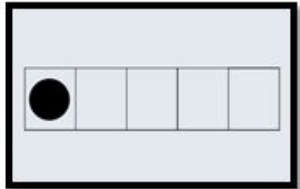
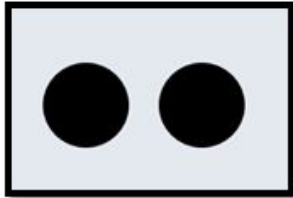
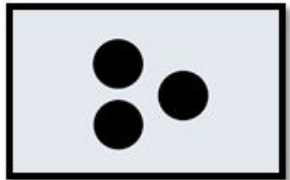


# Building Arithmetic Fluency Through Conceptual Understanding

Jenny Ainslie, Wake County  
Valerie Faulkner, NCSU



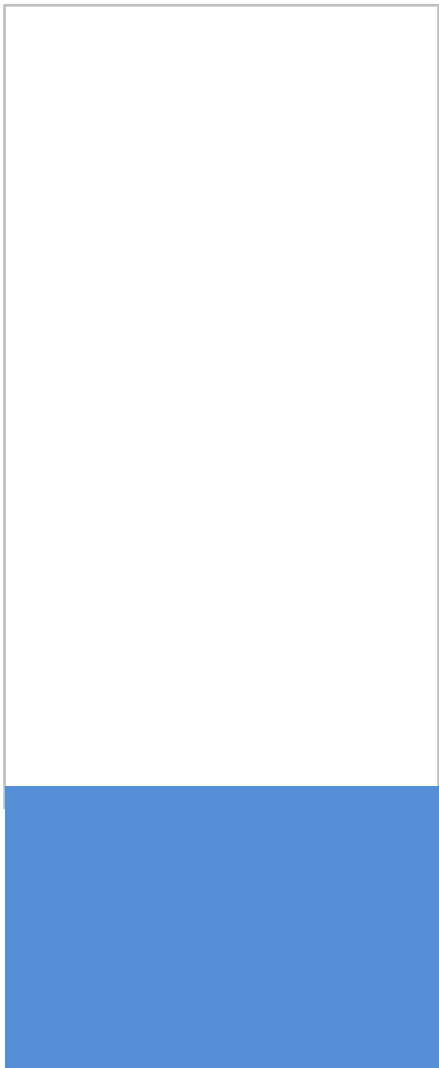
This is just a preview

Actual presentation will be posted  
after presentation

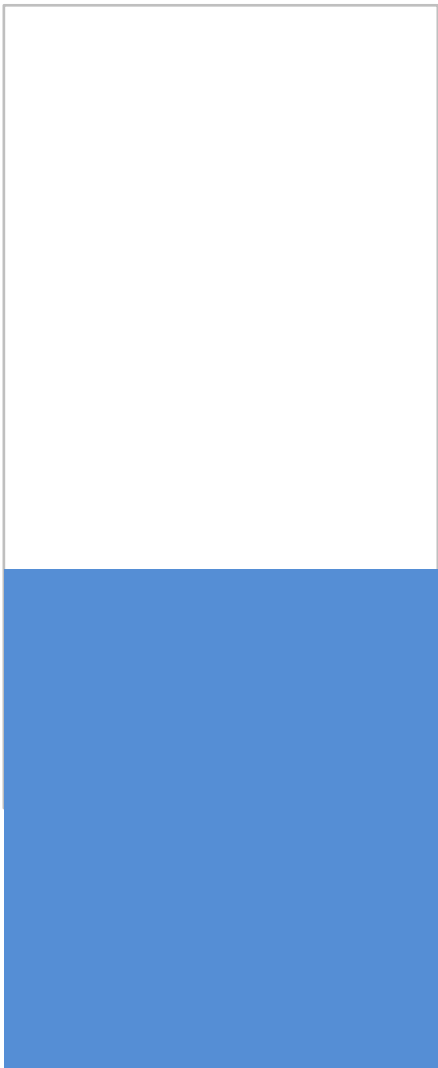
Come subitize! We will focus on the critical skill of subitizing. Participants will engage in classroom examples for how to subitize regularly and effectively with their preK-2 students. They will understand how subitizing connects to deepened additive and multiplicative number sense, an understanding of the numeration system, and algebra.

