objects. First take away the tens and then take away the ones. If you do not have enough ones to take away then you need to exchange a ten. This means you need to take a ten away and swap it for ten ones. Then you will be able to take away the correct amount of ones.
- Count how many objects you have left. Remember to count the tens first and then the ones.

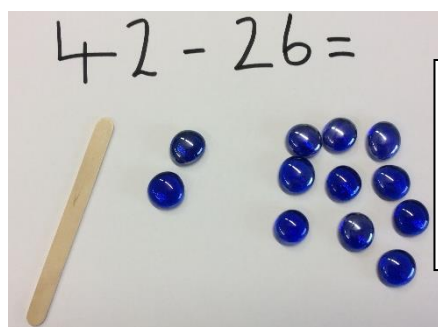
An example for you:



1. I started by representing 42.



2. I took away 2 tens. I can't take away 6 ones yet so I need to exchange a ten.



3. I took 1 ten away and exchanged it for 10 ones.



4. I took 6 ones and counted how many I had left.

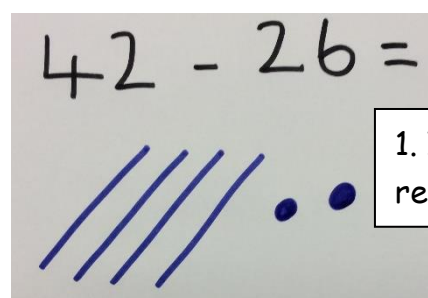
I have 16 left because I have 1 ten and 6 ones.

Pictorial - This means using drawings or representations.

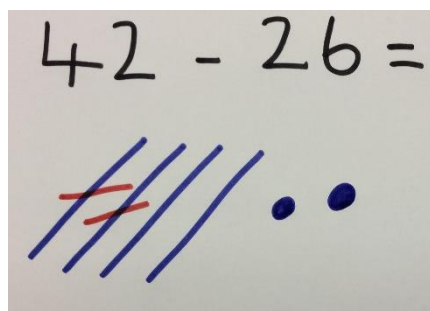
Steps to success:

- Find your exercise book.
- Represent the greater number using jottings. Remember to draw the tens and ones for a 2 digit number.
- Take away the right amount by crossing out the correct amount. First take away the tens and then take away the ones. If you do not have enough ones to take away then you need to exchange a ten. This means you need to take a ten away by crossing it out and swap it for ten ones by drawing them. Then you will be able to take away the correct amount of ones.
- Count how many you have left. Remember to count the tens first and then the ones.

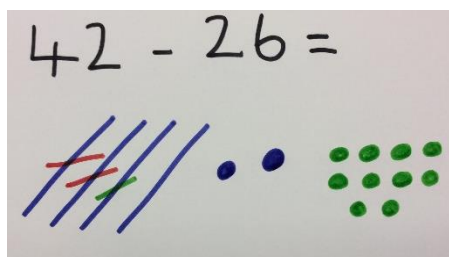
An example for you:



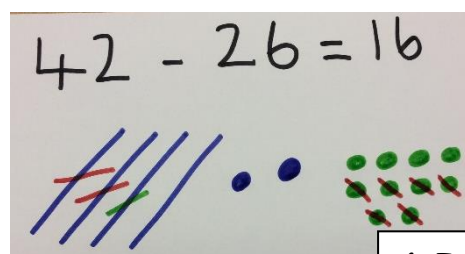
1. I started by representing



2. I took away 2 tens by crossing them out. I can't take away 6 ones yet so I need to exchange a ten.



3. I took 1 ten away by crossing it out and exchanged it for 10 ones by drawing them



4. I took 6 ones and counted how many I had left.

Abstract - This means doing the calculation mentally in your head.

Steps to success:

- Find your exercise book.
- Write down your subtraction number sentence.
- Use a number line to subtract the smaller number from the greater number.
- Or subtract the numbers in your head by counting back. You can partition the numbers to help you subtract. Start by taking away the tens and then take away the ones

An example for you:

$$42 - 26 = 16$$

$42 - 20 = 22$

$22 - 6 = 16$

The diagram illustrates the subtraction process using two number lines. The first number line starts at 16 and ends at 22, with jumps of 1, 2, 1, 2, 1, and 2. The second number line starts at 22 and ends at 42, with jumps of 10 and 12.

Try these yourself. What will you use to help you?

$$33 - 15 =$$

$$61 - 26 =$$