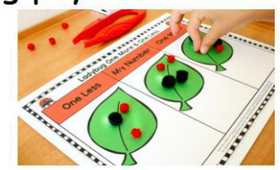
Main Principles	Foundation (1-20)	Year 1 (1-100)	Year 2 (HTU)
Place Value			

One-to-one correspondence:

Children first learn to count using one to one correspondence.

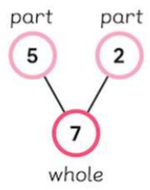
Children will be encouraged to say a number each time they touch an object.

Using physical resources:



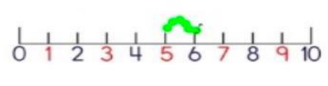
Children begin by practically taking away one or adding one more. They will also be able to use drawings to support them.

Part-part-whole model:



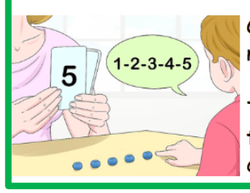
Children will use the part-part-whole diagram to add and subtract numbers.

Number lines:



Children will be able to use a number line to count, as well as using it to take away or add one.
This will be for numbers up to 20.

Recognising numerals:



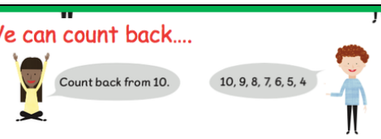
Children learn to recognise numerals to 20.

They are beginning to match the numeral with the correct corresponding quantity.

Counting to 10:

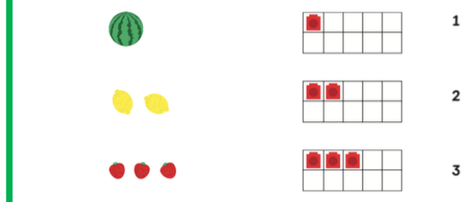
We can count on....

We can count back....



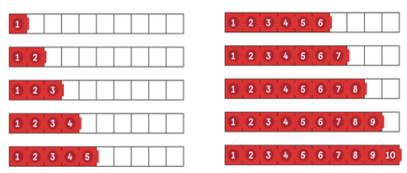
Then we learn about 0.

Counting with objects:



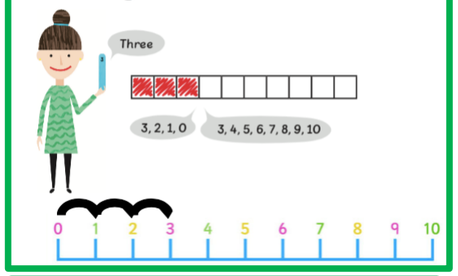
Physical objects Tens squares

Counting with objects:

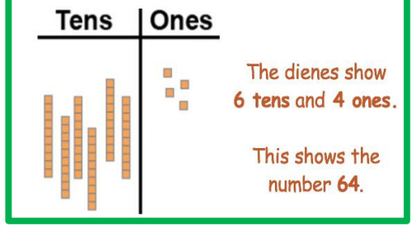


Using multilink cubes

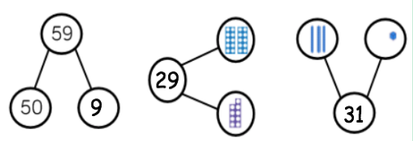
Counting with number lines:



Dienes to represent numbers:

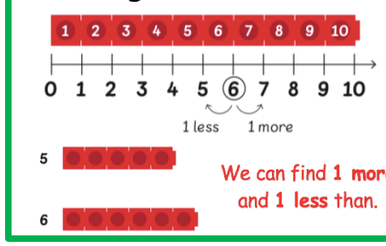


Number bond method:



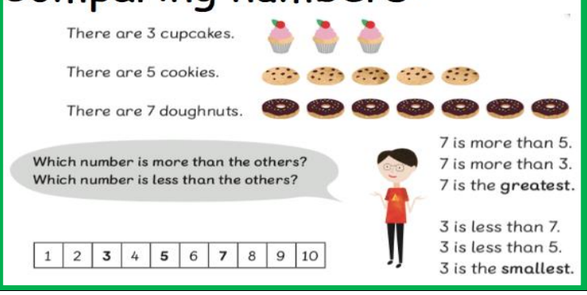
Separating the numbers apart like this is called **partitioning.**

