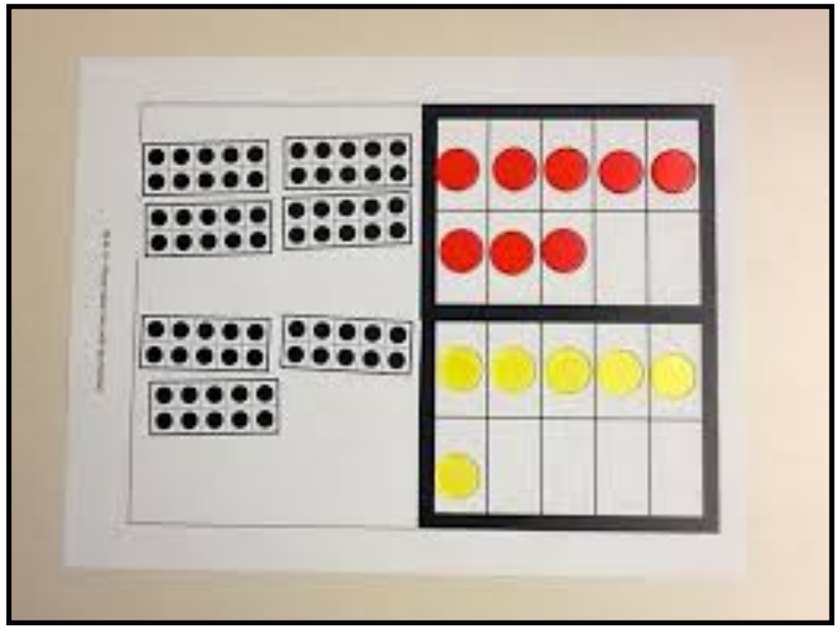
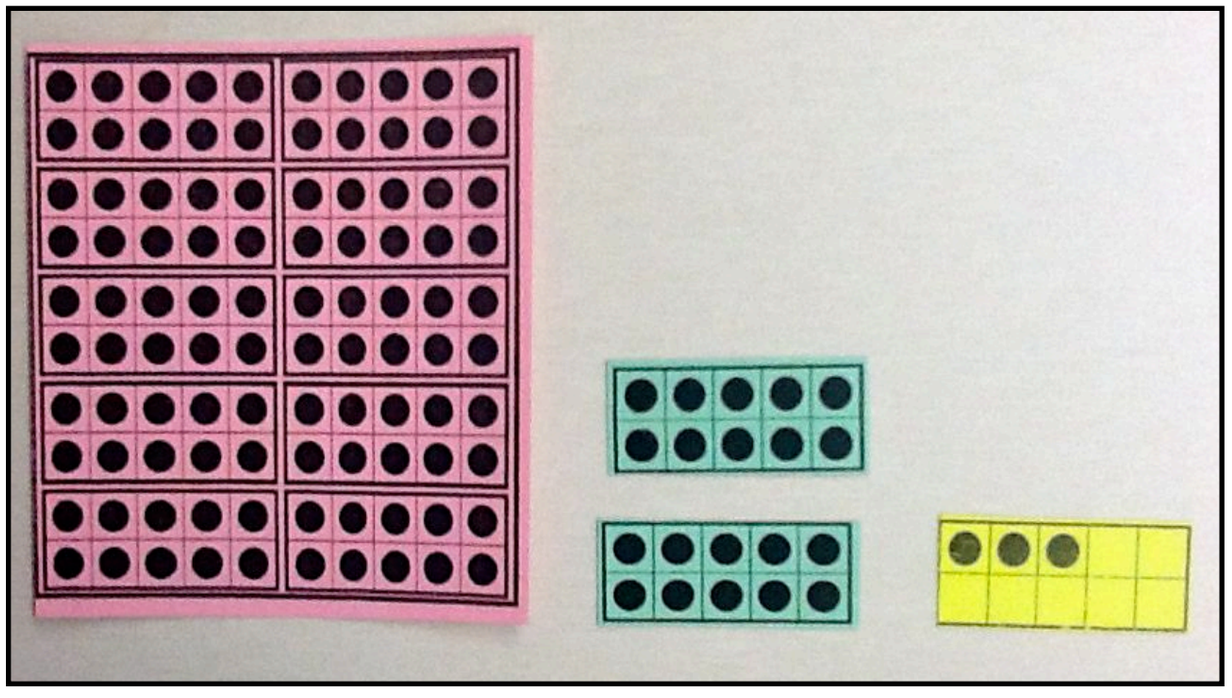
Using Ten Frames to Teach Addition with Whole and Decimal Numbers Gr. 2 - 5





April 8th, 2019

Jen Barker - Surrey Numeracy Helping Teacher
Website: meaningfulmathmoments.com
@barkerjBarker

Acknowledgement

Before going any further, it is important that we recognize that we are here today on the unceded, shared territories of the Coast Salish people on which our schools are located. We are so grateful and honoured to be able to live, learn, and create on these beautiful lands.

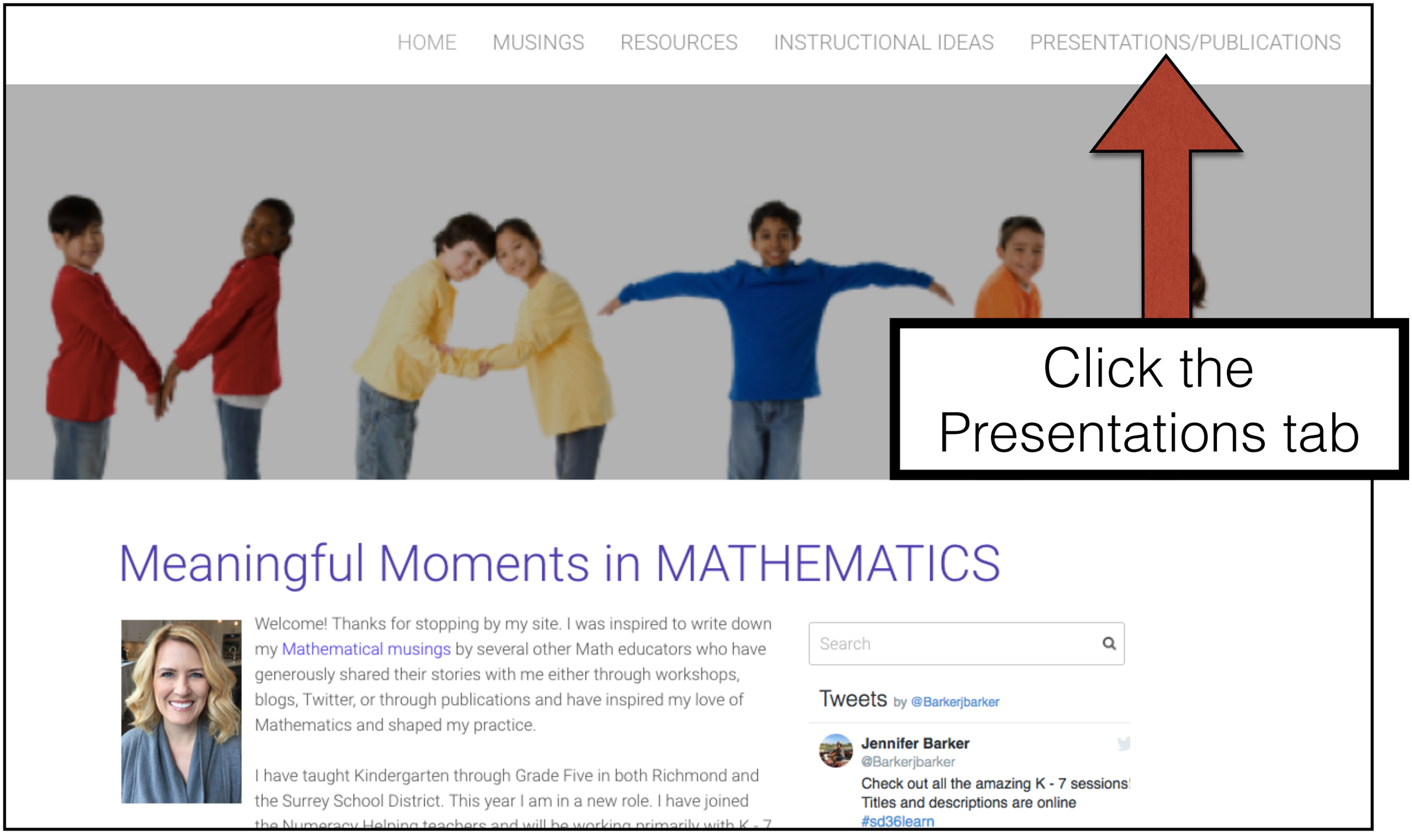
Learning Intentions

By the end of the session, I hope you will leave with:

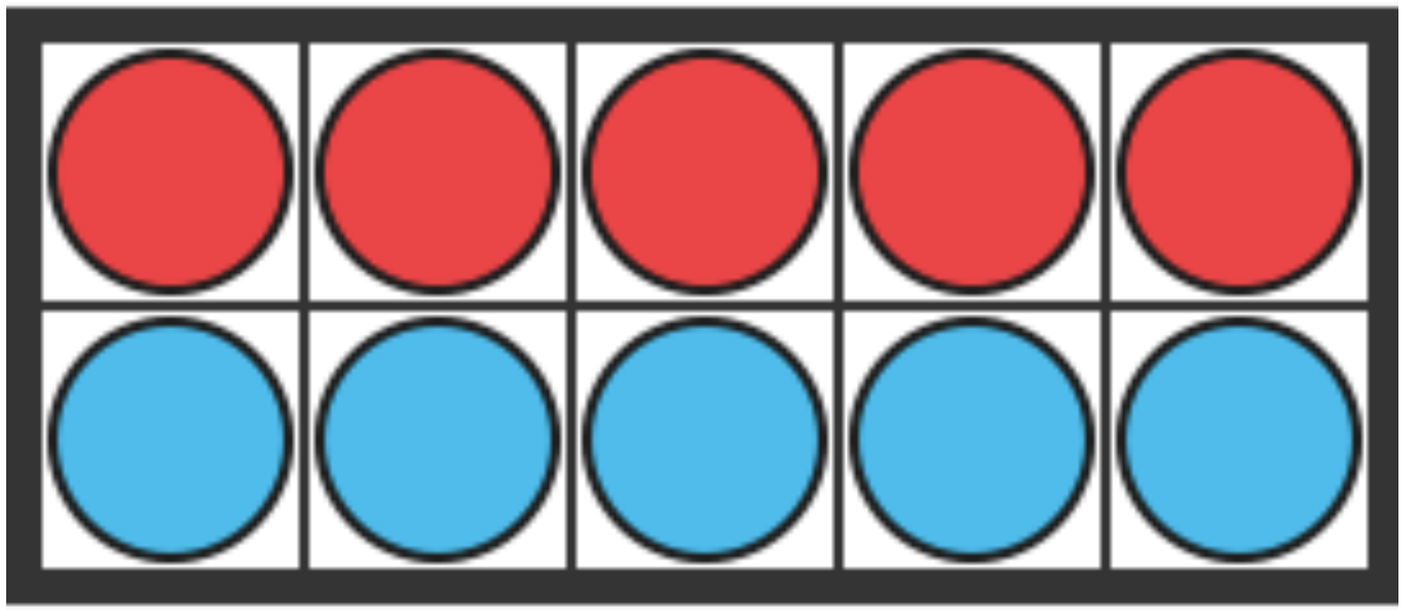
- Knowledge and understanding of why you might want to use ten frames to develop a conceptual understanding of addition.
- The developmental sequence of the learning experiences.
- Some ideas you want to try!

Where can you find this PPT?

www.meaningfulmathmoments.com



Why Use Ten Frames?



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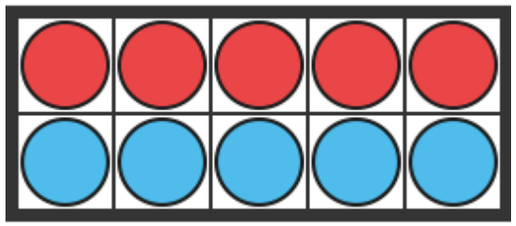

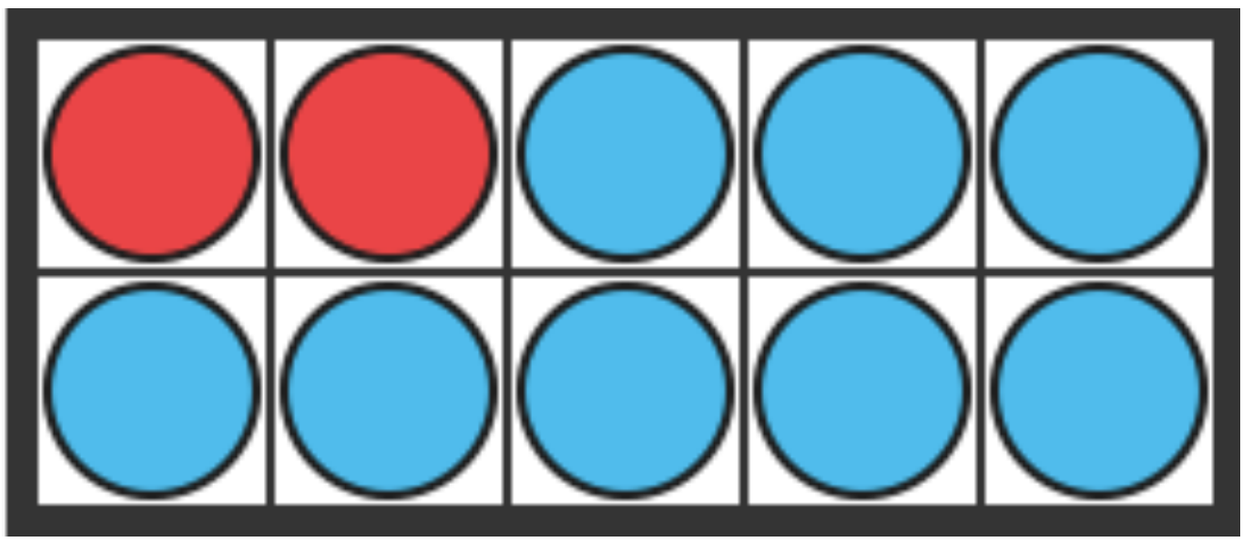

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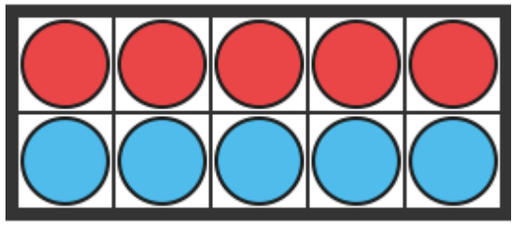