**What do this dog and baby  
have in common?**

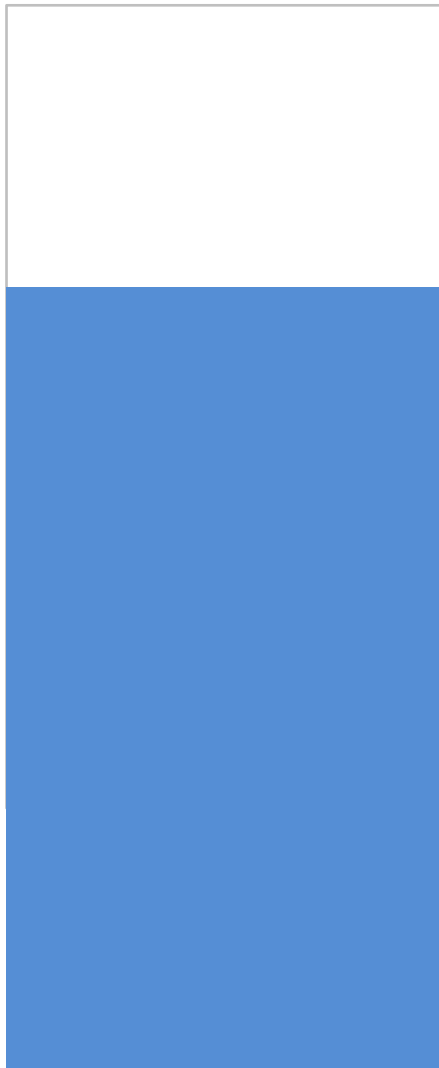




1



2



3

# Subitising through the years



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The importance and usefulness of building on perceptual subitising and the development of conceptual subitising is explained. A guide on how to continue to develop numerical ideas based on subitising is shared.















As you read, think about/take notes on:

- ❑ the implications for your teaching
- ❑ the connections to higher level math
- ❑ the connection between literacy and math
- ❑ how subitizing aids in your student's mathematical identity





-  01 Perceptual 1 0-3.pptx 
-  02 Perceptual 2 0-5.pptx 
-  03 Conceptual 1 0-5.pptx 
-  04 Conceptual 2 0-9.pptx 
-  05 Conceptual 3 0-5 Missing Addend.pptx 
-  05b Conceptual 3 0-9 Missing Addend.pptx 
-  06 Bar Models.pptx 
-  07 Conceptual 0-12.pptx 

-  08 Conceptual 10-20 Tens Frame.pptx 
-  09 Conceptual Break Apart to Make 10 with 9, 8.pptx 
-  10 C8 BAMT 7, 6, 5.pptx 
-  11 Conceptual Break Apart to Make 10 Small First Addend.pptx 
-  12 Conceptual Multiplication.pptx 
-  13 Conceptual Multiplication Missing Factor.pptx 
-  14 Conceptual Division.pptx 

3001

- 97

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$$\begin{array}{r}
 \begin{array}{cccc}
 & 2 & 9 & 9 & 11 \\
 3000 & 1 & & & \\
 \hline
 & & 97 & & 
 \end{array}
 \end{array}$$

Flash!!  
Flash!!  
Flash!!  
TALK



**Caution!**

## The Subitizing Song! [suhb-itizing] (Version 1-- dots, ten-frames ...



<https://www.youtube.com/watch?v=nsScVF6Jo6A>

Feb 9, 2017 - Uploaded by Harry Kindergarten Music

Up next. Tens Frame Song. Subitize Up To 5 (soo-bi-tize) | Math Song for Kids | Jack Hartmann. The ...

## Subitize Up to 5 (soo-bi-tize) | Math Song For Kids | Jack ... - YouTube



[https://www.youtube.com/watch?v=6yyz\\_OycV4A](https://www.youtube.com/watch?v=6yyz_OycV4A)

Jun 30, 2017 - Uploaded by Jack Hartmann Kids Music Channel

Subitize is the ability to tell the number of objects in a set, quickly, without counting. In this **subitizing song** name ...

## Subitize Rock (sübitize) | Math Song for Kids | Jack Hartmann - YouTube



<https://www.youtube.com/watch?v=A1Mazc-SsG0>

Jun 21, 2017 - Uploaded by Jack Hartmann Kids Music Channel

Subitize is the ability to tell the number of objects in a set, quickly, without counting. In this **subitizing song** name ...

## Subitize Up To 5 (soo-bi-tize) | Math Song for Kids | Jack ... - YouTube



[https://www.youtube.com/watch?v=PSIA-u\\_ABmU](https://www.youtube.com/watch?v=PSIA-u_ABmU)

Jun 24, 2017 - Uploaded by Jack Hartmann Kids Music Channel

Jack Hartmann's website: [www.jackhartmann.com](http://www.jackhartmann.com) Remember to connect with Jack Hartmann on his Social ...

# One more thought...

Generalization is a bear



Thank you!

**Valerie Faulkner, NCSU**

**Jenny Ainslie, Wake County**