Ordering numbers:



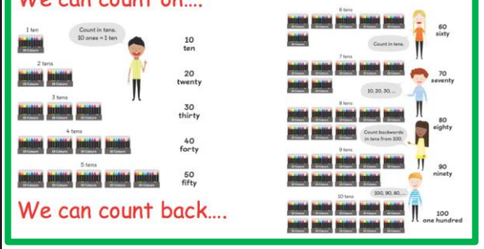
We can find **1 more** and **1 less** than.

Comparing numbers:



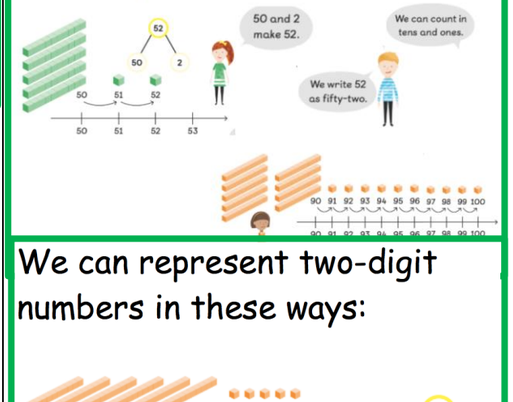
Counting in tens to 100:

We can count on....

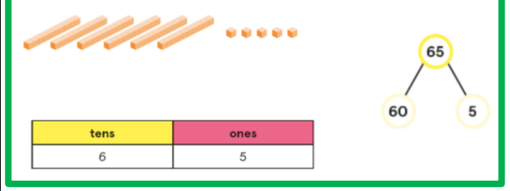


We can count back....

Counting in tens and ones:

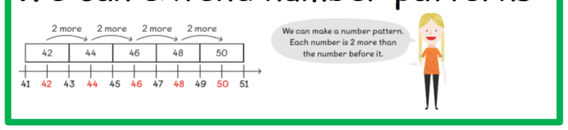


We can represent two-digit numbers in these ways:

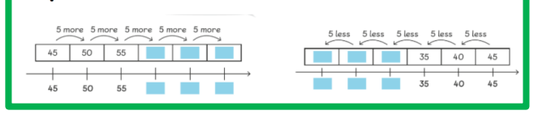


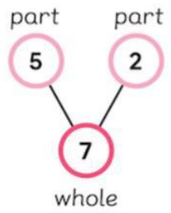
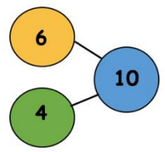
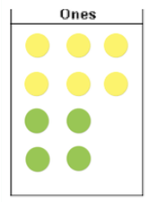
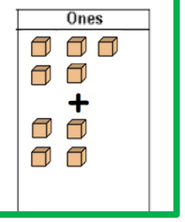
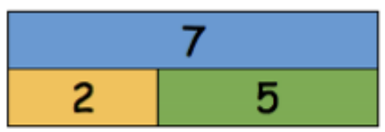
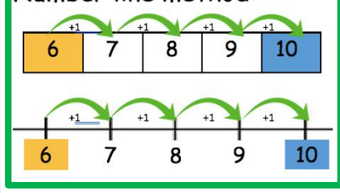
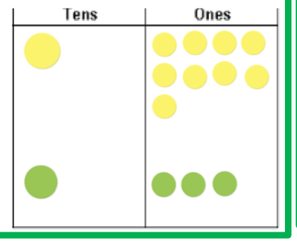
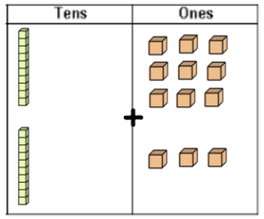
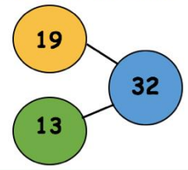
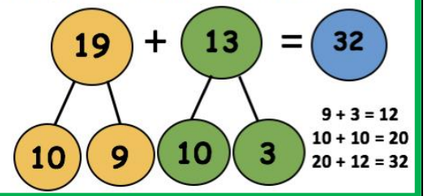
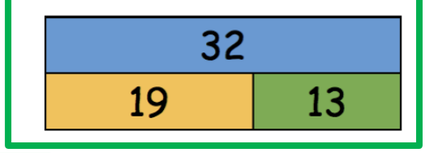
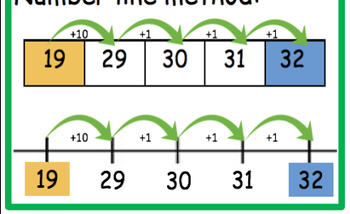
Comparing numbers: using more than and less than signs (> and <)

