

Material can be found at "newmero academy": www.newmero.net

Age: 4-6 years

Purpose of the exercise:

- Teach children to count to 20.
- Teach children that the numbers 11 to 19 consist of a 10 and some 1s.
- Teach children that 20 is the next "10'er" after 10 – namely "two 10s".

What should the children discover themselves:

- The children should discover themselves how the numbers 11 to 19 are built up – e.g. that 15 is simply a 10'er and a 5'er (brick).
- As an additional game or exercise, the children can try to build the numbers 21 to 29 and – again – discover the same structure, e.g. that 25 is just a 20 and a 5.

How should the teach be helpful without giving the answers directly:

- The teacher can explain how the bricks can be stacked to (literally) build the numbers 11, 12, and 13.
- The teacher counts with the children from 1 to 20 and asks the children to help build the numbers.


Which material should be used for the lecture:


- The yellow bricks and the bricks 10 and 20 (green).
- Some printouts for distribution – The "Pupil material" pages
- A smartboard/large screen could be used to show the following pages so the children know how to use the bricks to complete the "Pupil material" pages

We count together to 20!

"One", "two", "three", ... "Ten!"

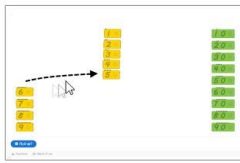
"Eleven", "twelve", "thirteen",
... "Twenty!"

Who is this? 

And who is this? 

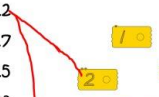
This page is not shown to pupils
We now build the numbers together (1/4)


1. It is recommended that the teacher uses a Smartboard or a large screen and a "Drag and drop" board with 1s and 10s from (newmero.net > Boards) e.g. newmero.net/?page_id=512
2. Count again (slowly) from 1 to 10, while simultaneously dragging the yellow 1s bricks out and placing them in the middle of the board. Below is shown when, e.g., 5 is reached.





Which bricks should be used?


Name: _____
Name: _____
Class: _____


How do you build: 12 


How do you build: 17 


How do you build: 15 


How do you build: 13 

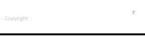
How do you build: 14 


How do you build: 11 

How do you build: 16 

How do you build: 19 

How do you build: 18 

How do you build: 23 

How do you build: 27 

Start by counting from 1 to 20.
Show a 10 and a 20.

.. start over again by counting, but now show how the numbers 11 to 19 can be built up

.. and show examples of how the answers are noted down

We count together to 20!

"One", "two", "three", "Ten!"

"Eleven", "twelve", "thirteen",
... "Twenty!"

Who is this?

10

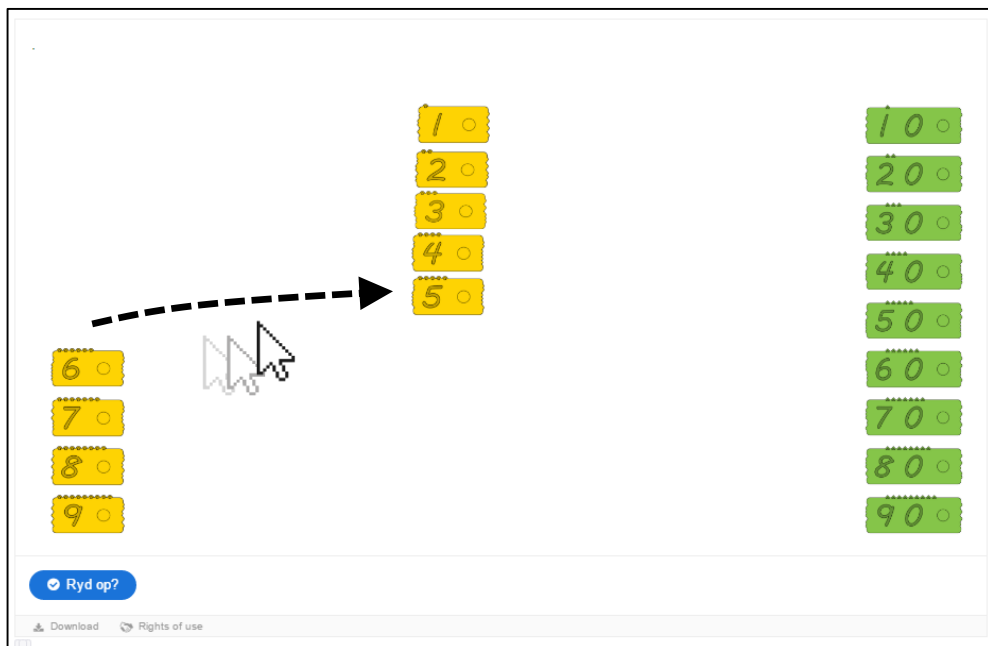
And who is this?

