

THE LINE OF 20

The alternative to coloured rods
which has revolutionised maths teaching in primary school.

WHAT IS IT?

The Line of 20 is a small tool capable of developing the mechanics of calculation by following the same procedure we use with our hands.



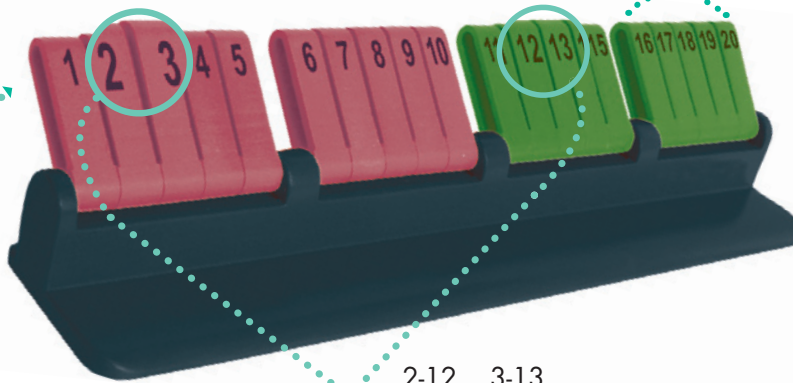
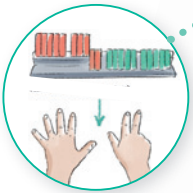
It's like using a tablet: if you give one to children, they would start playing with it using the images



Camillo Bortolato
The Line of 20
The analogical method for learning calculation
Book+tool

HOW IS IT DONE?

The 5 pegs remind us of our fingers



The fives are separated because the amount is perceived, through the grouping of the pegs.

2-12... 3-13...
are number 'cousins'

HOW DOES IT WORK?

7+8 using the Line of 20: the dialogue between the tool and the mind



The mind dictates the idea of the number 7 and composes it on the tool



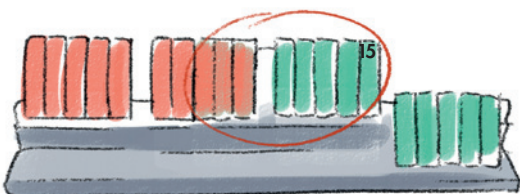
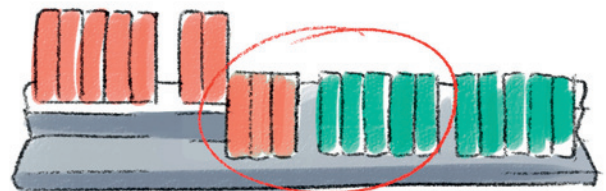
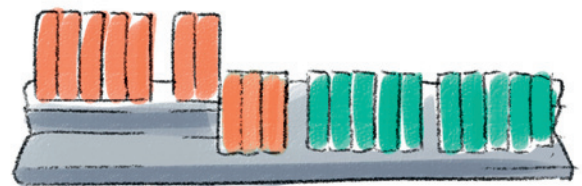
The eyes no longer see the number 7 but 5 pegs + 2



The mind dictates the idea of the number 8 and composes it on the tool



The eyes no longer see the number 8 but 5 pegs + 3



The result 15 is read on the tool as the sum of 10+5, without any counting having been performed



This is the
analogical
method!

The Analogical Method

It was conceived by teacher Camillo Bortolato and it is used in thousands of primary schools because of its immediacy and effectiveness



Camillo Bortolato
He has been teaching in primary school for forty years



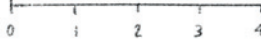
It is an extremely simple, intuitive and scientific-based method for learning maths.

It applies at-a-glance perception, which is the main condition of our way of living, to learning.



In Italy, more than **500,000 pupils** have successfully adopted the Analogical Method.

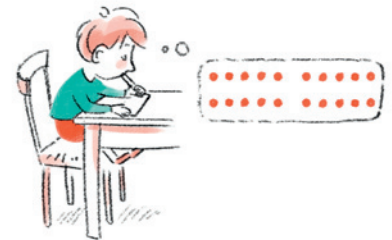
WHAT HAPPENS IN MENTAL CALCULATION WHEN USING THE ANALOGICAL METHOD



Digits don't matter

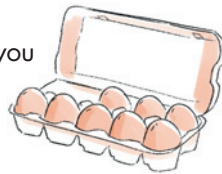


Dots don't matter



It's the space in which we arrange the dots that matters.

For instance, just a glance at this egg carton will tell you how many eggs there are and how many are missing



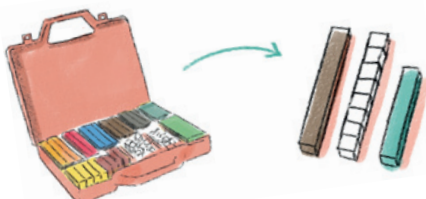
COLOURED RODS AND LINE OF 20: WHAT'S THE DIFFERENCE?

If you open a box of coloured rods and look for the number 8, it is difficult to find it if you don't know what colour it is if you don't line up the 1 as many times as necessary to count 8.

Why?

Because you only have the cardinal dimension!

You immediately miss the ordinal number size, which is the position of a number in relation to other numbers.



With The Line of 20

Pupils recognize the tool as a representation of their hands. **The analogy is immediate!**

