



## CURRICULUM FOR Early Math

# Building Numbers to 10

## Activity #1 Number Sequence with Brain Blox

### Skills & Concepts they will LEARN:

- Introduction to Number Sense
  - Quantification of numbers
  - Number identification
  - Number representation
  - Counting to 10
  - One-to-one correspondence
- Fine motor skills
- Early reading concepts (moving the eye from left right)

### What they will NEED:

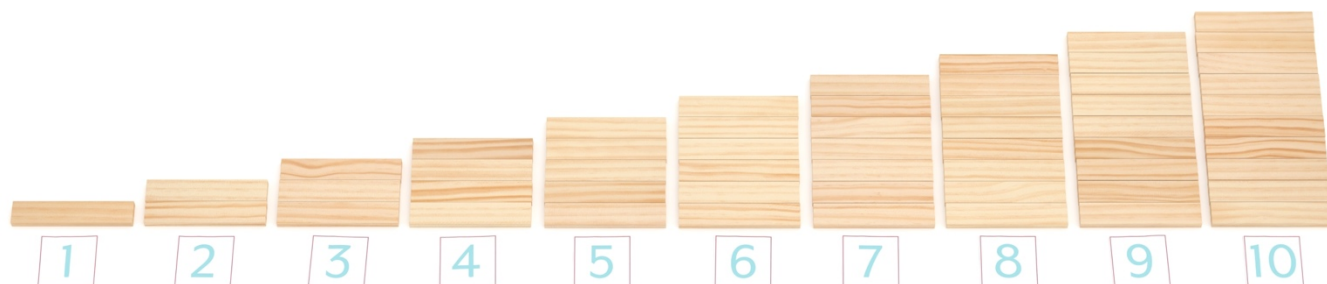
- 100 Brain Blox Building Planks
- Number Cards to 10

### What they will DO:

Demonstrate the following steps slowly for the child first, then have them follow the steps on their own with your gentle guidance.

1. Place your Number Cards from 1-10 sequentially in a horizontal line in front of you.
2. Choose 1 Brain Blox Plank and place it above the "1" card (the plank should be lying flat, horizontally)
3. Repeat step 2 for the remaining numbers, placing the correct number of planks above each number card

*\*Ideally, you will have enough room to put all 10 columns along 1 row so the child can better visualize how larger numbers represent larger quantities (plank columns get taller).\**



Guide the child through each column, pointing to the “1” card, saying “one”, and then pointing to, or picking up the corresponding plank and saying “one”, showing that written numbers represent quantities (number representation).

- Ask the child what they notice about each column of planks. Try to guide them to notice how each column gets taller & taller the further you move to the right.
- Keeping the planks in their position over the number cards, stack each column of planks on top of one another. This is a practice in balancing, fine motor and also another visualization of how larger numbers represent larger *quantities*.
- Invite the child to hold the planks from column 10 in one hand and the plank from column 1 in the other. Ask them if they notice anything. (Hint: 10 planks are heavier than 1 plank – this is another concrete way of grasping the concept of numbers)

## Activity #2 Equation Building with Brain Blox

*\*Complete Activity #1 before beginning Activity #2 as it utilizes the same set-up\**

### Skills & Concepts they will LEARN:

- Introduction to Number Sense
  - Quantification of numbers
  - Simple Addition
  - Number identification
  - Number representation
  - Counting to 10
  - One-to-one correspondence
- Fine motor skills
- Early reading concepts (moving the eye from left right)

### What they will NEED:

- 100 Brain Blox Building Planks
- Number Cards to 10
- Plus Sign (+) Card and Equals Sign (=) Card

## What they will DO:

Using your set-up from Activity #1, demonstrate the following steps slowly for the child first, then have them follow the steps on their own with your gentle guidance.

1. Choose the Number Card "1" and its corresponding number of planks
2. From left to right, lay out the plank(s), equals sign card, and number card. Point to the plank and say "one", point to the equals sign and say, "equals" and point to the number 1 and say "one". Remember to go slowly to let the child absorb the way quantities are represented by numbers. *\*For the number 1, this is your final step. For numbers 2-10, continue to step 3.\**



3. Place your plus sign card to the left of your planks and move 1 of the planks to the left of the plus sign to represent an equation. *(See picture below for an example of how each equation will be built. For numbers 3-10 you'll have the opportunity to make multiple equations as you follow step 4)* Remember to go slowly, pointing to each part of the equation and saying it aloud for the child.



4. Continue moving one plank at a time to the left of the plus sign to show all of the equations that equal the number you are working with. (for example: when working with the number 6 you will end up creating 5 equations:  $1+5=6$ ,  $2+4=6$ ,  $3+3=6$ ,  $4+2=6$ , and  $5+1=6$ . Point out the associative properties of addition by showing that  $2+4$  is the same as  $4+2$  and so on!)

 $1 + 5 = 6$

 $2 + 4 = 6$

 $3 + 3 = 6$

 $4 + 2 = 6$

 $5 + 1 = 6$

\*\*\*If you would like to add in number cards for each equation to better emphasize number representation you'll need to print out an additional sheet of number cards.\*\*\*



1

2

3

4

5

6

7

8

9

10

+

=

11

12

13

14

15

16

17

18

19

20

<

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