20

This page is not shown to pupils

We now build the numbers together (1/4)

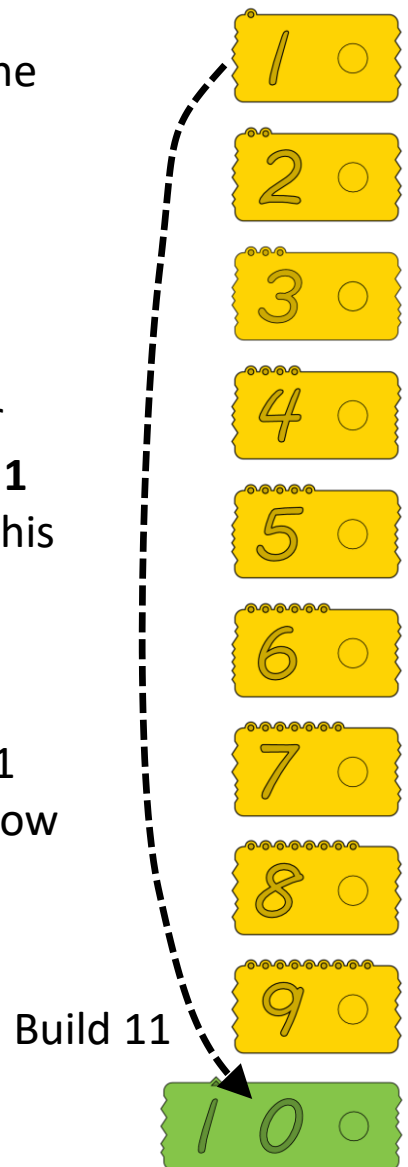
1. It is recommended that the teacher uses a Smartboard or a large screen and a "Drag and drop" board with 1s and 10s from (newmero.net > Boards) e.g. newmero.net/?page_id=512
2. Count again (slowly) from 1 to 10, while simultaneously dragging the yellow 1s bricks out and placing them in the middle of the board. Below is shown when, e.g., 5 is reached.



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We now build the numbers together (2/4)

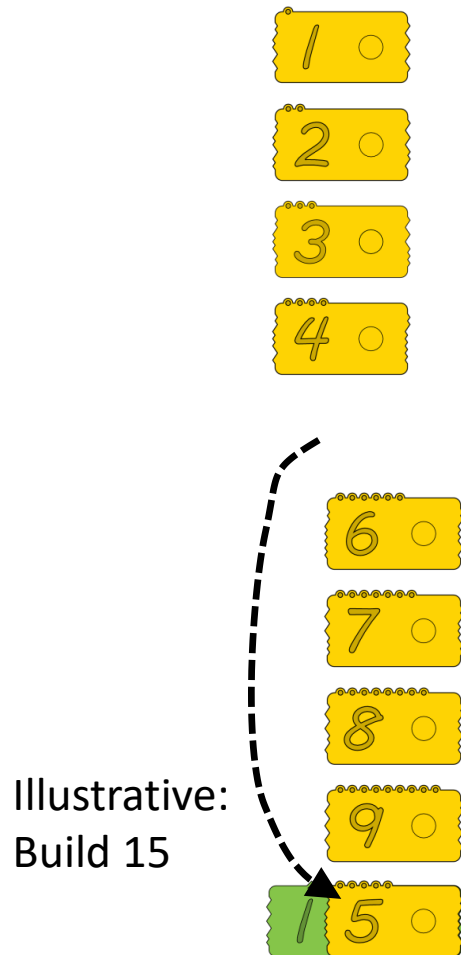
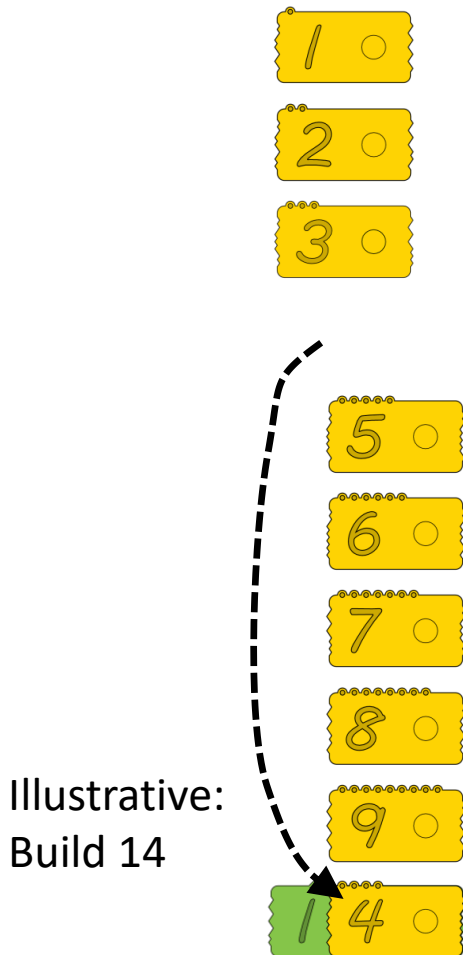
3. When you reach **10**, the teacher stops up and asks the pupils if they **have noticed something** – here the pupils must themselves be able to say that the last brick is “larger” or “green” .. It is different.
4. Then you ask what comes next (after 10)? (The children should answer themselves: **11**)
5. When the children say 11, the teacher shows that **11 can be built by moving 1 down on top of 10**. The teacher says this is 11. On the smart board, **1 can be moved back and forth above 10**, to show that 11 is just a 10 and a 1. The children can try themselves to build 11 with their bricks. The teacher shows how the physical bricks can be stacked.
6. Then you ask what comes after 11?