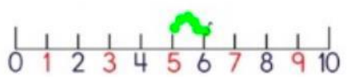
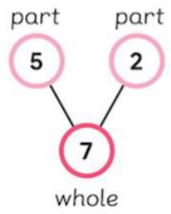
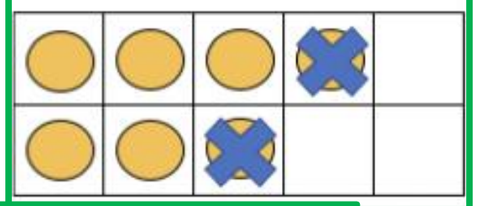
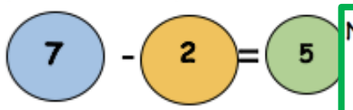
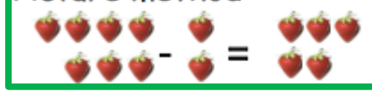
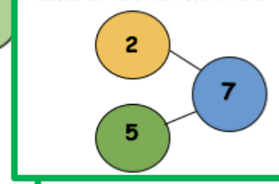
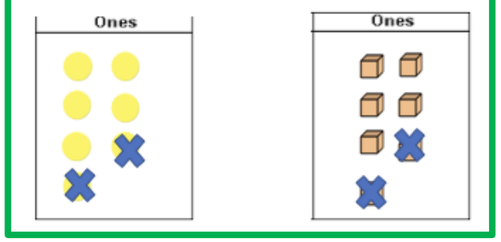
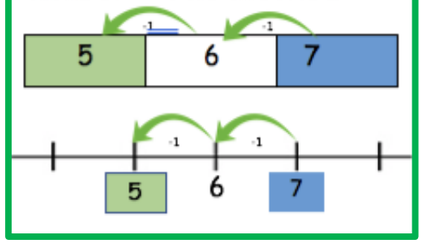
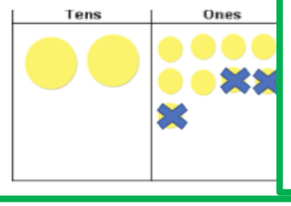
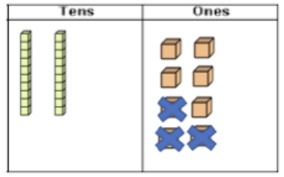
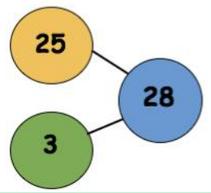
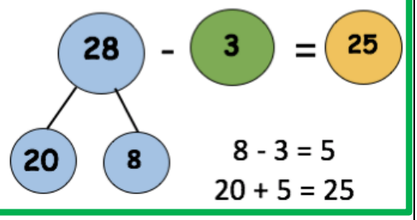
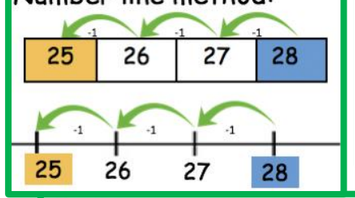
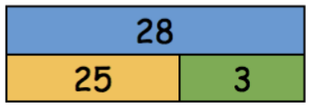
We can extend number patterns:

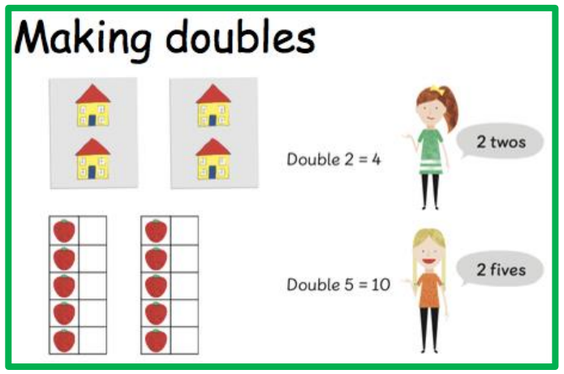
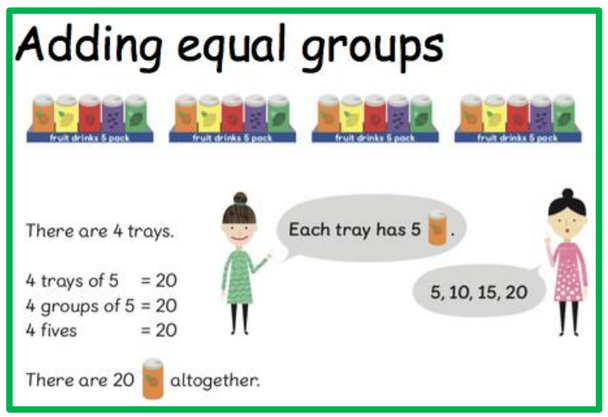
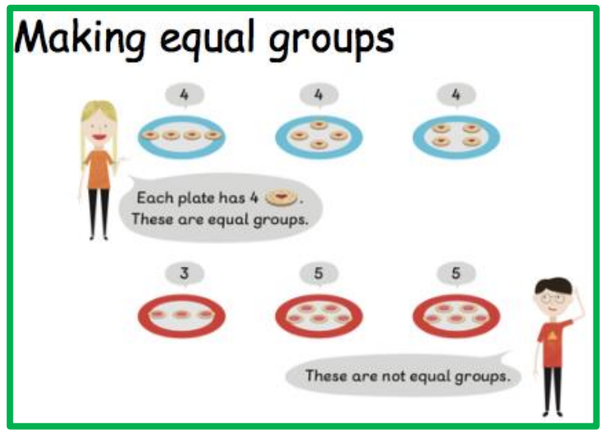
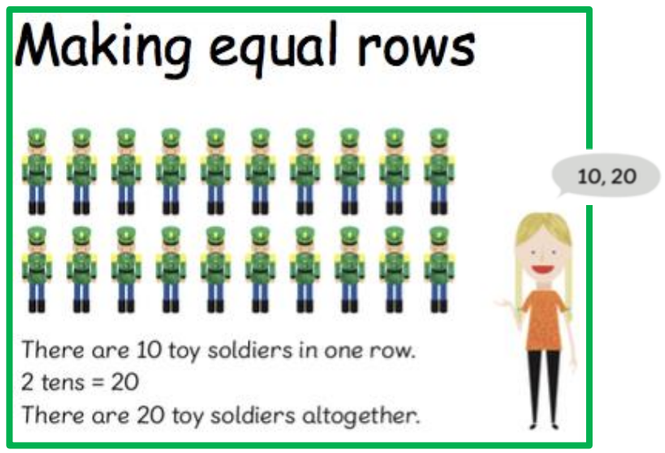
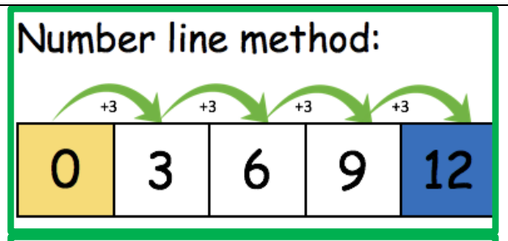
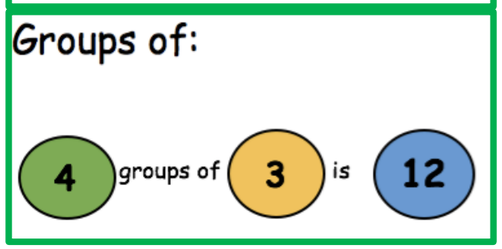
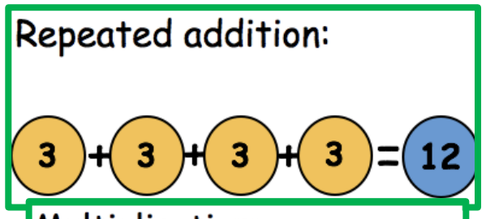
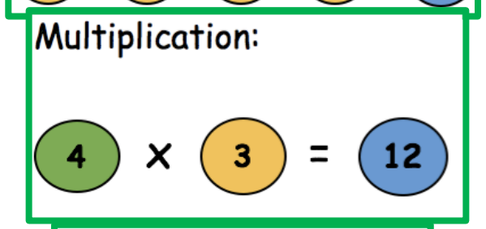
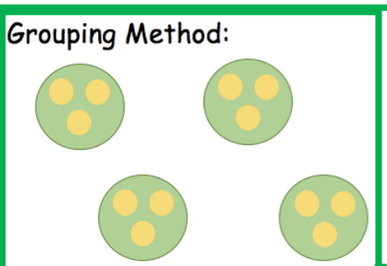
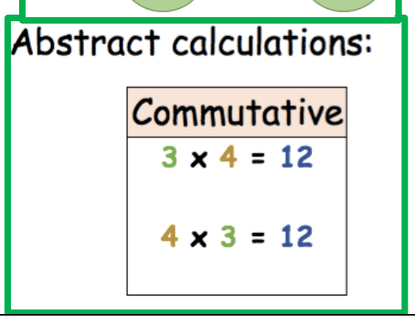


