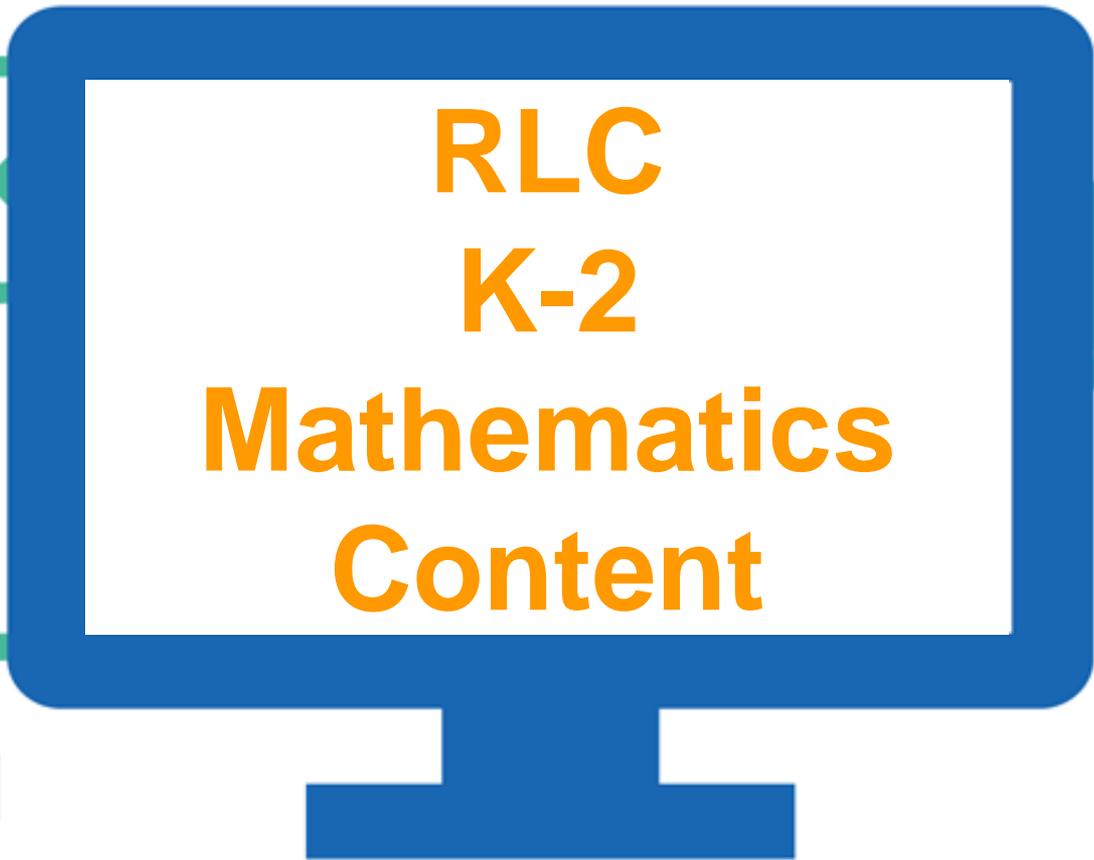
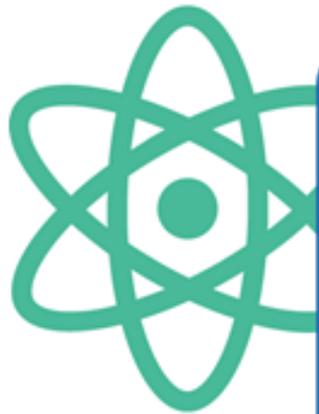


**RLC**

**Remote Learning Chats**





# Introductions

Natasha Neff is an Instructional Technology Specialist with Atlanta Public Schools.