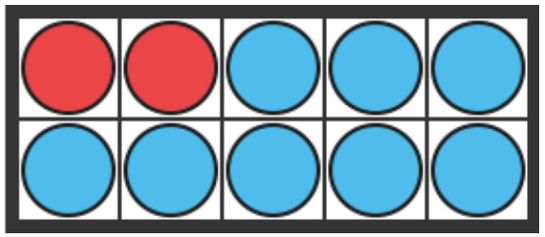

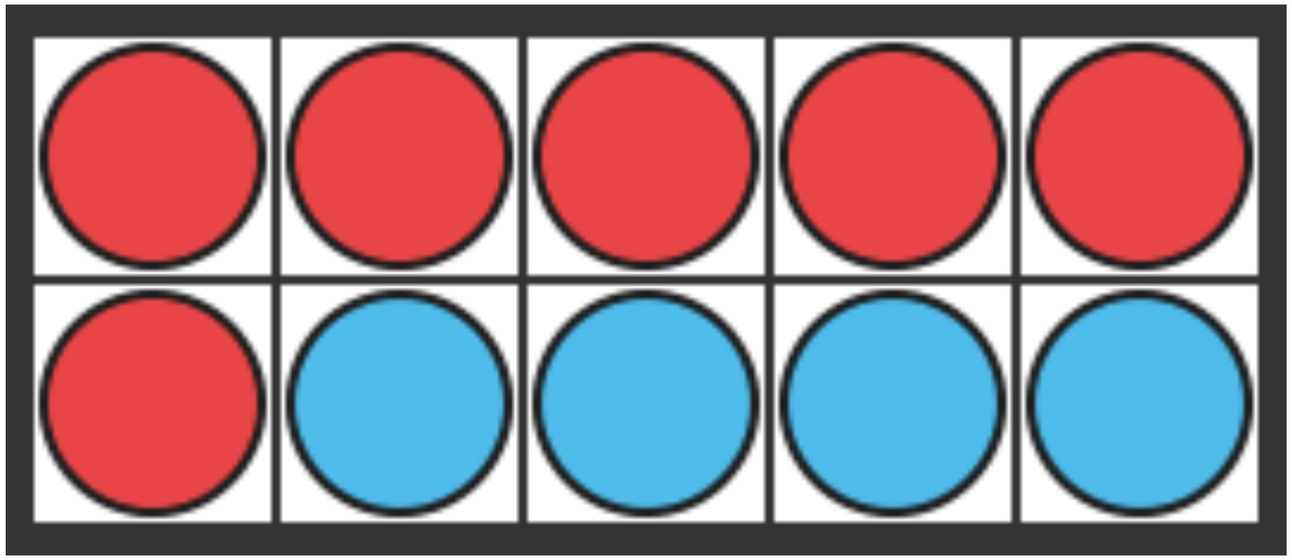

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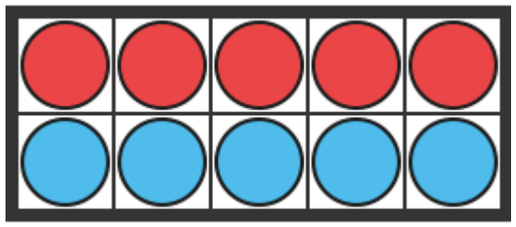

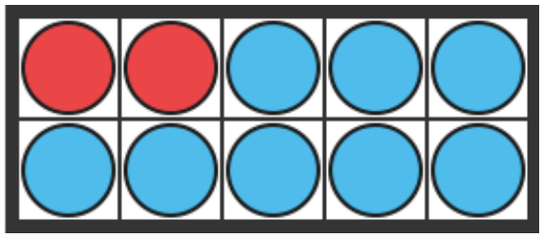

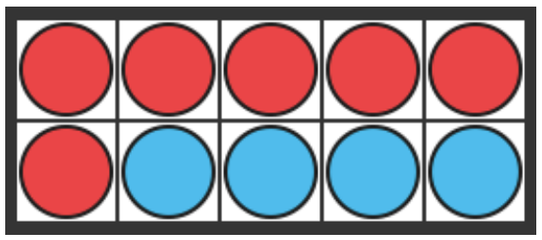

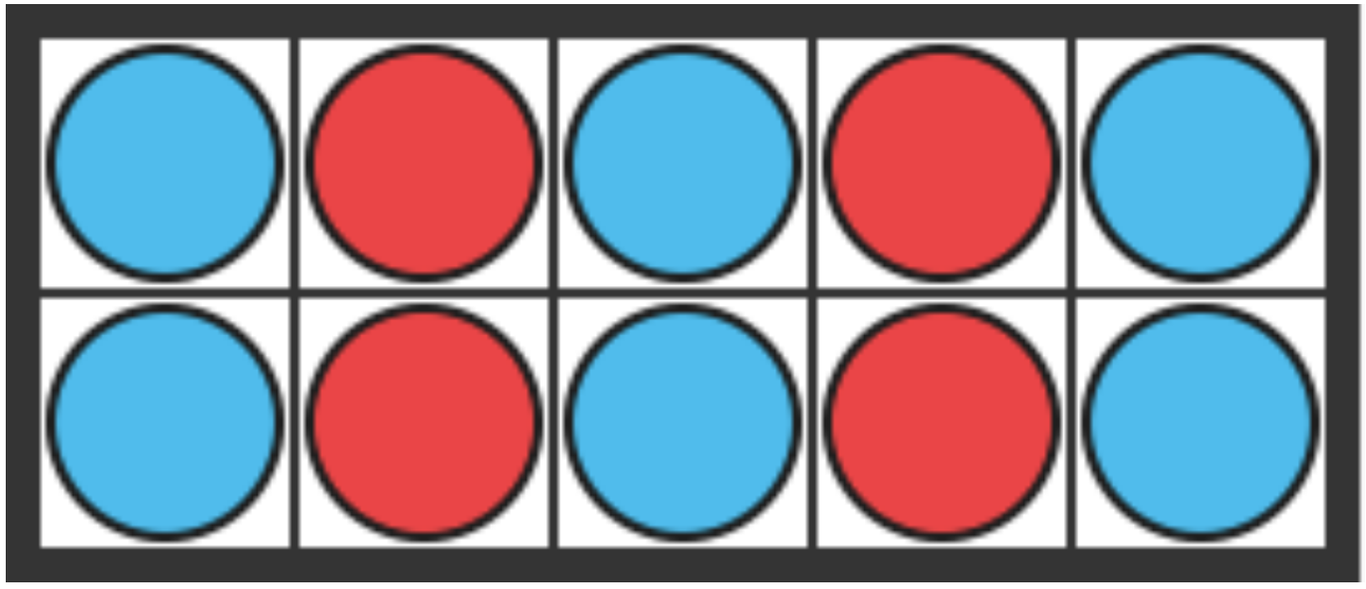

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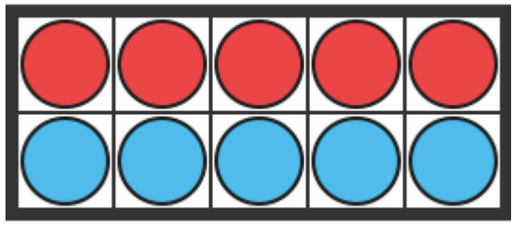
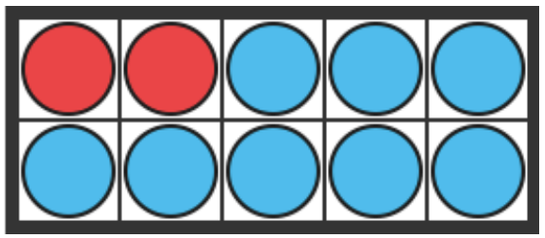
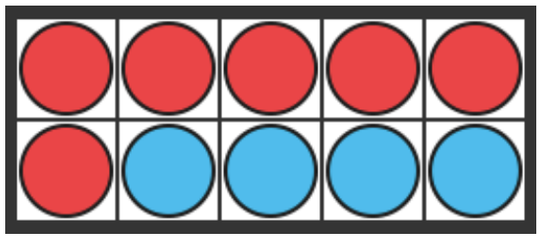
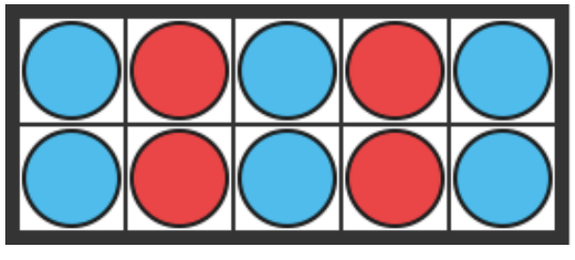
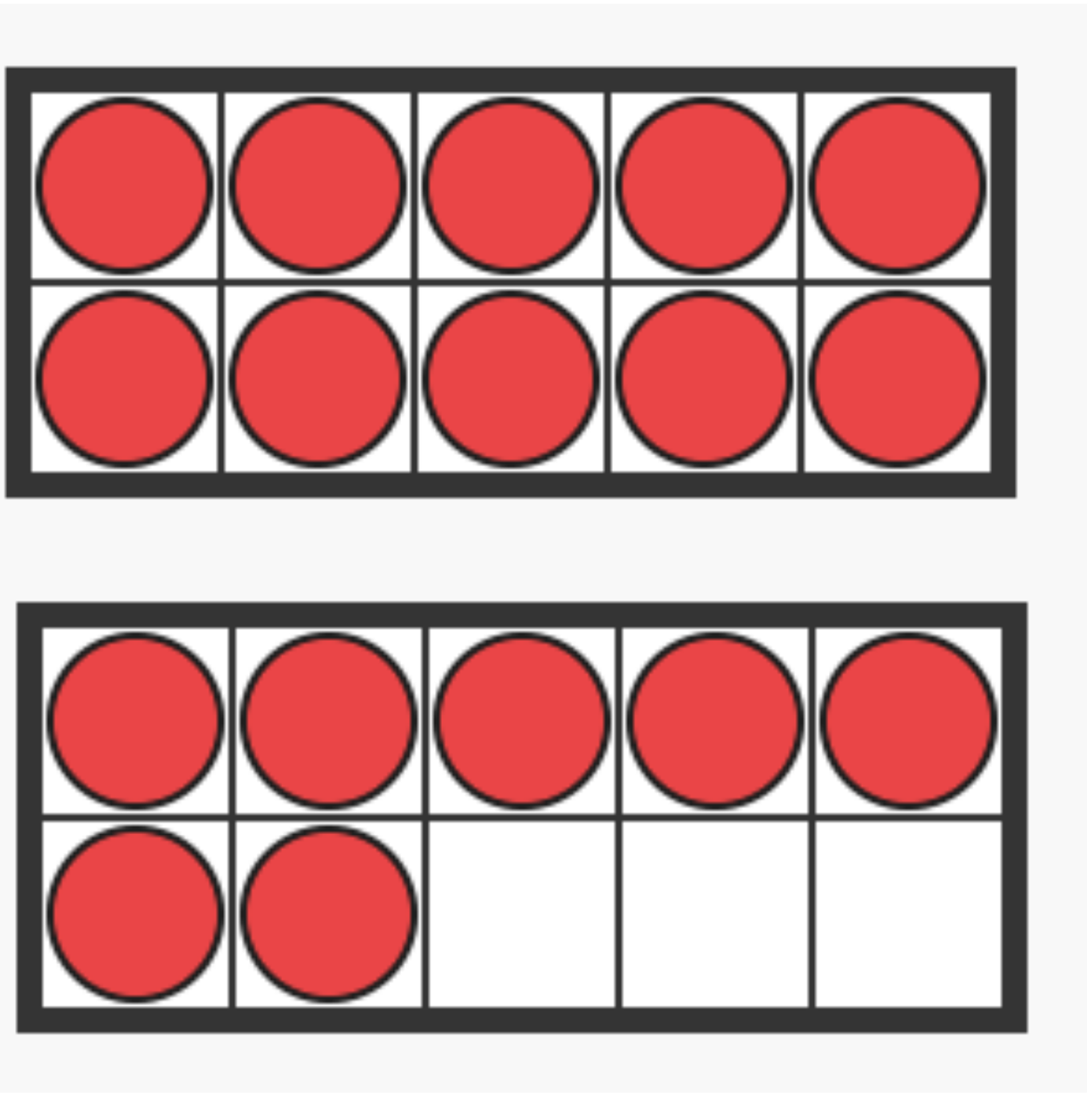