We can find the missing numbers in patterns:



Main Principles	Foundation	Year 1 (U + U)	Year 2 (TU + TU)
Addition Key written methods to be taught. Potential mental methods for extension.	**Number bonds using Tens frame:** Tens frame: Children will be able to use a tens frame to find number bonds to 10. The tens frame shows 6 + 4 = 10 **Part-part-whole model:**   Children will use the part-part-whole diagram to add and subtract numbers.	**Tens strip:** Count on from the biggest number: 6 + 4 = 10 Tens frame: Number bond method:  **Number bond method:** 6 + 4 = 10 Picture method: Counters method:  Base 10 method:  **Bar model:**  Number line method:  Abstract calculations: Commutative: 2 + 5 = 7; 5 + 2 = 7 Inverse: 7 - 5 = 2; 7 - 2 = 5	**Counters method:**  **Base 10 method:**  Number bond method:  **Number bond method:**  **Column addition:** Without renaming: 18 + 11 = 29 With renaming: 19 + 13 = 32 (1) Expanded method: 19 + 13; 12; 20; 32 **Bar model:**  Number line method:  Abstract calculations: Commutative: 19 + 13 = 32; 13 + 19 = 32 Inverse: 32 - 13 = 19; 32 - 19 = 13

Main Principles	Foundation	Year 1 (U - U)	Year 2 (TU – TU)
Subtraction Key written methods to be taught. Potential mental methods for extension	**Number lines:**   Children will be able to use a number line to count, as well as using it to take away or add one. This will be for numbers up to 20. **Part-part-whole model:**   Children will use the part-part-whole diagram to add and subtract numbers.	**Tens strip:**  Count back from the biggest number: 7 - 2 = 5 **Tens frame:**  **Number bond method:**  **Picture method:**  **Number bond method:**  **Counters method:** **Base 10 method:**  **Number line method:** 	**Counters method:**  **Base 10 method:**  **Number bond method:**  **Number bond method:**  **Number line method:**  **Bar model:**  **Column subtraction:** Without renaming: 28 - 3 = 25 With renaming: 23 - 19 = 4 Expanded method: 29 - 14 = 15 **Abstract calculations:** Commutative: 25 + 3 = 28; 3 + 25 = 28 Inverse: 28 - 3 = 25; 28 - 25 = 3

Main Principles	Foundation	Year 1	Year 2
Multiplication Key written methods to be taught. Potential mental methods for extension	 	 	     

Main Principles	Foundation	Year 1	Year 2
Division Key written methods to be taught. Potential mental methods for extension