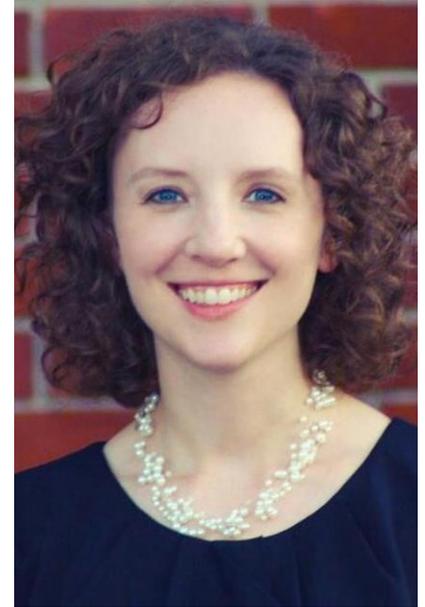


Christy Sutton is a 2nd grade teacher in Lee County.

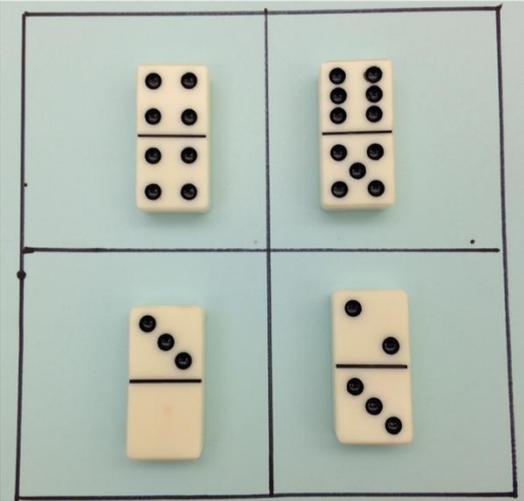
Currently working on her Doctorate in Math Curriculum

Former PAEMST winner

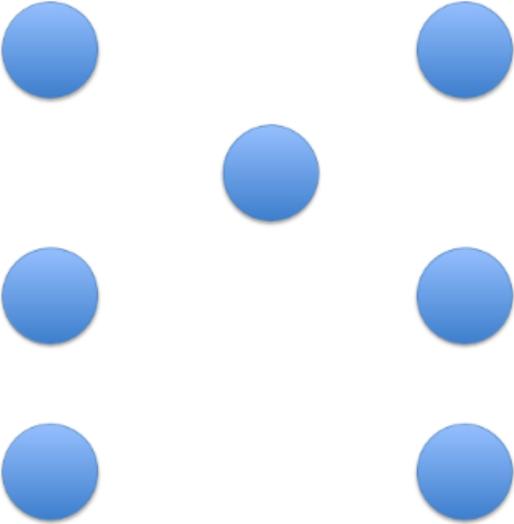
2 sons who are 6 and 2.



