

TOYBOX



Count On Nature

Math and Sticks!

Beginner: Collect and count sticks.

[Tip]: Ask “How many sticks did you find? I have 4.”

Intermediate: Create single digit numbers using sticks.

[Tip]: With 4 sticks, I can make the number 4 on the ground.

Experienced: Create double digit numbers using sticks.

[Tip]: With 12 small sticks, I can make the number 12 on the ground.

Why is this important? This activity helps children learn about counting and connects numbers to symbols, while enjoying nature.

Looking for more information? Scroll down for 10 Frames and a 100 Chart.

Reference: Witzel, B. S., Riccomini, P. J., & Herlong, M. L. (2013). Introduction to the characteristics of number sense. In Building number sense through the common core (pp. 1-10). Corwin Press, <https://www-doi-org.uwinnipeg.idm.oclc.org/10.4135/9781506335827.n1>

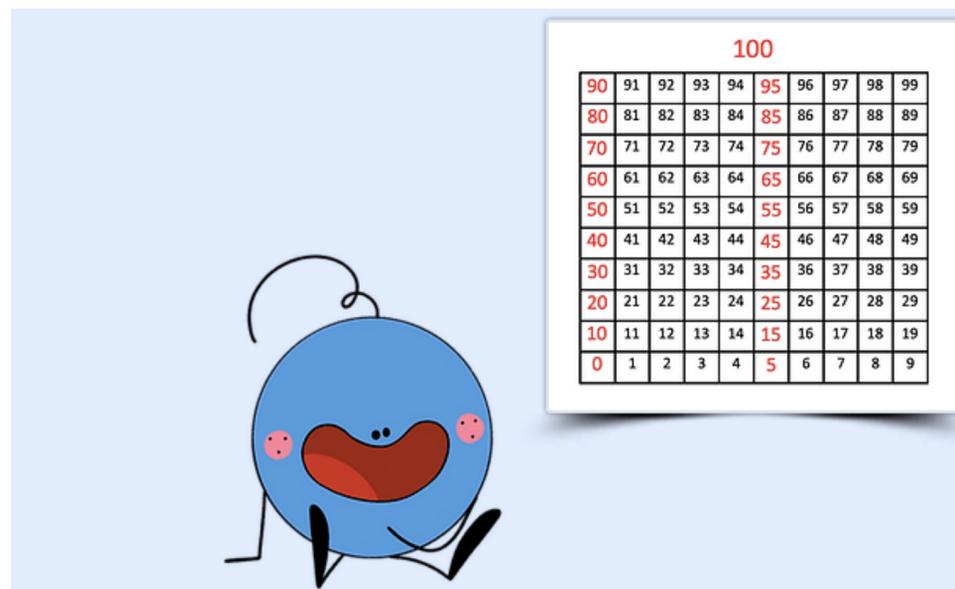


100 Chart

A 100 chart (or "hundreds chart") is a 10 by 10 grid that helps show connections between numbers. You can use this chart to talk about patterns in our base ten number system, and to explore concepts like skip counting and adding two-digit numbers.

There are many fun ways to use a 100 chart:

1. Use a small toy or rock to jump along the numbers as you count.
2. If you have access to a plastic sleeve and dry erase marker, have fun highlighting patterns that you find in the chart.
3. For example: The numbers in each row increase by 1
4. (1, 2, 3...), while the numbers in each column increase by 10 and end in the same digit (5, 15, 25...).
5. Make a game of skip counting by 2s, 5s, and 10s, or use as a visual tool to practice addition!



100

90	91	92	93	94	95	96	97	98	99
80	81	82	83	84	85	86	87	88	89
70	71	72	73	74	75	76	77	78	79
60	61	62	63	64	65	66	67	68	69
50	51	52	53	54	55	56	57	58	59
40	41	42	43	44	45	46	47	48	49
30	31	32	33	34	35	36	37	38	39
20	21	22	23	24	25	26	27	28	29
10	11	12	13	14	15	16	17	18	19
0	1	2	3	4	5	6	7	8	9

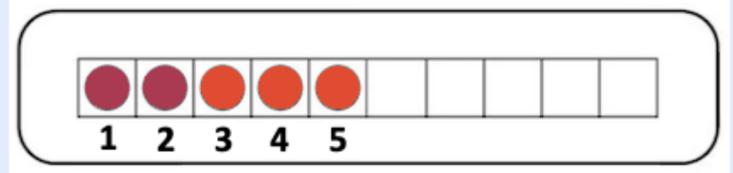
10 Frames

A 10 frame is a grid of equal spaces, 5 on top and 5 on the bottom. They are a great visual tool to see "how many" something is without having to count, which helps to establish number sense. 10 frames can also be used as a stepping stone to learn addition, by developing children's intuition about numbers and their relationships.

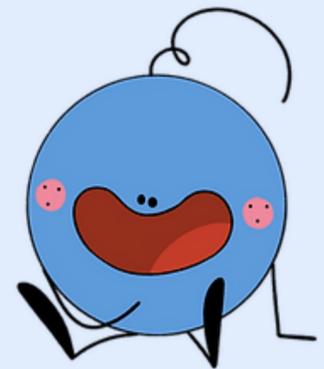
There are many fun ways to use a 10 frame:

1. Start with a blank 10 frame, and add small toys or rocks one at a time to count from 1 to 10. Count backwards from 10 to 1 by removing each item, one at a time.
2. Make a game of looking at filled 10 frames, and have your child identify the number.
3. Have your child order 10 frames from 0 - 10.

Tip: 6 sided dice are also a great tool to help learn "how many" something is without counting, as children start to become familiar with numbers!



$$2 + 3 = 5!$$



10	
9	
8	
7	
6	
5	
4	
3	
2	
1	