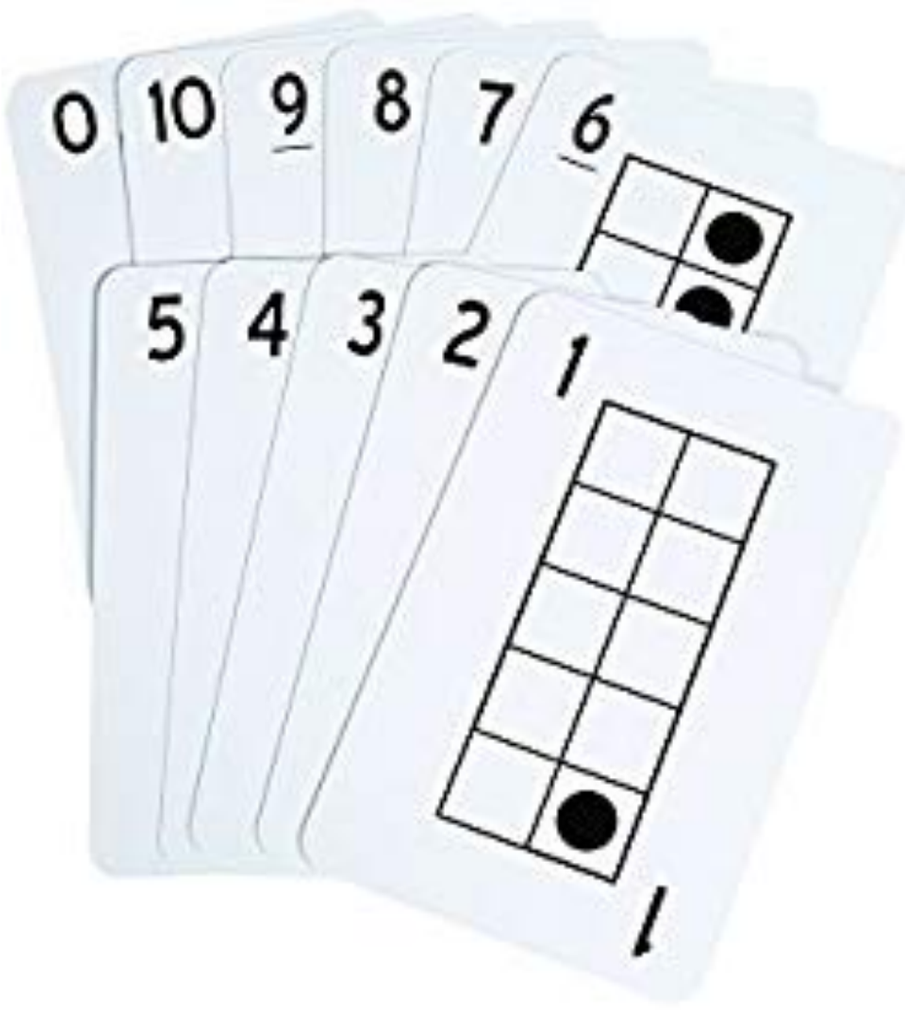


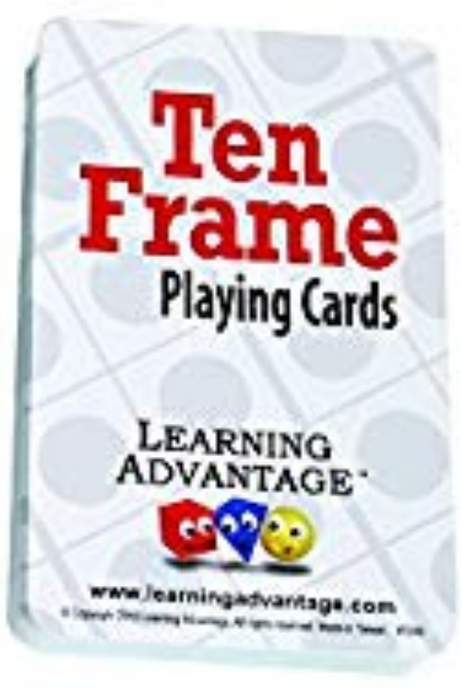


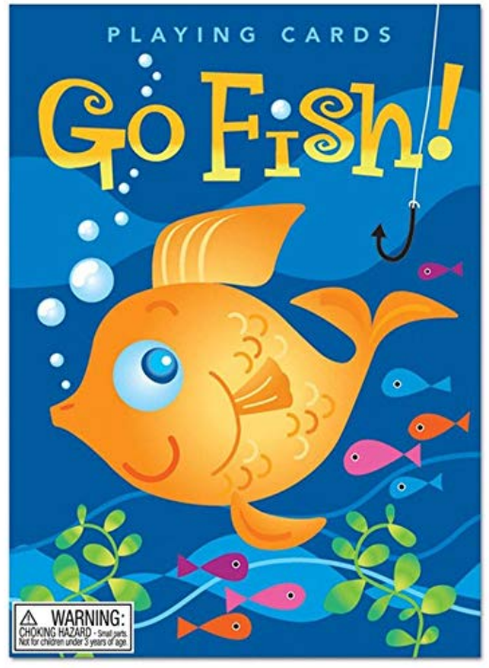




Students must become FAMILIAR with ten frames

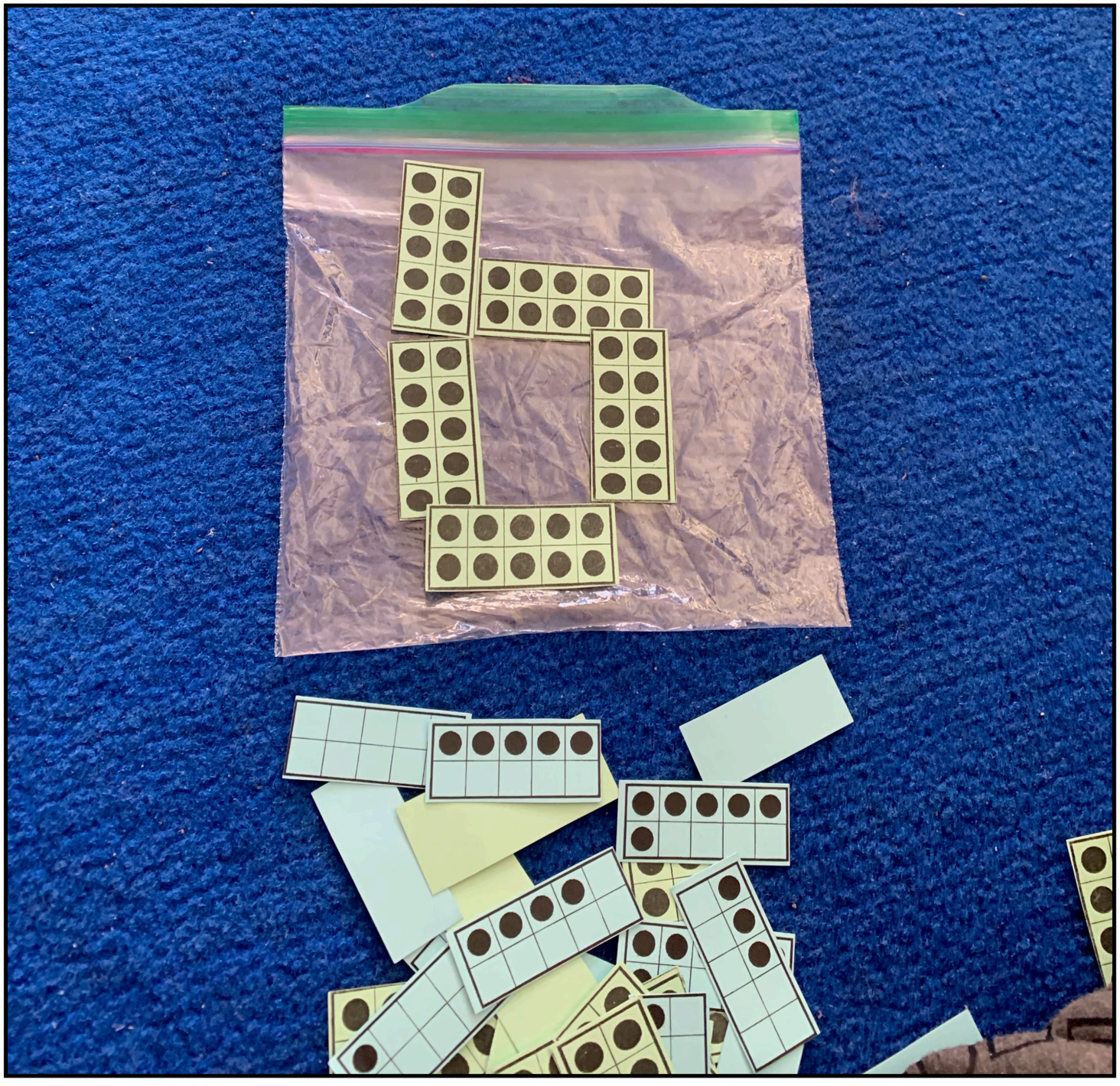


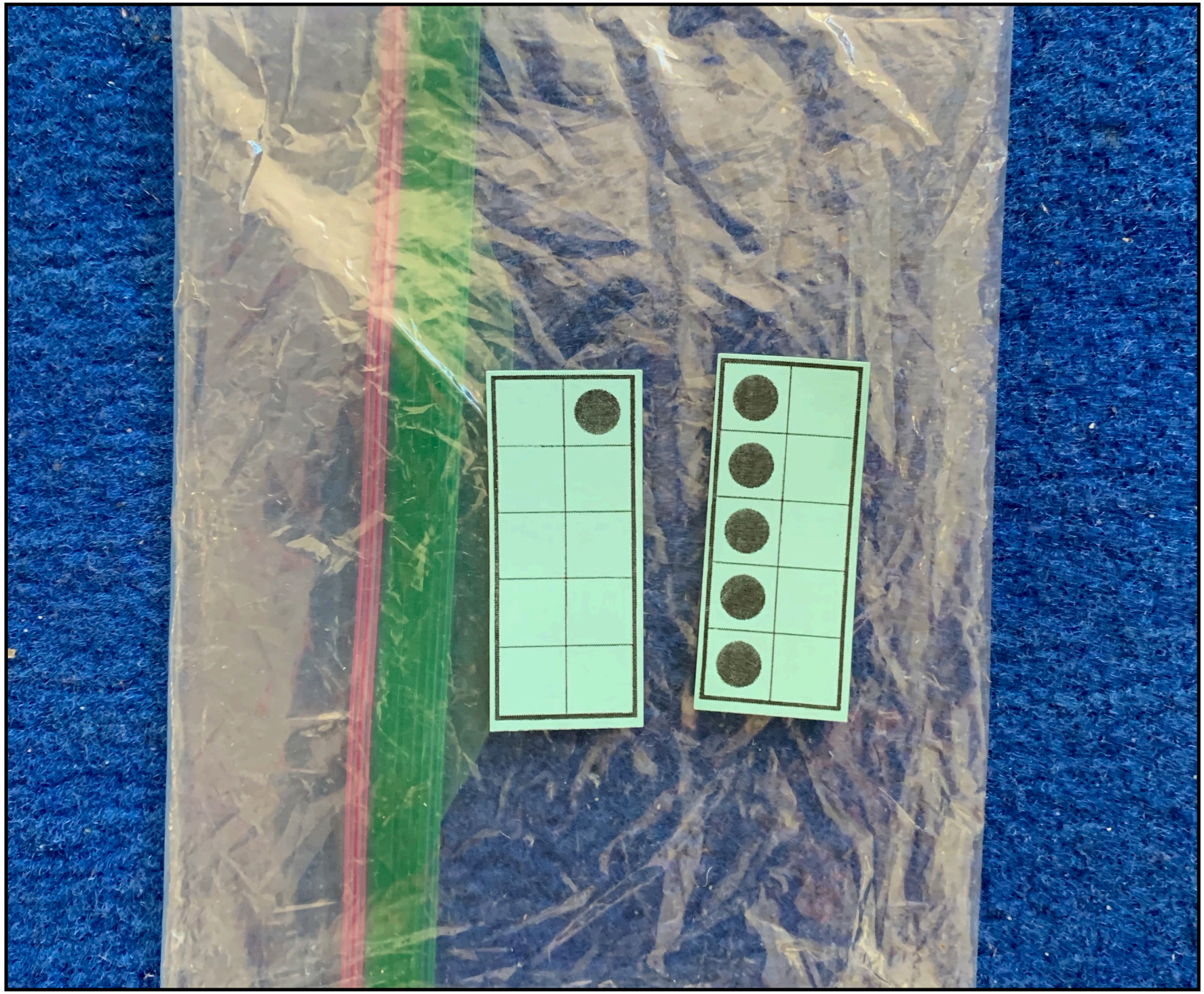




SNAP

CONCENTRATION/ MEMORY





Representing Quantities

Using Quick Images

Flash and Say
Flash and Show
Flash and Build

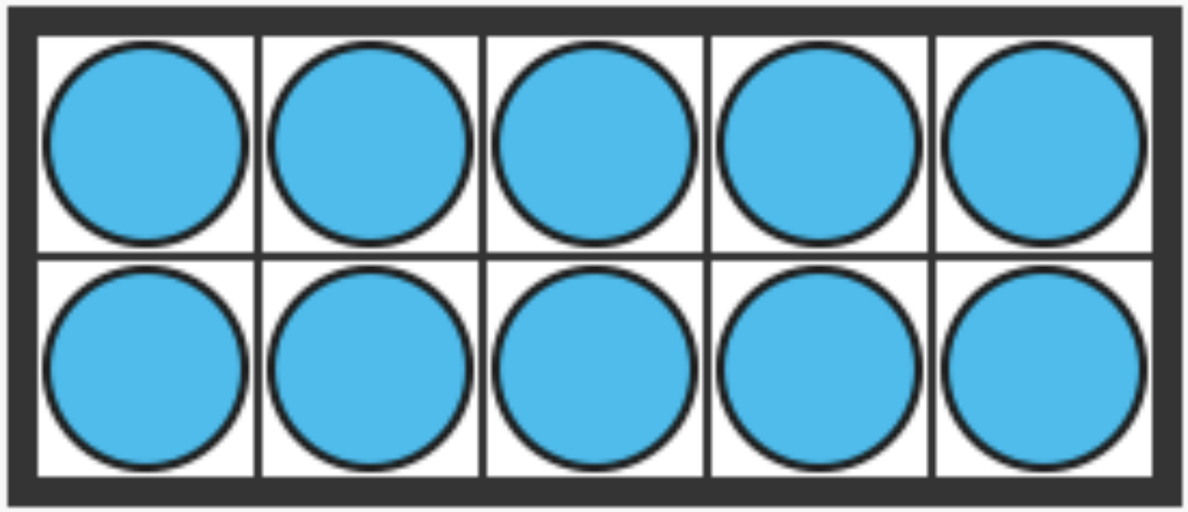
It is important because students need to develop:

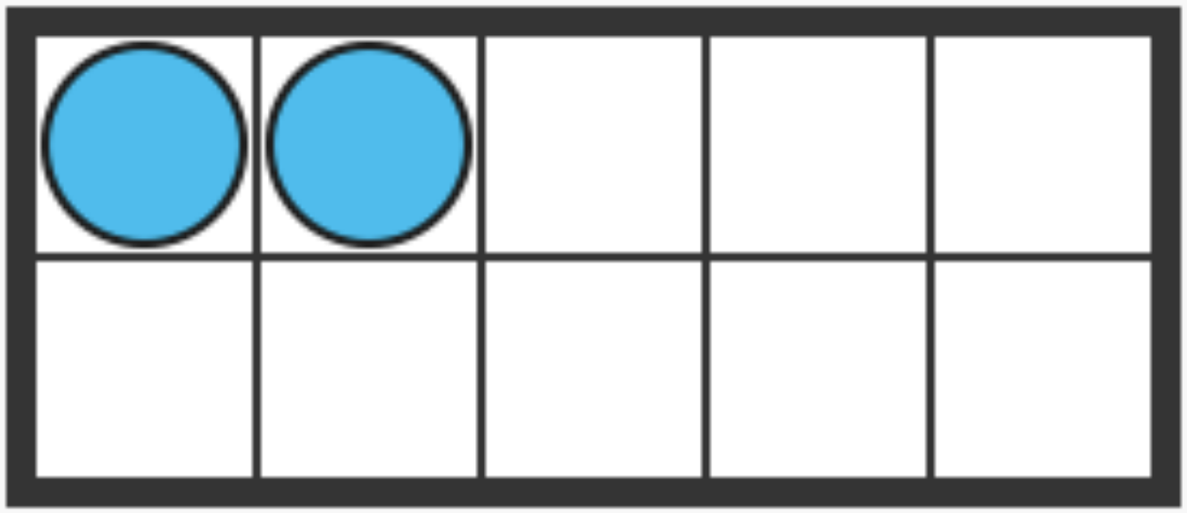
- ability to move beyond counting to see spatial patterns
- seeing groups/sets of #’s
- a strong sense of both five and ten and the relationship between these quantities (similar to 50 and 100 and 500 and 1000)
- develop part-part whole understanding
- place value understanding

How many dots do you see?