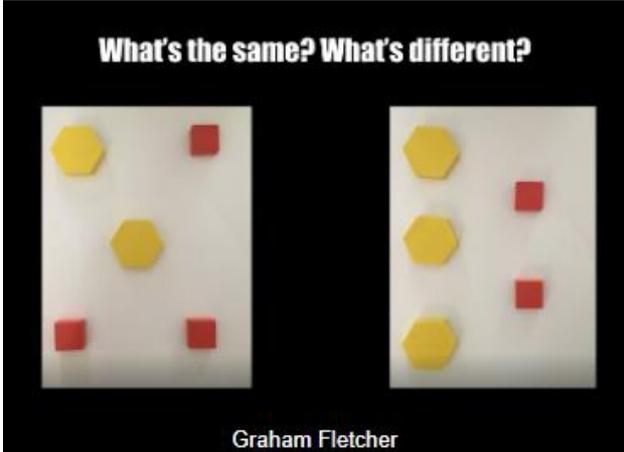
# Kindergarten Routines & Strategies



**Which One Doesn't Belong**



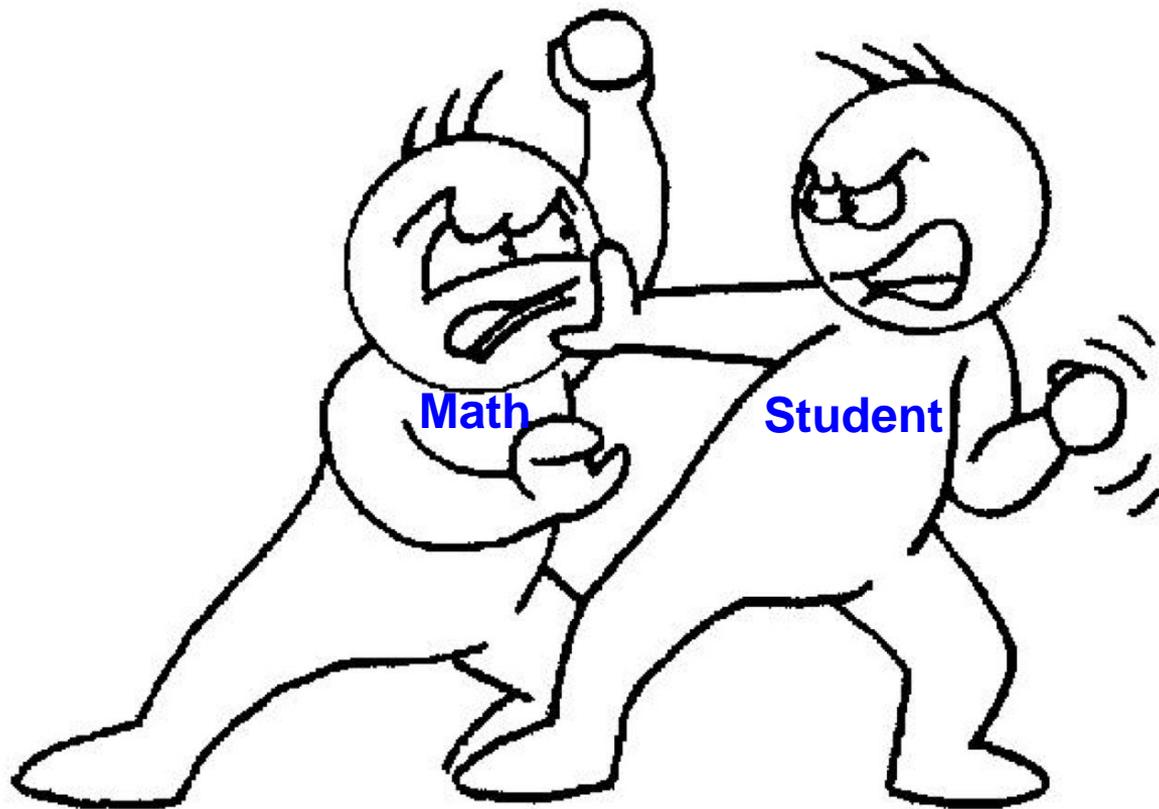
**Number Talks**



**Same/Different Math**

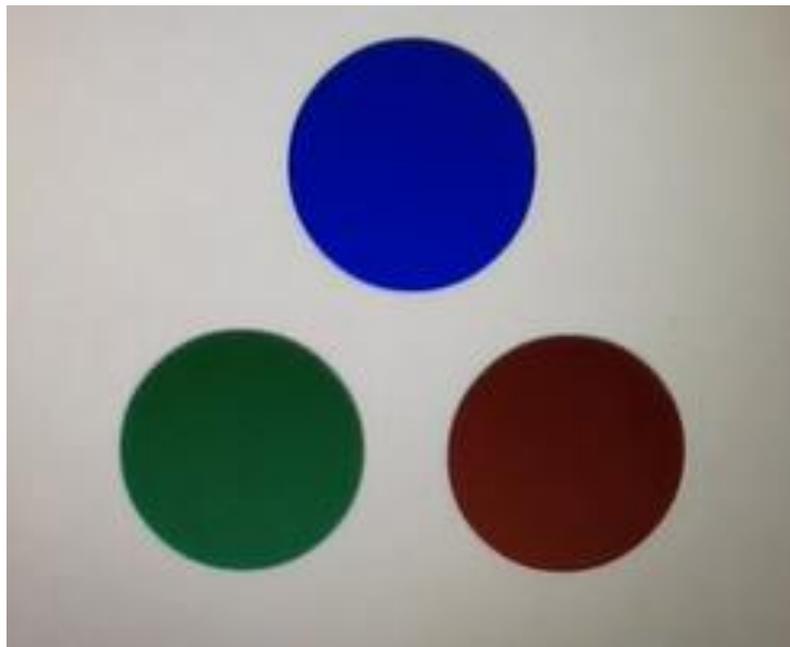
Kindergarten

## Relationships



Kindergarten

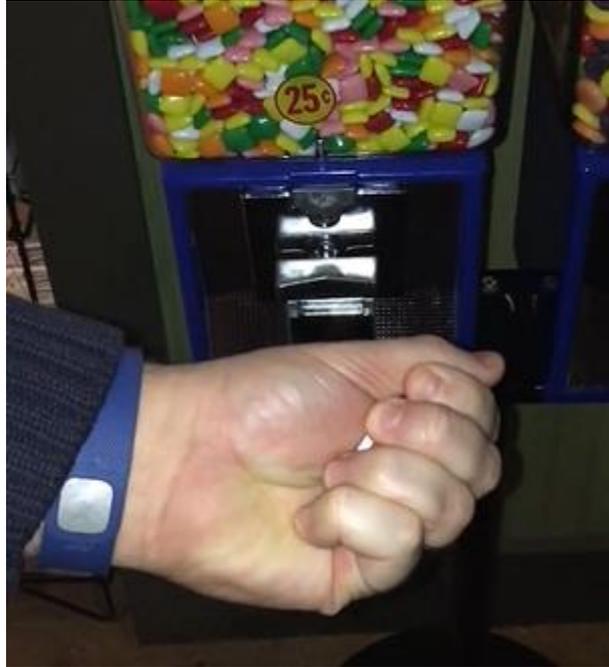
**Relationships**



**Dotty - 3-Act Task**

Kindergarten

## Relationships



**The Candyman - 3-Act Task**

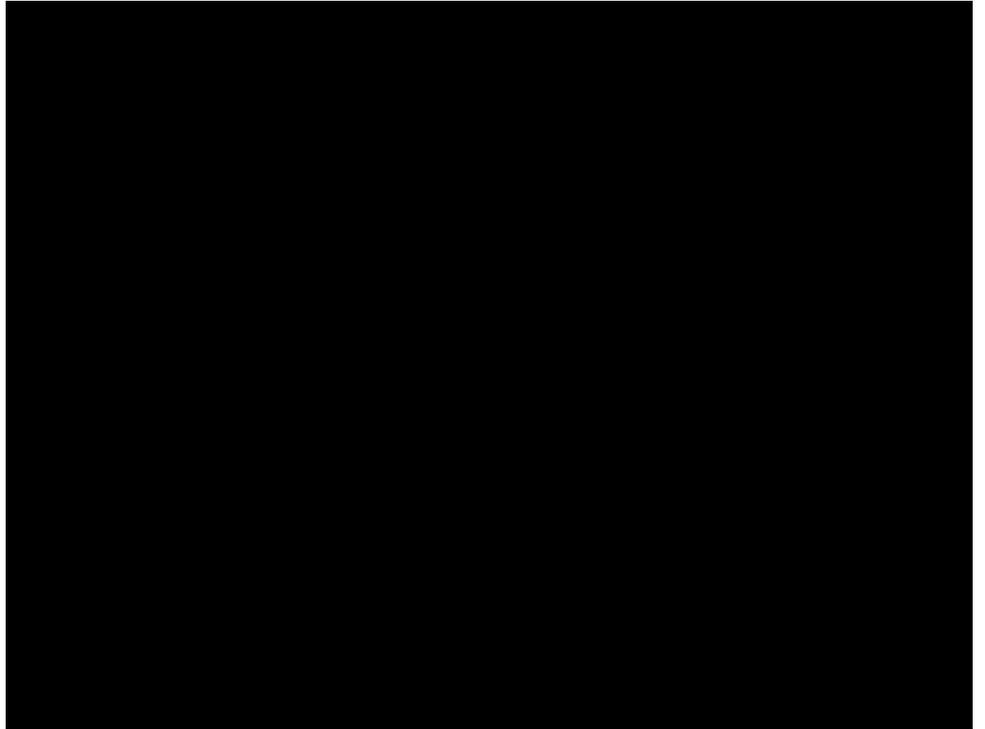
# 1st Grade

- Virtual Whiteboards for Number Talks

$$3 + 6$$

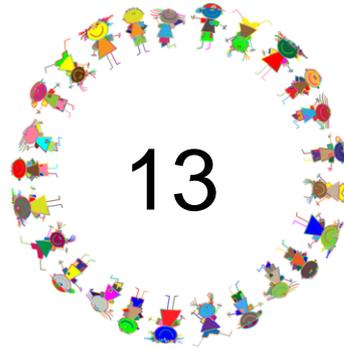