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We now build the numbers together (3/4)

- When the children say 12, the teachers moves 1 away from the 10, places the 1 back on top of the line, takes the 2 instead and places it down on top of 10.

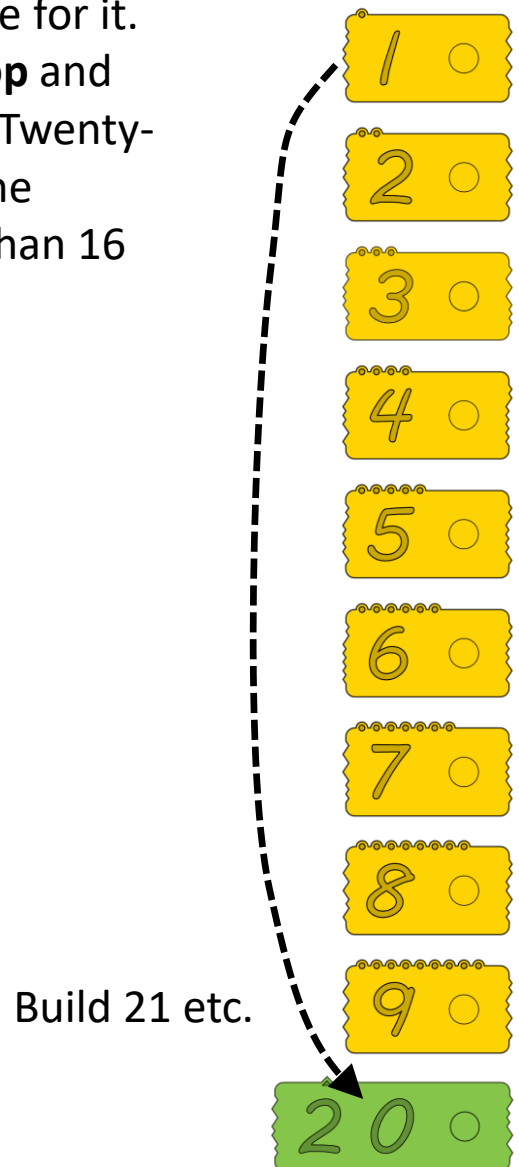


- This is **repeated till you reach 19**.
- At the end you show the 20 brick.

This page is not shown to pupils

We now build the numbers together (4/4)

10. After 20 has been introduced, the teacher can proceed a bit further, if the pupils show interest and appetite for it.
11. Now build 21, 22, .. **but then stop** and ask about how one builds 26? ("Twenty-six"). This is actually easier for the children to decode sound wise than 16 ("Sixteen").



Which bricks should be used?

Name: _____

Name: _____

Class: _____

How do you build: 12

How do you build: 17

How do you build: 15

How do you build: 13

How do you build: 14

How do you build: 11

How do you build: 16

How do you build: 19

How do you build: 18

How do you build: 23

How do you build: 27

The image shows a vertical list of numbers from 11 to 27. To the right of each number is a yellow brick with a number and a dot, representing a building block. A red line starts at the number 12 and goes down to the number 19. The bricks for 10 and 20 are green, while the others are yellow.

Number	Brick 1	Brick 2
12	1	2
17	1	6
15	2	6
13	3	7
14	4	8
11	4	8
16	5	9
19	10	20
18	10	20
23	20	3
27	20	7