How do you see them?

Is there a number sentence/ equation that we could write that would match how _____ determined how many dots there were?





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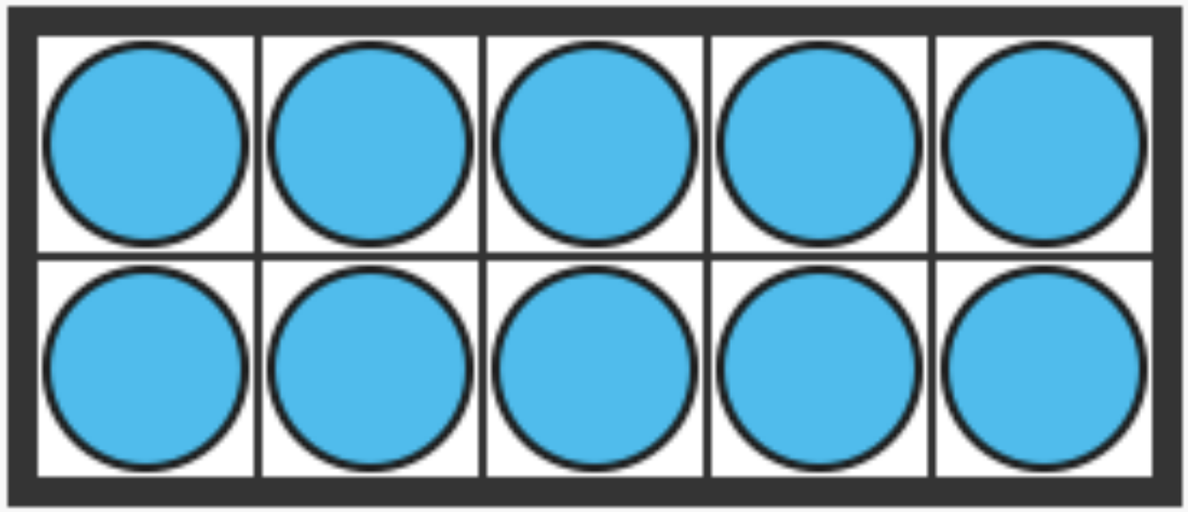
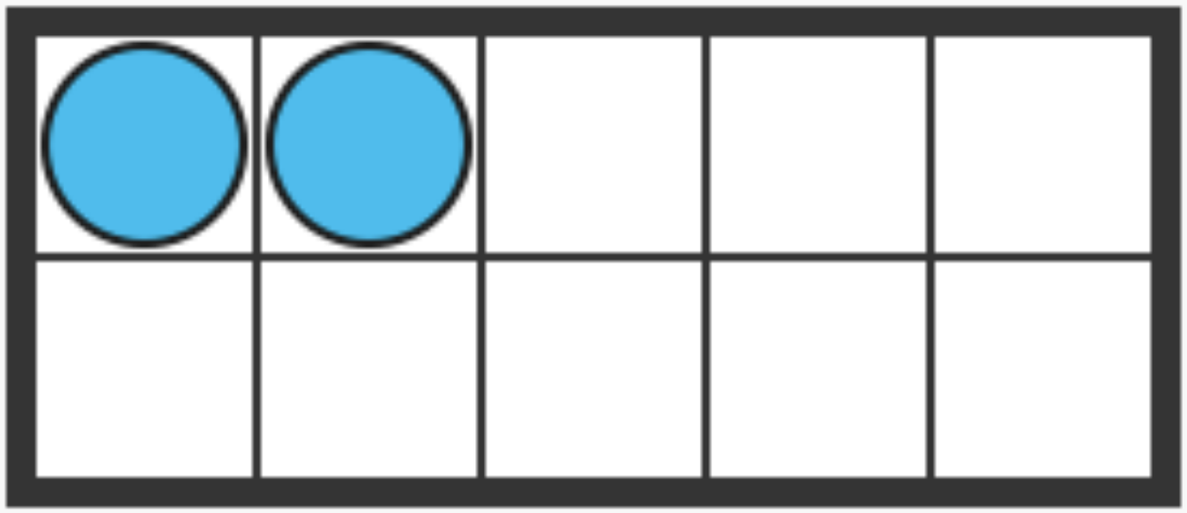
And if a whole were one full ten frame then how many?





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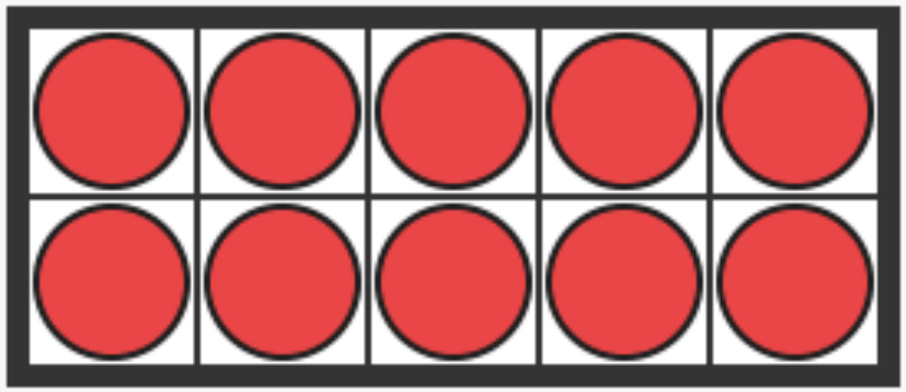

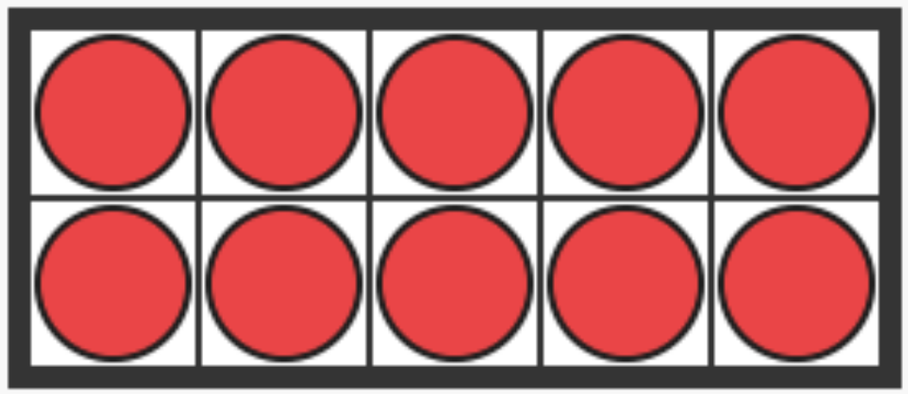

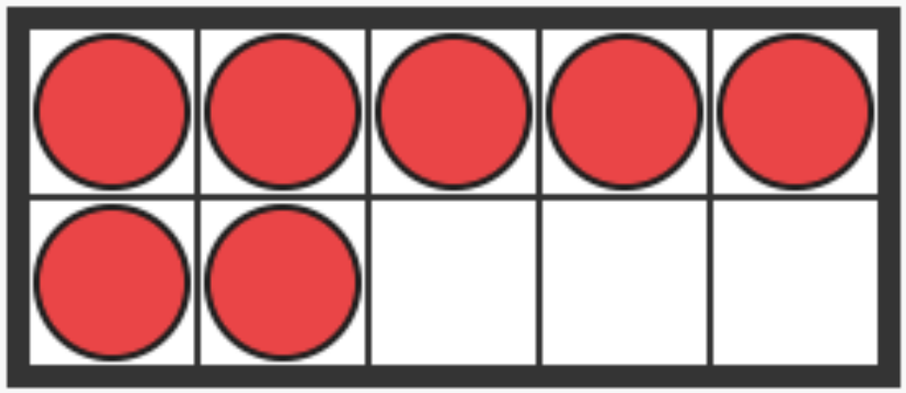

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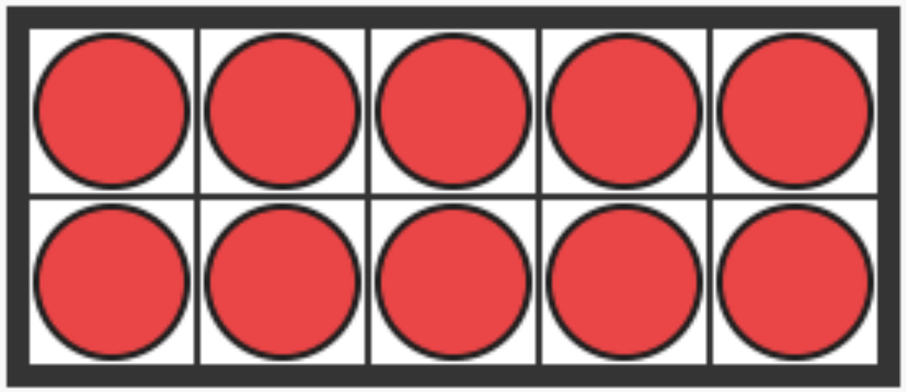