The screenshot displays a virtual whiteboard interface. The main whiteboard area shows the equation  $3 + 6$  in large, colorful digits. To the right of the equation is a dark blue rectangular area containing ten colored dots: three red dots in the top row and seven yellow dots in the bottom row. The interface includes a top menu bar with 'Insert', 'Tools', and 'Help' options, and a 'CLASSFLOW' logo. A vertical toolbar on the right side contains various icons for drawing and editing. At the bottom, there is a Windows taskbar with a search bar and several application icons. A video feed of a woman, identified as 'Nathasha Neff', is visible in the bottom right corner. The system tray shows the time as 11:02 AM on 7/21/2020.

- Show what you know with Screen Recording and audio response.



2nd  
Grade

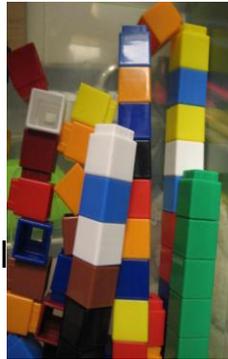
# Beginning of Year Math Games



- Stand at desk
- Say 1-3 sequential numbers at a time
- Sit at the number 13



- Class challenge
- Count to 10
- One person can speak at a time and can only say 1 number
- No other talking or hand signals



## Break Apart 10:

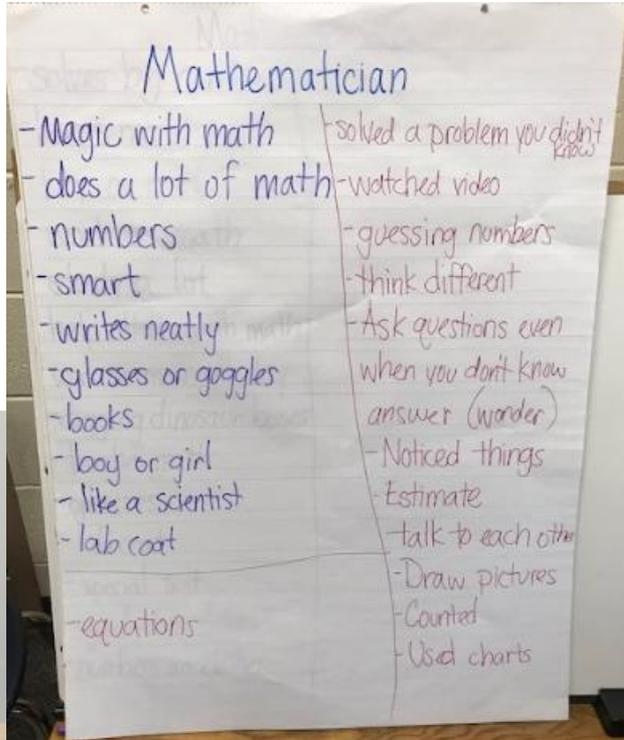
- 10 stick of unifix cubes
- Put behind your back and break off a part
- Show one part
- Partner says what is behind your back

