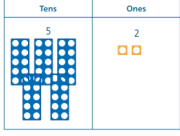


Maths - Year 2

Calculating 6: Partitioning into tens and ones to answer adding and subtracting problems

Key Vocabulary

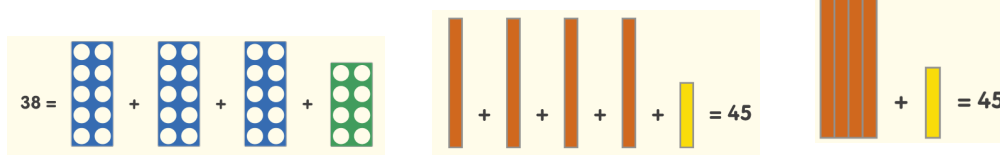
Subtract	Taking one amount from another.
Add	Combine two or more amounts to make a total.
Tens	Refers to the number of tens in a number e.g. on a place value grid. 
Whole tens /Tens numbers/ multiples of 10	The result of multiplying a number by 10. Numbers in the ten times tables e.g. 10, 20, 30, 40, 50 etc.
Ones	Refers to how many ones in a number e.g. 34 has 3 tens 4 ones.
Partition	Splitting a number in different ways.
Inverse	The result of subtracting one number from another.
Equals	The same in number or amount.
Value	The amount a number is worth.

Mathematical Skills

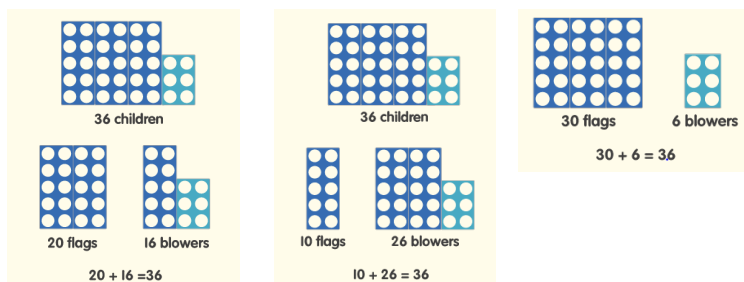
- Know how to partition a number into 'lots' of tens and ones and write this as an adding sentence e.g. for 37 write $10 + 10 + 10 + 7$.
- Know how to partition a number into a multiple of 10 and ones and write this as an adding sentence e.g. $30 + 7 = 37$ or $37 = 7 + 30$.
- Know how to partition a number in different ways e.g. $10 + 27 = 37$ or $37 = 20 + 17$.
- Use the parts and wholes relationship e.g. 37, 30, 7 to devise inverse adding and subtracting number sentences such as $30 + 7 = 37$ and $37 - 7 = 30$.
- Connect adding tens and ones using Numicon shapes or number rods with adding coin values, e.g. three 10p coins and a 5p equals 35p.
- Add single digits to whole tens and whole tens to single digits without counting on in ones.
- Subtract a single digit from a 2-digit number to leave a multiple of 10.
- Subtract whole tens from a 2-digit number to leave a 1-digit number.

Mathematical Methods

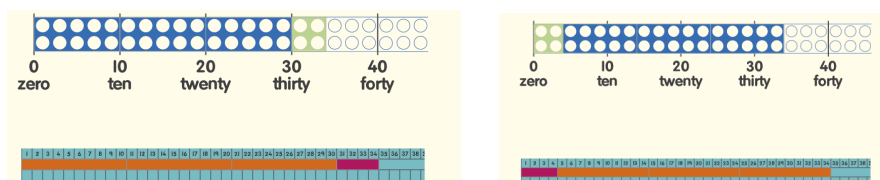
- Partitioning 2-digit numbers into tens and ones.



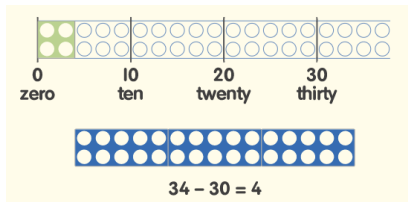
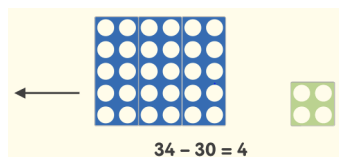
- Different ways to partition into tens and ones.



- Partitioning 2-digit numbers into multiples of 10 and units e.g. $30 + 4 = 34$ or $4 + 30 = 34$

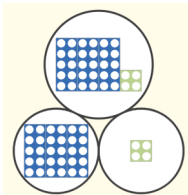


- Partitioning and subtracting.

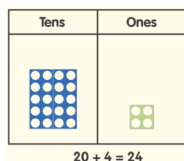
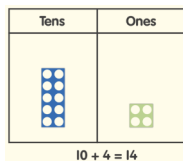


- Using parts and wholes with multiples of 10 and ones.

$$\begin{array}{ll} 34 = 30 + 4 & 30 + 4 = 34 \\ 34 = 4 + 30 & 4 + 30 = 34 \\ 34 - 4 = 30 & 30 = 34 - 4 \\ 34 - 30 = 4 & 4 = 34 - 30 \end{array}$$

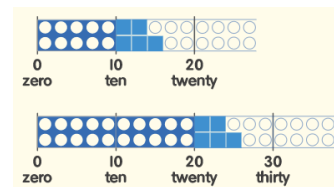
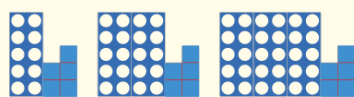


- Finding patterns with adding a single digit to multiples of 10.



- Finding patterns when subtracting.

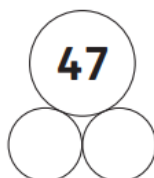
$$15 - 5 = \quad 25 - 5 = \quad 35 - 5 =$$



- Using the context of money for partitioning, e.g. I have two coins in my purse totalling 25p. What would I be left with if I spend the 20p? And, what would I be left with if I spend the 5p?

Can you..?

- Find two parts of 47.



- Look at this subtracting sentence. Can you use the same numbers to write another subtracting sentence and two adding sentences?

$$\boxed{52} - \boxed{2} = \boxed{50}$$