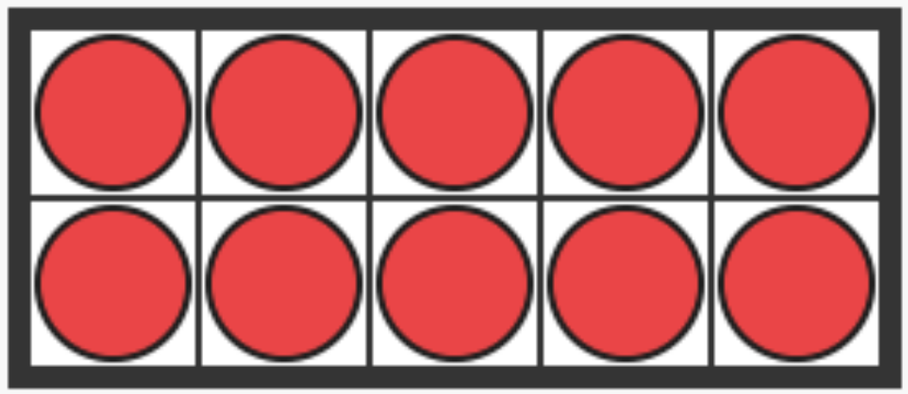

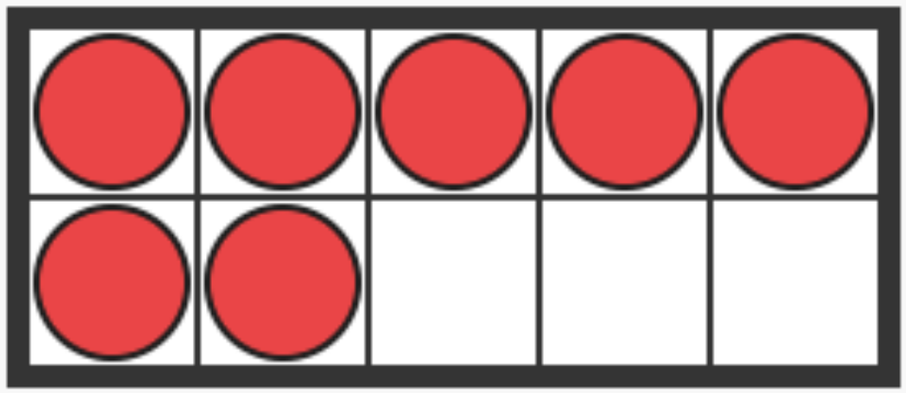

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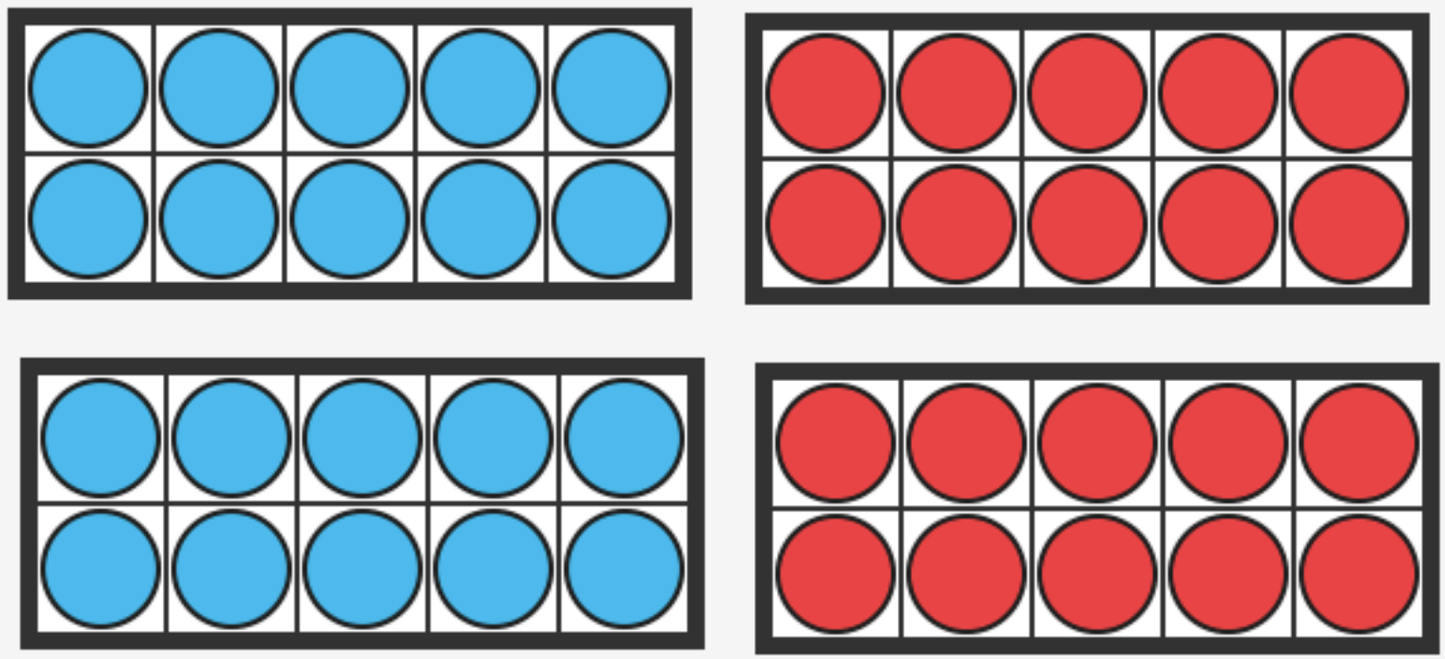
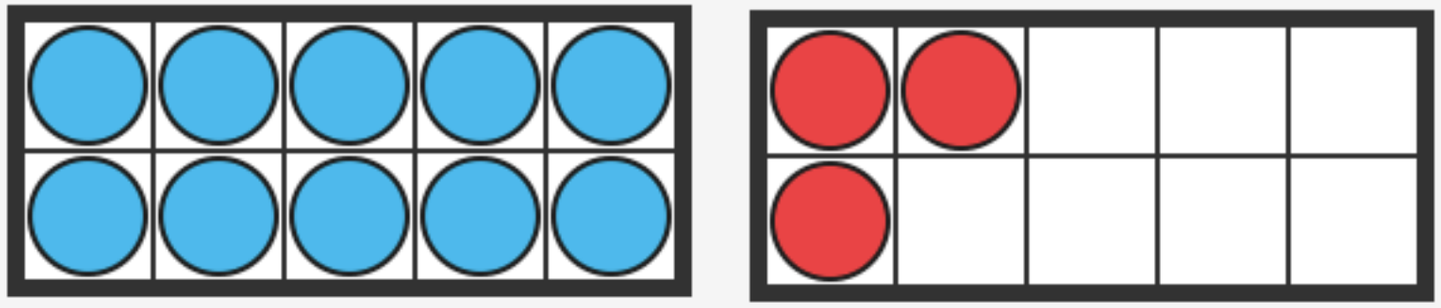
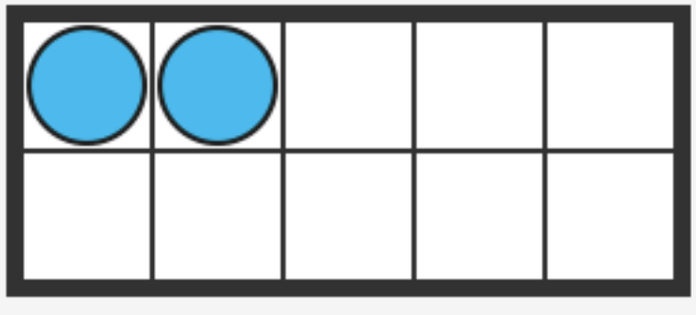
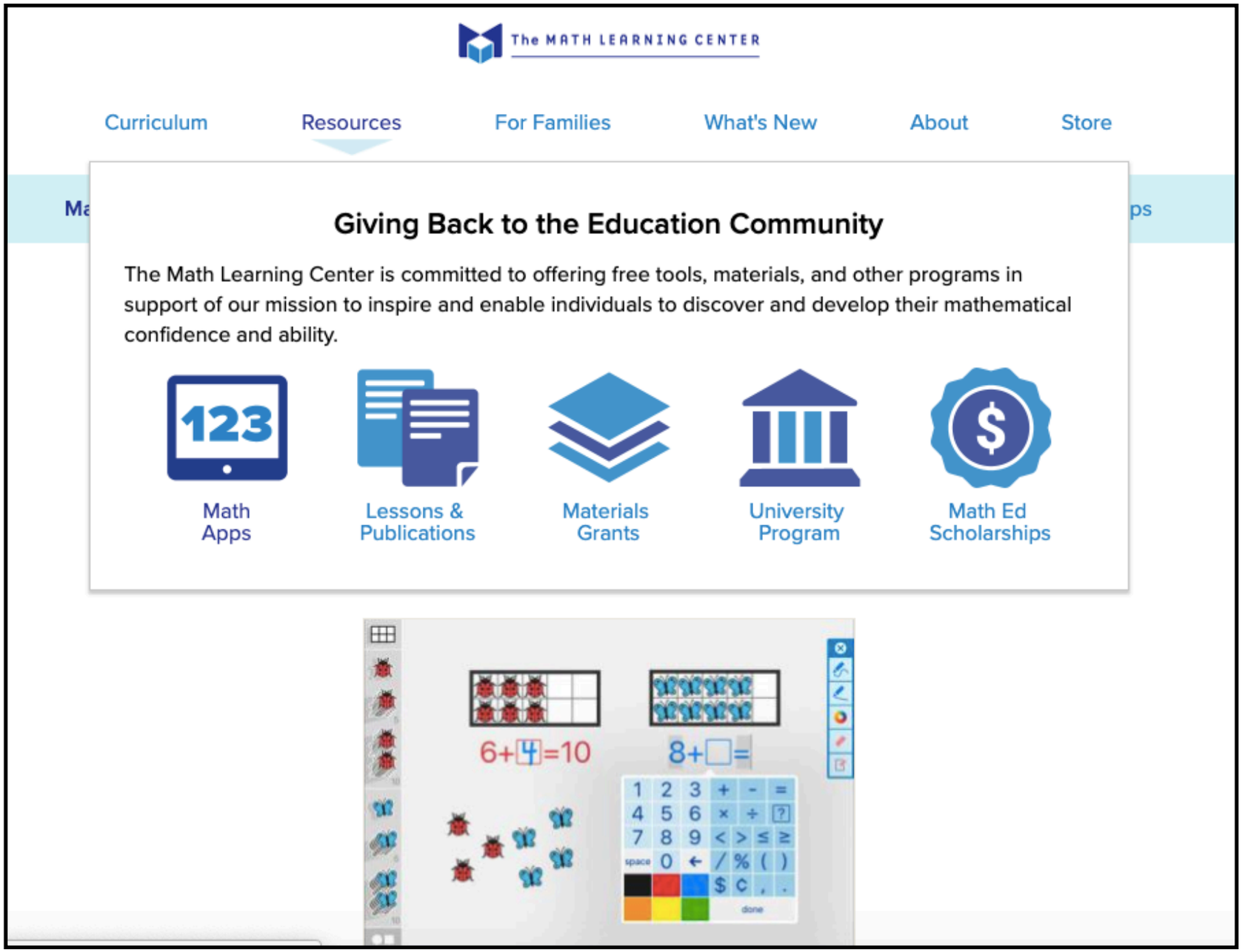






Let's check out a FREE digital app where you can create images!

www.mathlearningcenter.org



How many dots do you see?

How do you see them?

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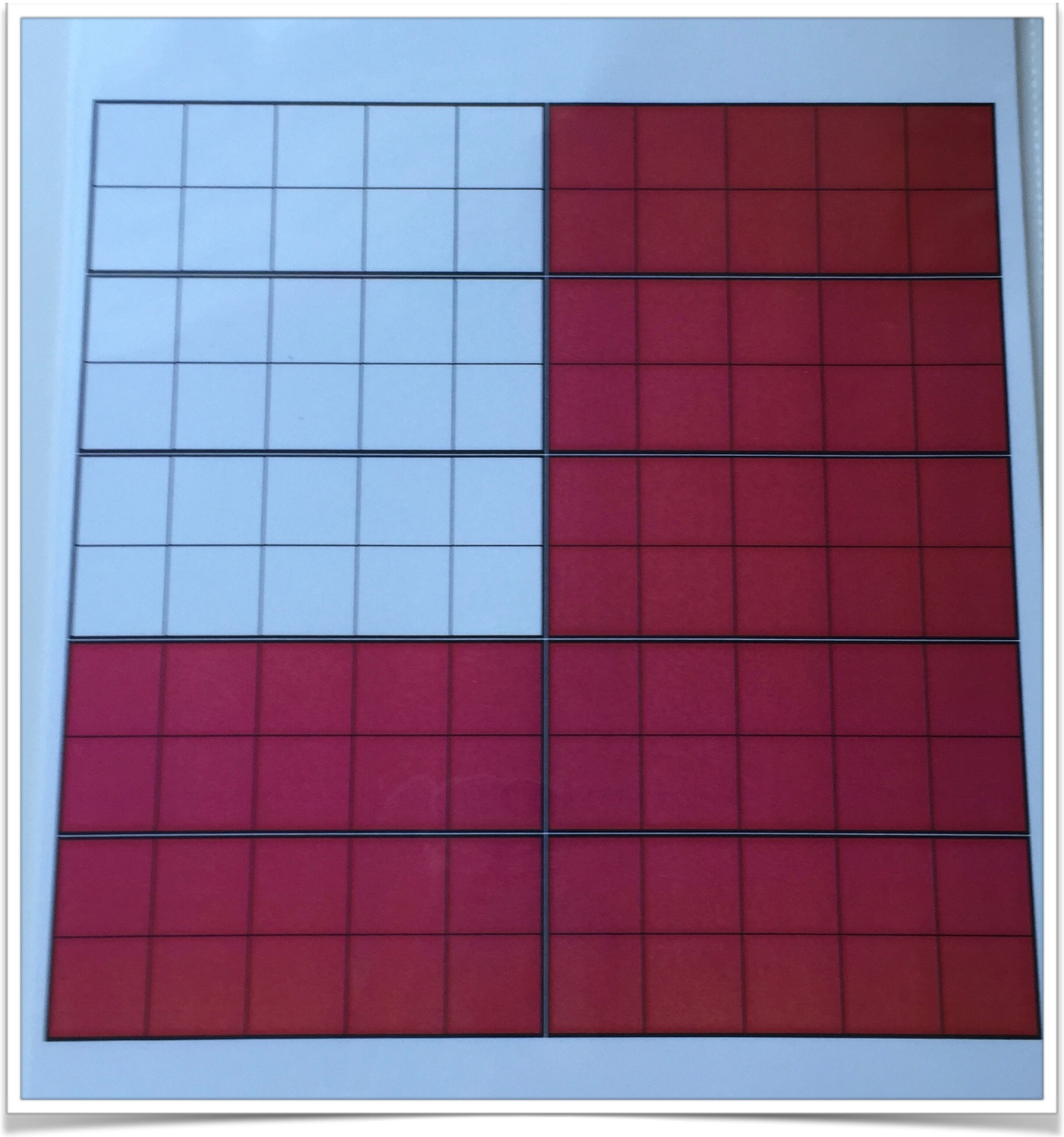
Hundreds Boards



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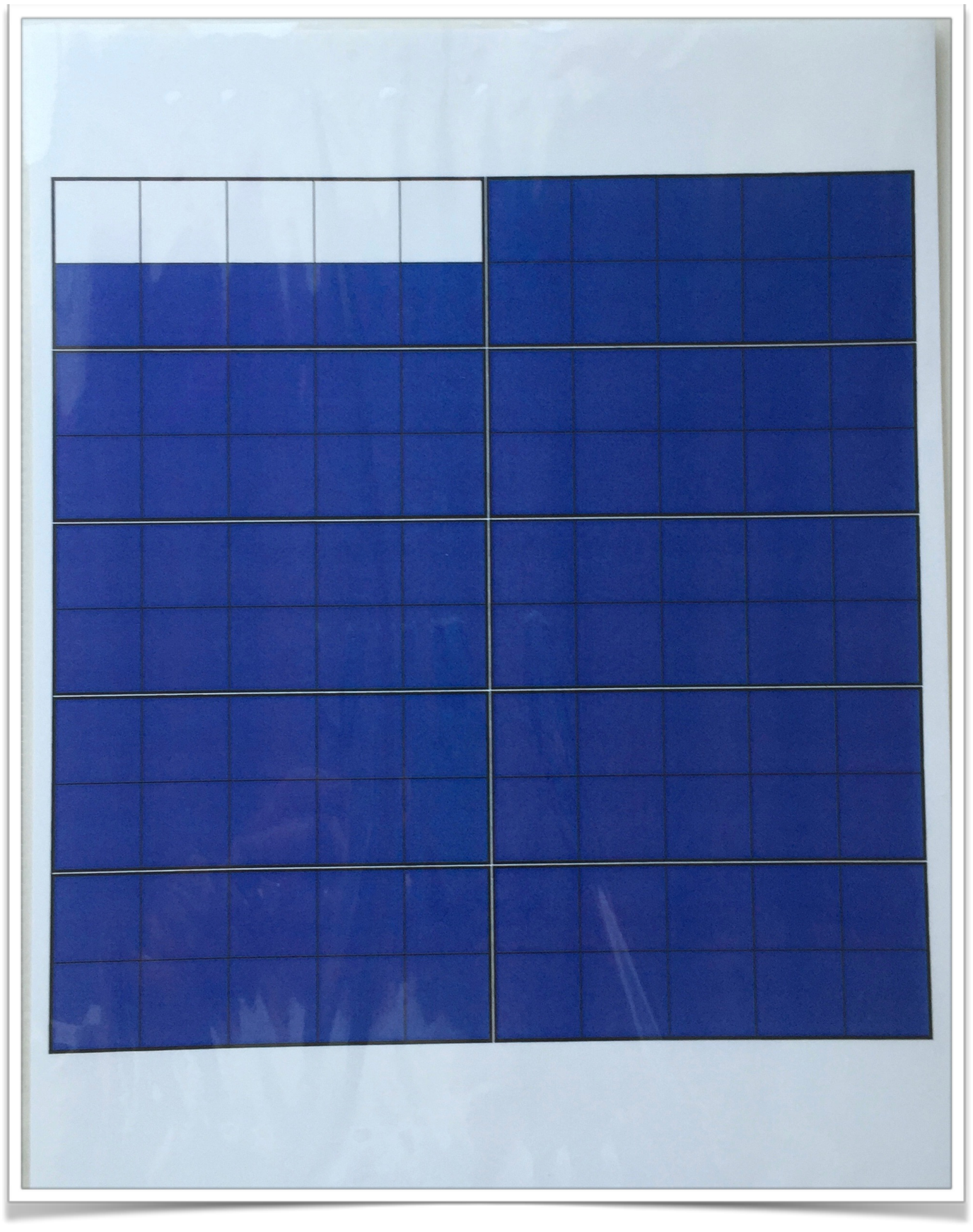