# Beginning of Year Activities

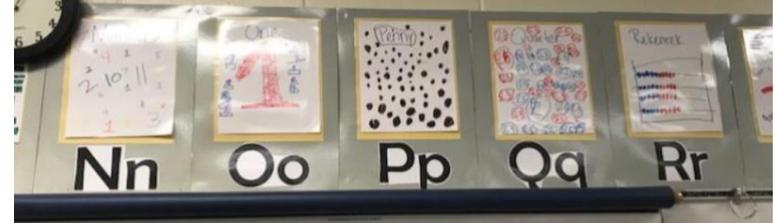
## What is a Mathematician?



Gfletchy: The Pringle Ringle 3 Act Task

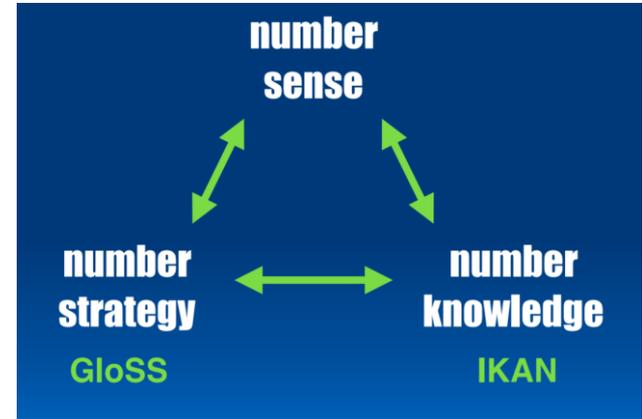


## Math Alphabet



# Where are my students at?

Georgia's Numeracy Project: GloSS and IKAN  
 IKAN: Individual Knowledge Assessment for Numeracy (stage 1)  
 GloSS: Global Strategy Stage



Individual Knowledge Assessment for Numeracy (IKAN) Part I

Name: \_\_\_\_\_

### Counting Students (Interview)

\*for students scoring within Strategy Stage 0 - 3

Look for confusions between "teen" and "ty" numbers in questions (1), (3), and (7) to (9) and for "dropping back" to find the numbers after and before.

(1) Start counting from 1. Stop at 32.

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32

*student must stop counting at (32) and not go beyond*

(2) Count backwards from 10. Stop at 0.

10,9,8,7,6,5,4,3,2,1,0

*student must say "zero"*

(3) Count backwards from 23. Stop at 11.

23,22,21,20,19,18,17,16,15,14,13,12,11

*student must stop counting at (32)*

Show each number (on card). For each number ask:

Questions:	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Show Card #	1	5	11	14	31	50	80	100	111	409	870	999
What is this Number?												
What Number comes after?												
What number comes before?												

\*\*\*record dates achieved FNWS/BNWS/R&S in table below\*\*\*

	(K) R&S to 20	(1 <sup>st</sup> Grade) R&S to 120	(2 <sup>nd</sup> Grade) R&S to 1000
FNWS-		Number recognition to-	Number recognition to-
BNWS-		Number after and before to-	Number after and before to-
Number recognition to-			
Number after and before to-			