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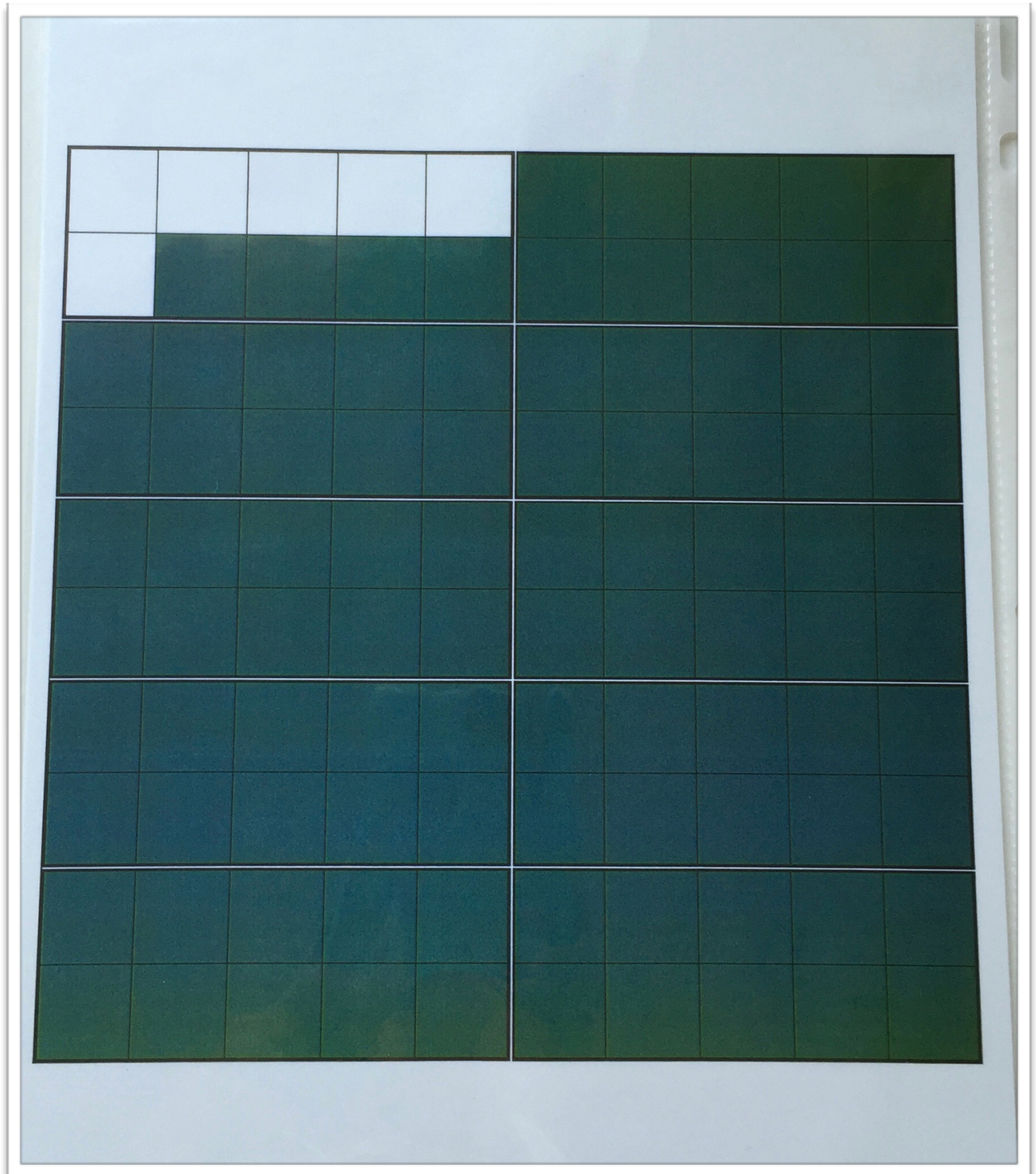

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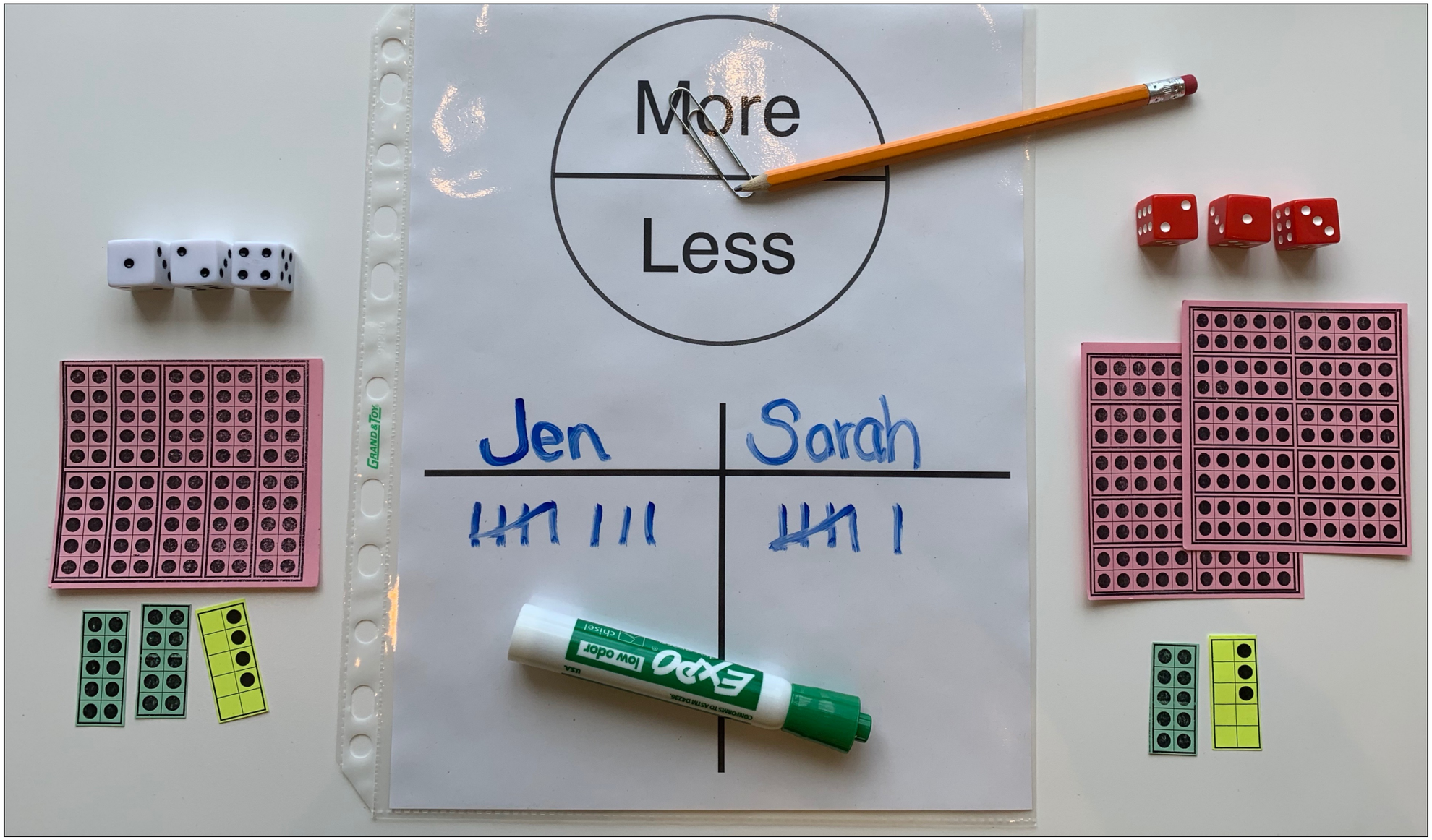
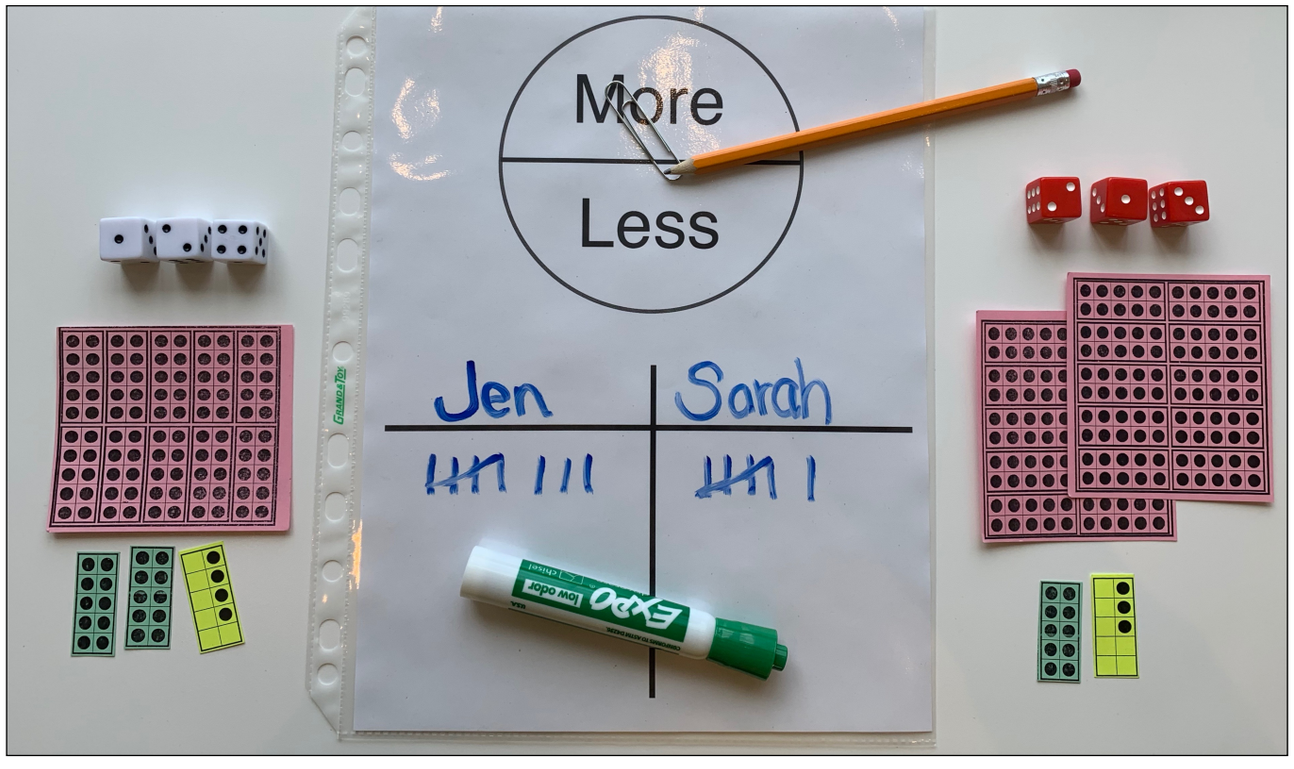
More OR Less



More OR Less

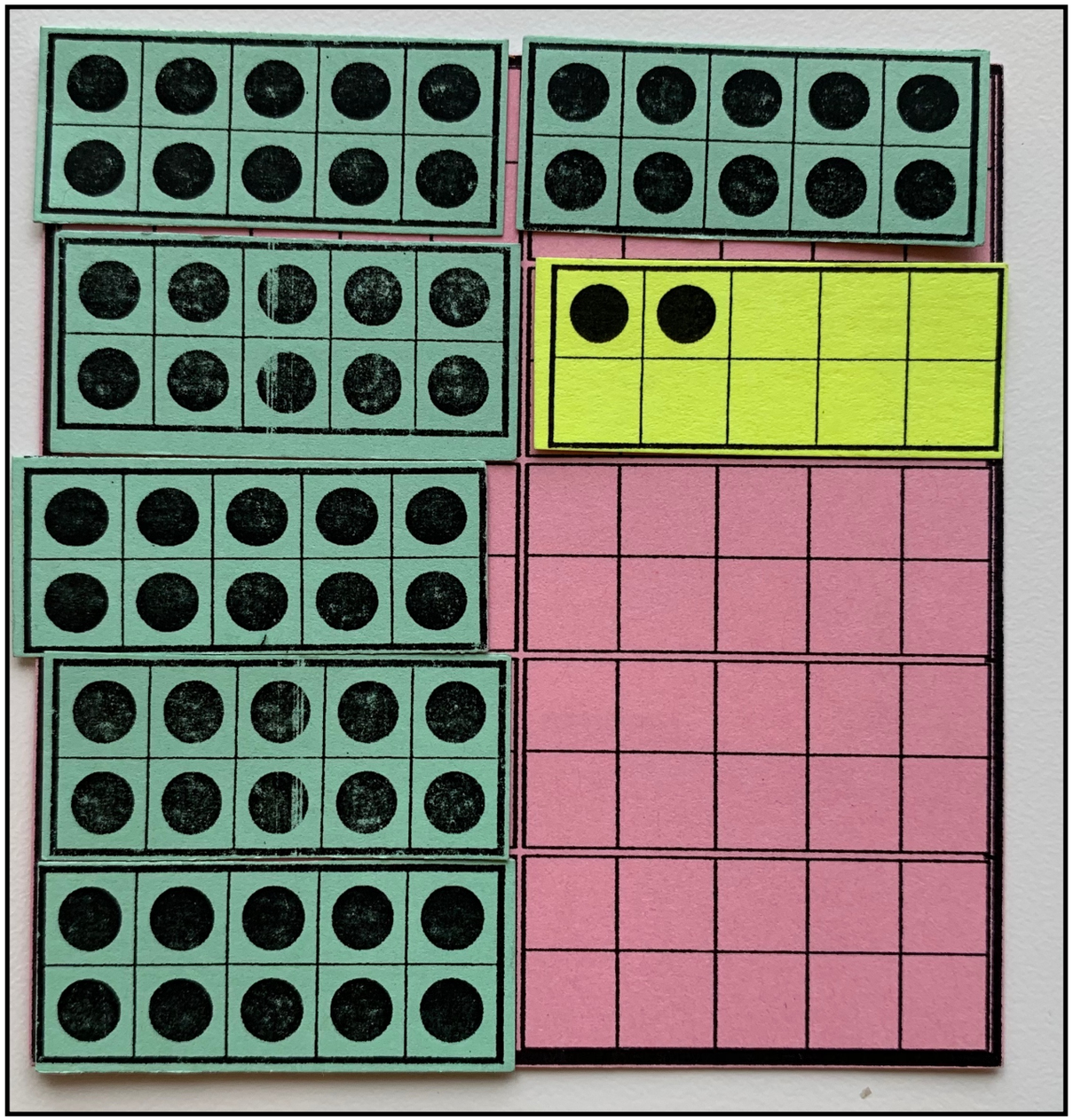


Shrink OR Grow

Please build 919

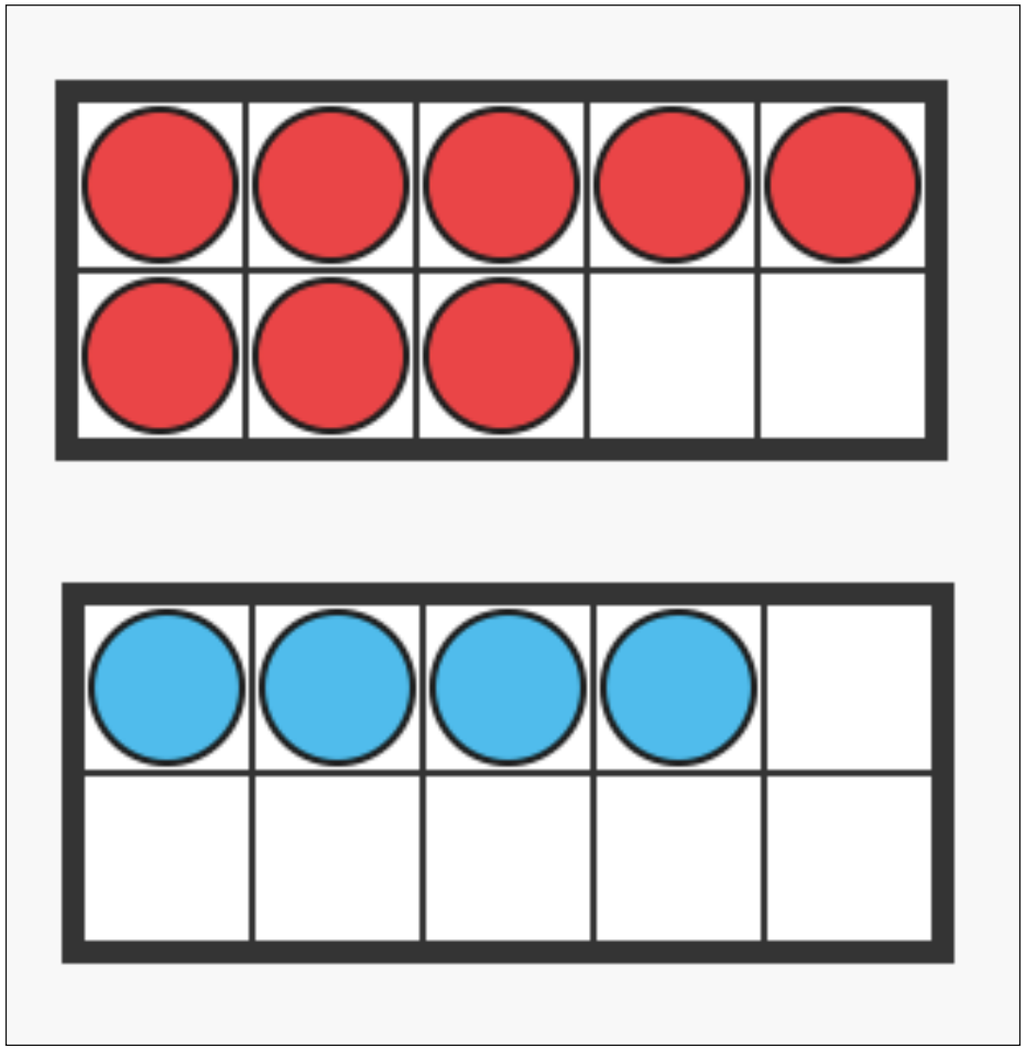
Are we shrinking or growing?
Can you make 742?

How Much More to Make 50 or 100 or .5 or one whole



Let's play!

Single Digit Addition



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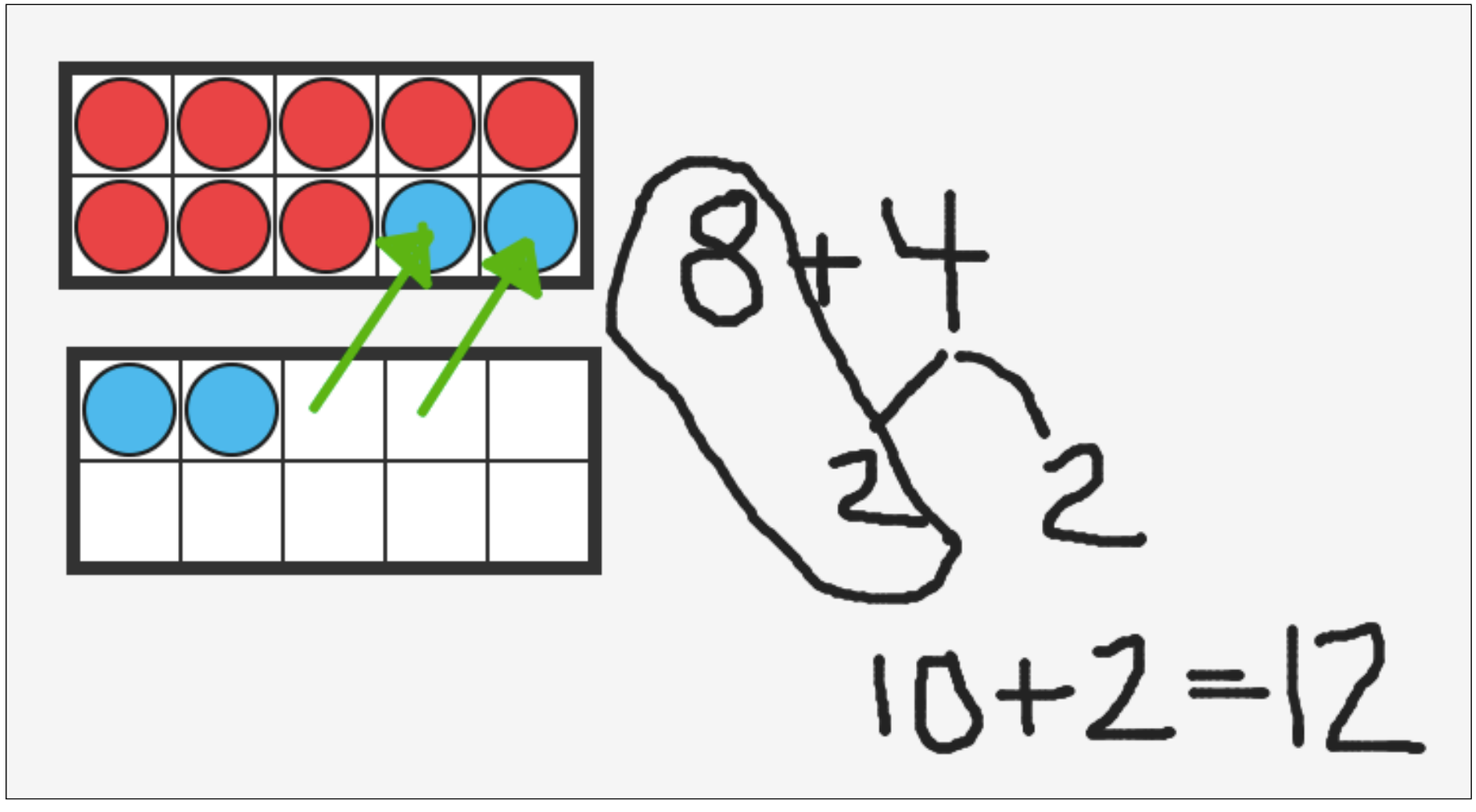
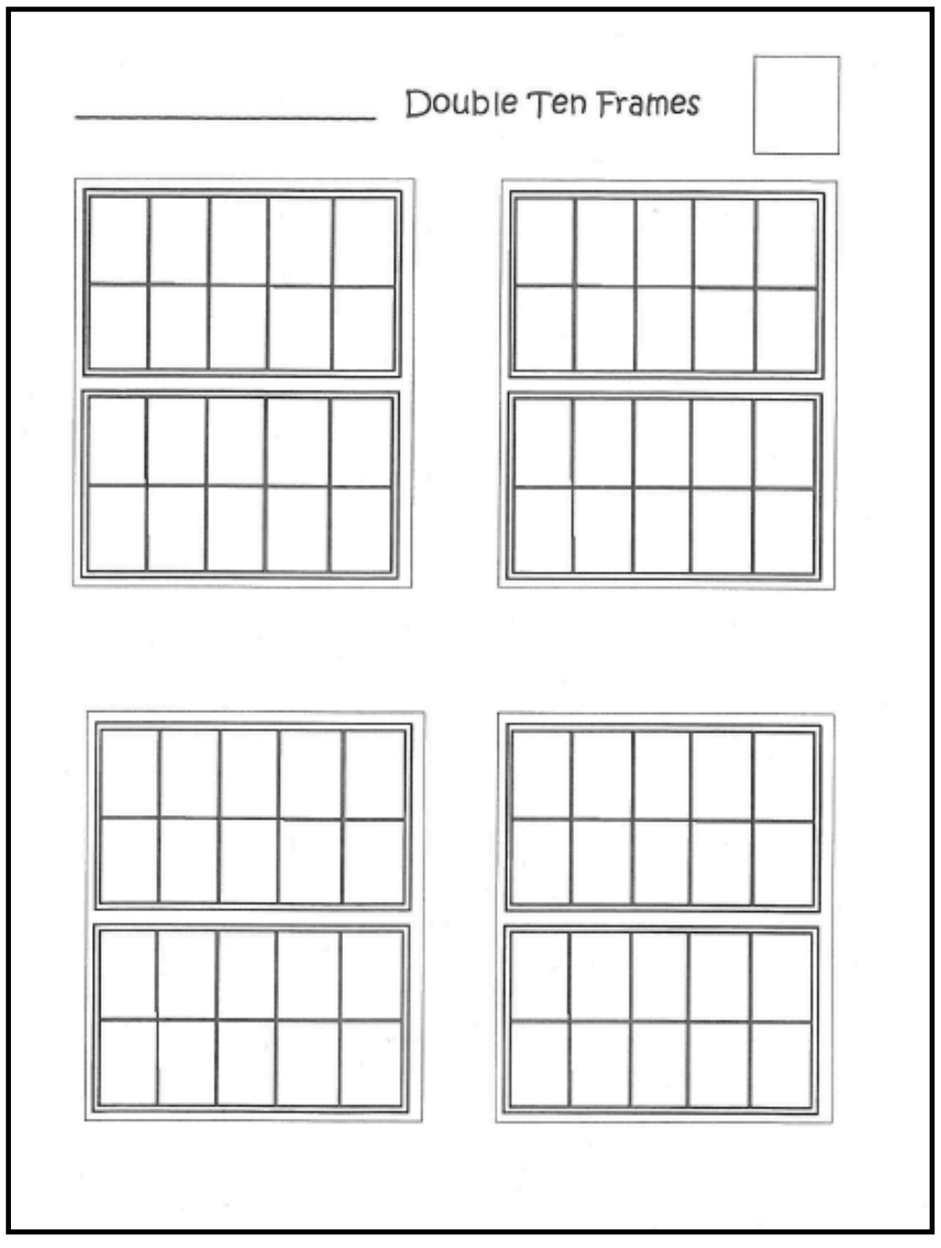


Connecting Representations

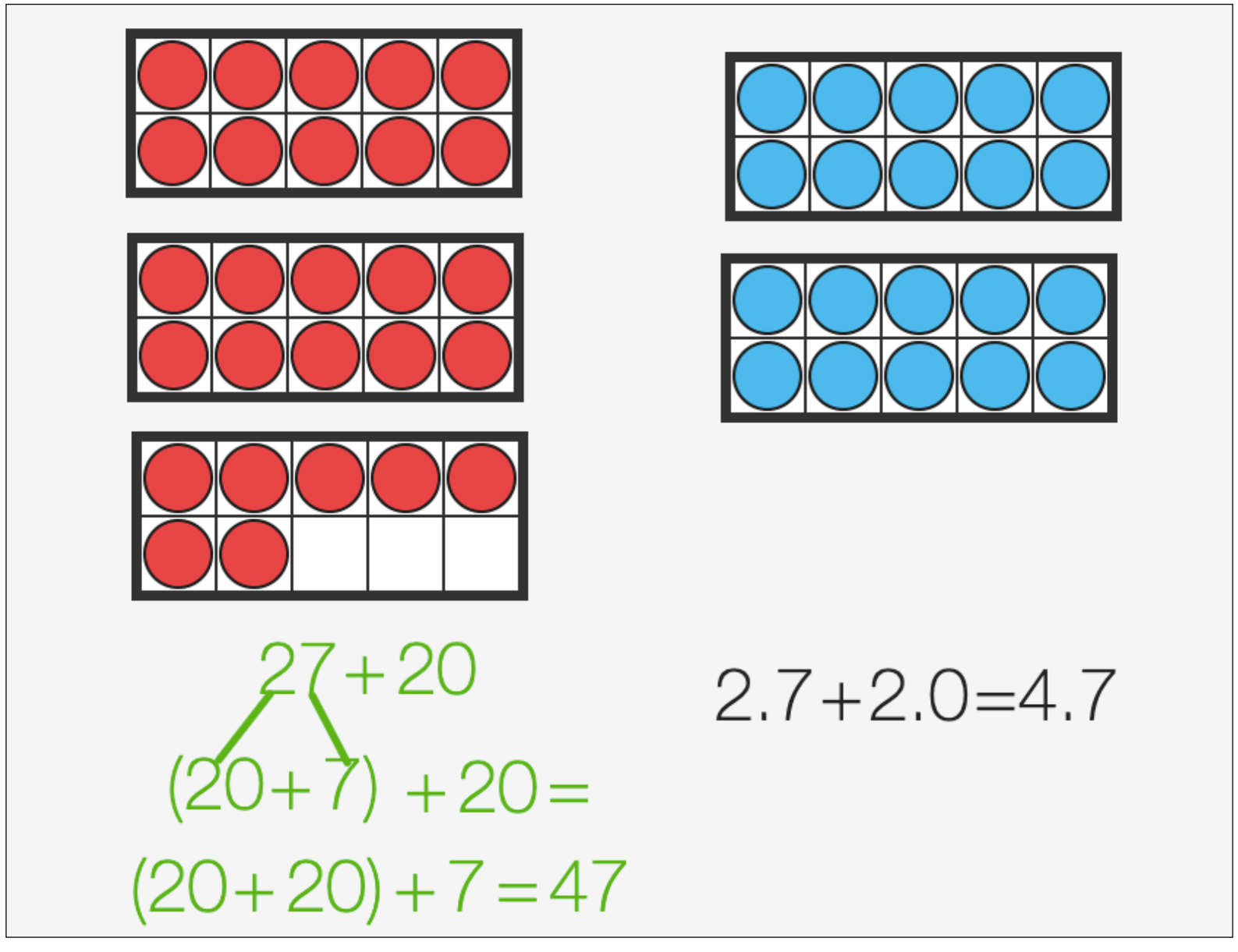
Concrete



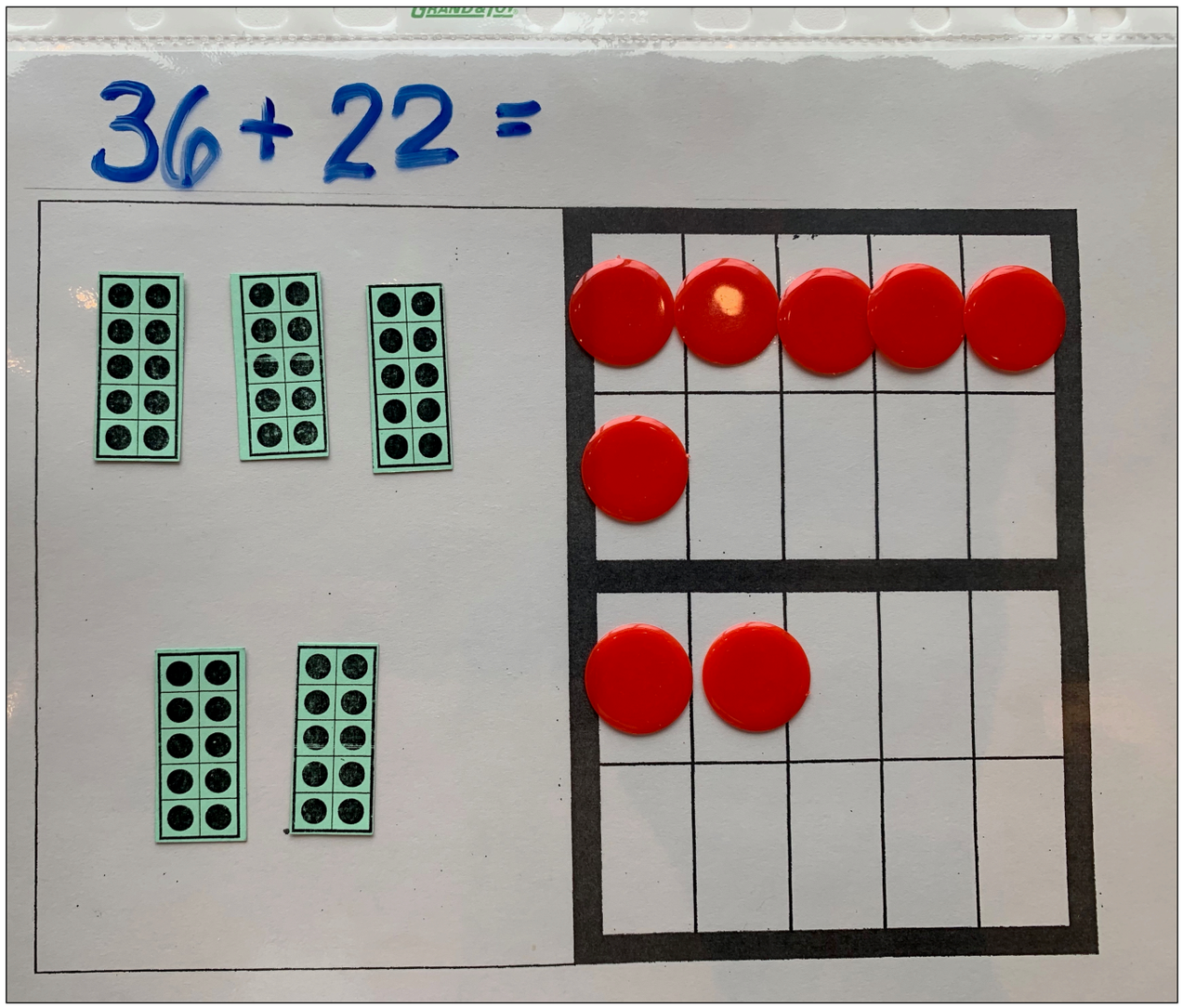
Pictorial

Abstract

Adding to 2-digit numbers
Whole tens and hundreds



Adding tens and ones without regrouping



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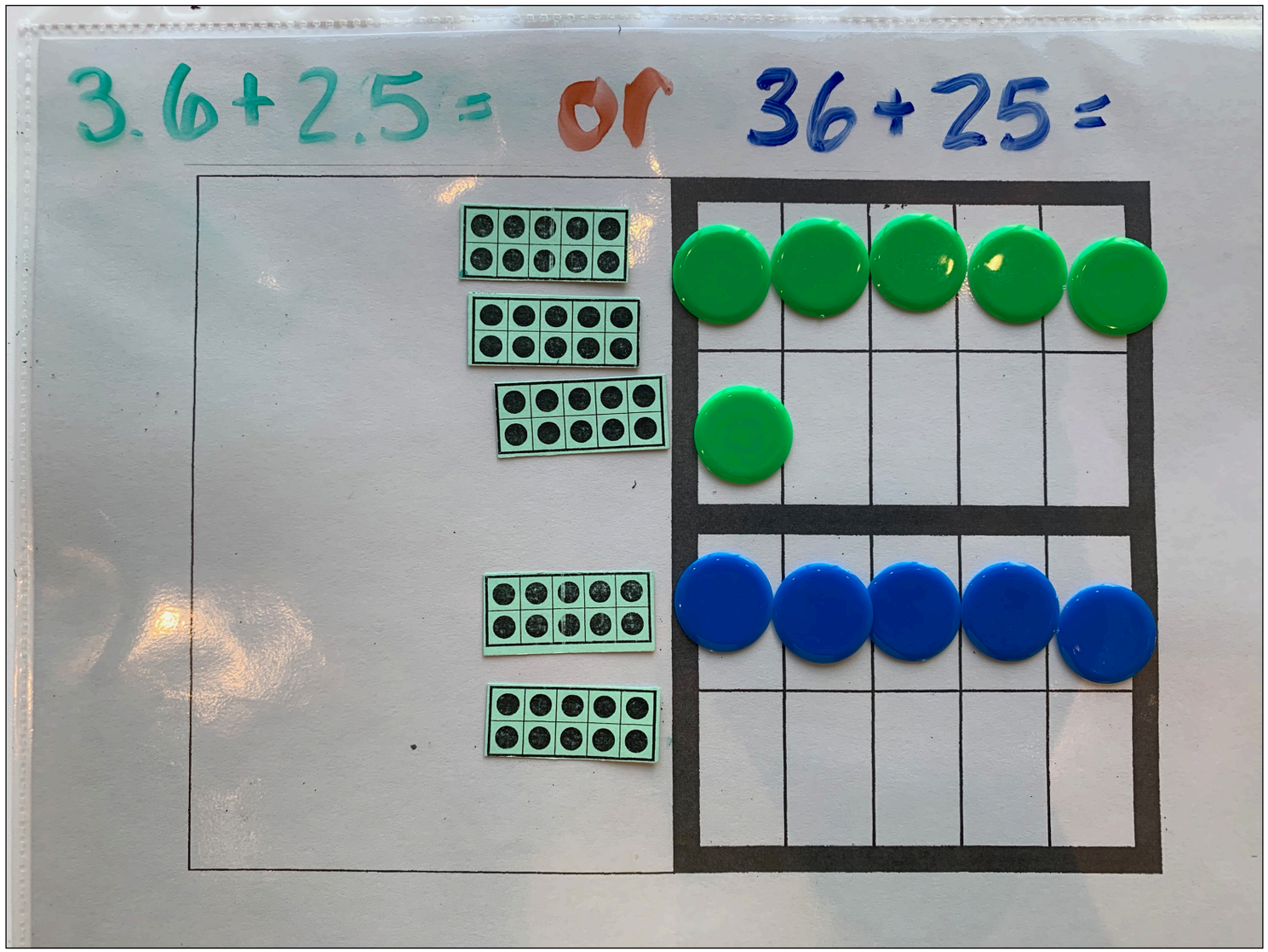

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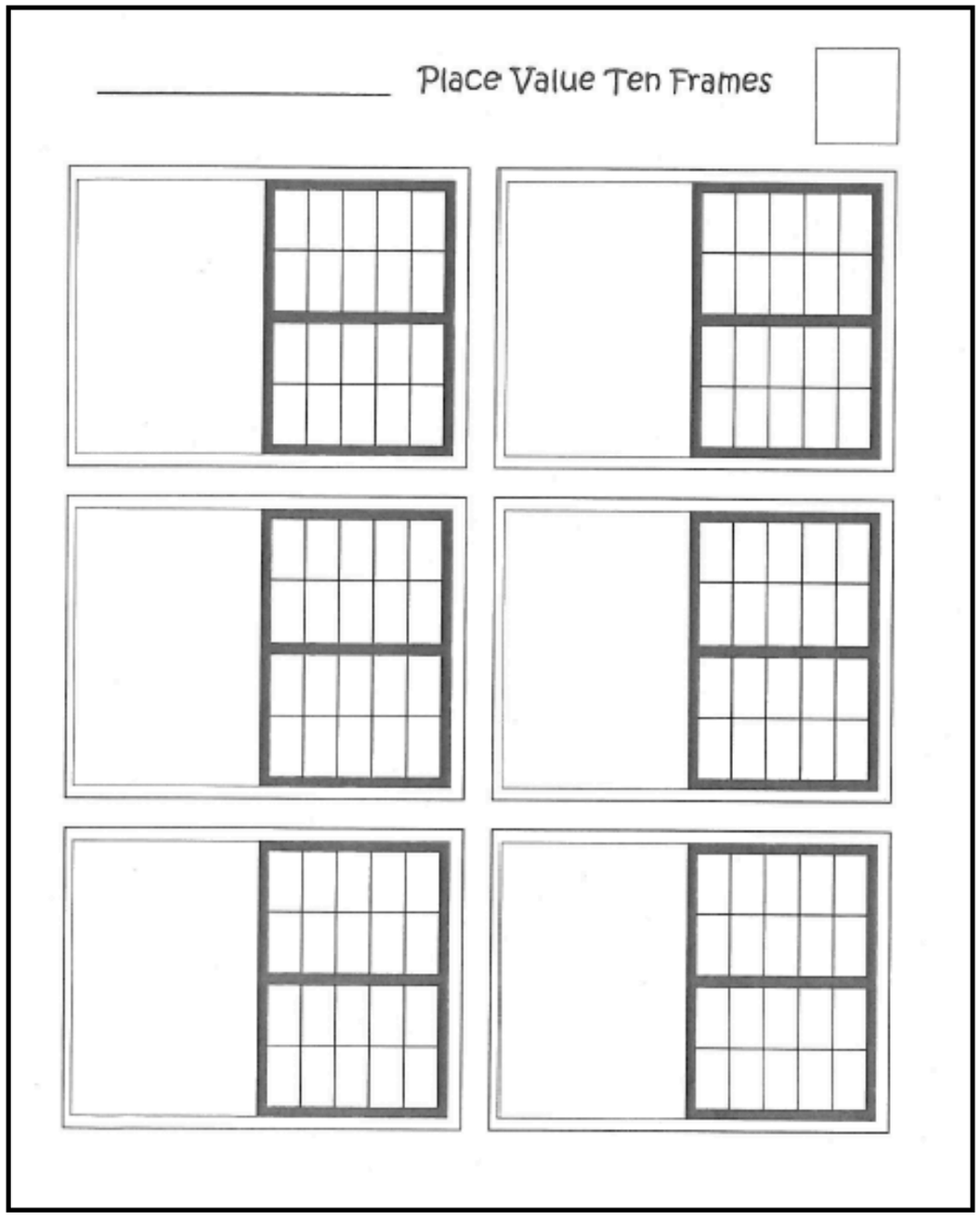

you are amazing

REMEMBER THAT.