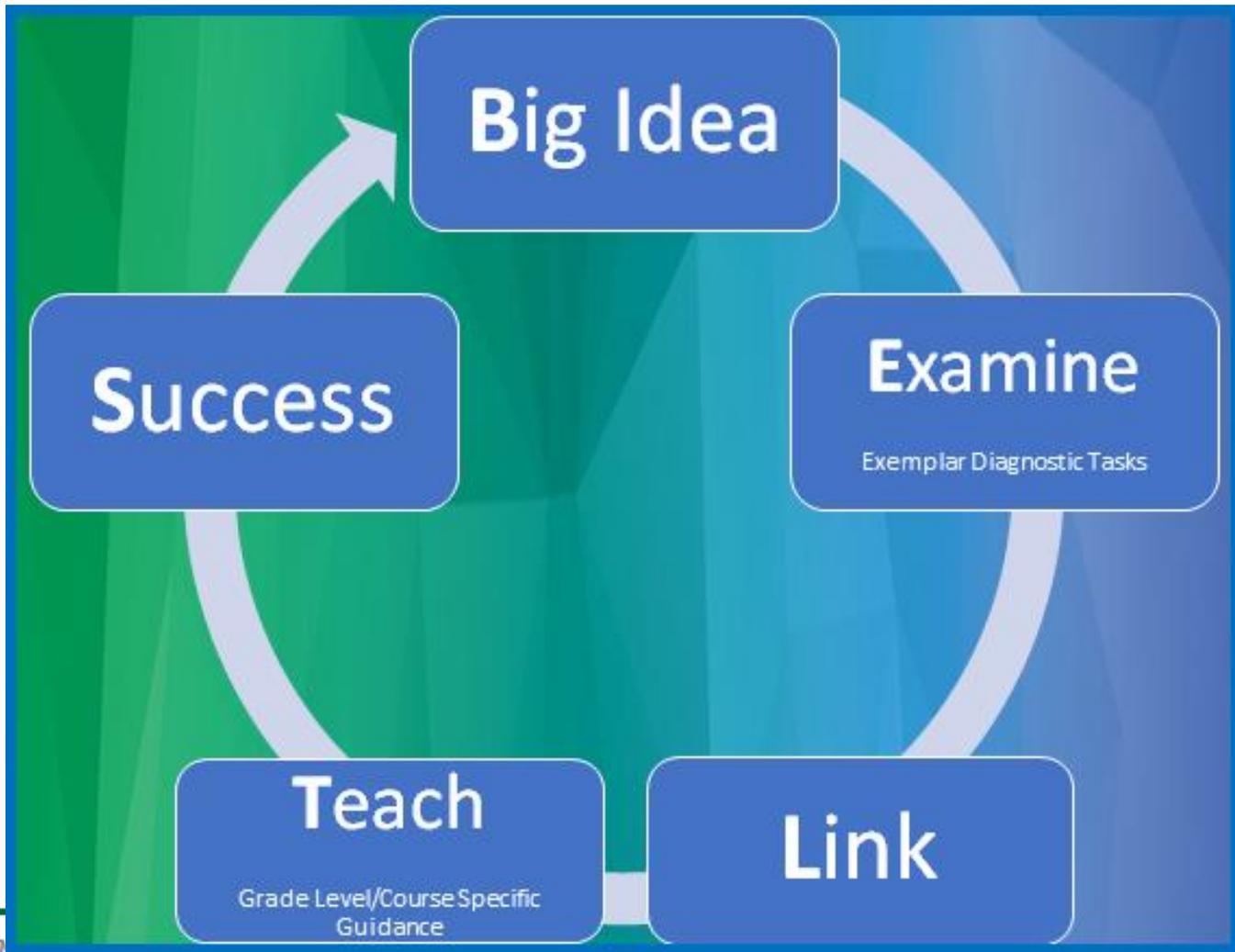
FNWS/BNWS- Forward and Backward Number with Sequence

R&S-recognition and Sequence

Adapted from nzmaths

- Numeracy Project Tasks
- Small Group Instruction
- Number Talks

# Student Success Toolkit



# Student Success Toolkit



## Grade Level GRADE LEVEL OVERVIEW

### Sample Mathematics Learning Plan

<b>Big Idea/ Topic</b>	Identify what students need to know/ understand in this learning plan  Big Idea: Extend Understanding of Base-Ten Notation
<b>Standard Alignment</b>	List the GSE standard(s) alignment here  <i>MGSE2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</i>  <i>MGSE2.NBT.2 Count within 1000; skipcount by 5s, 10s, and 100s.</i>  <i>MGSE2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</i>  <i>MGSE2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons. Represent and interpret data.</i>  <i>MGSE2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.</i>

# Student Success Toolkit



## Diagnostic Assessment

Link to appropriate diagnostic task/activity/assessment and write a short description of the assessment used to diagnose student understanding of the specific big idea

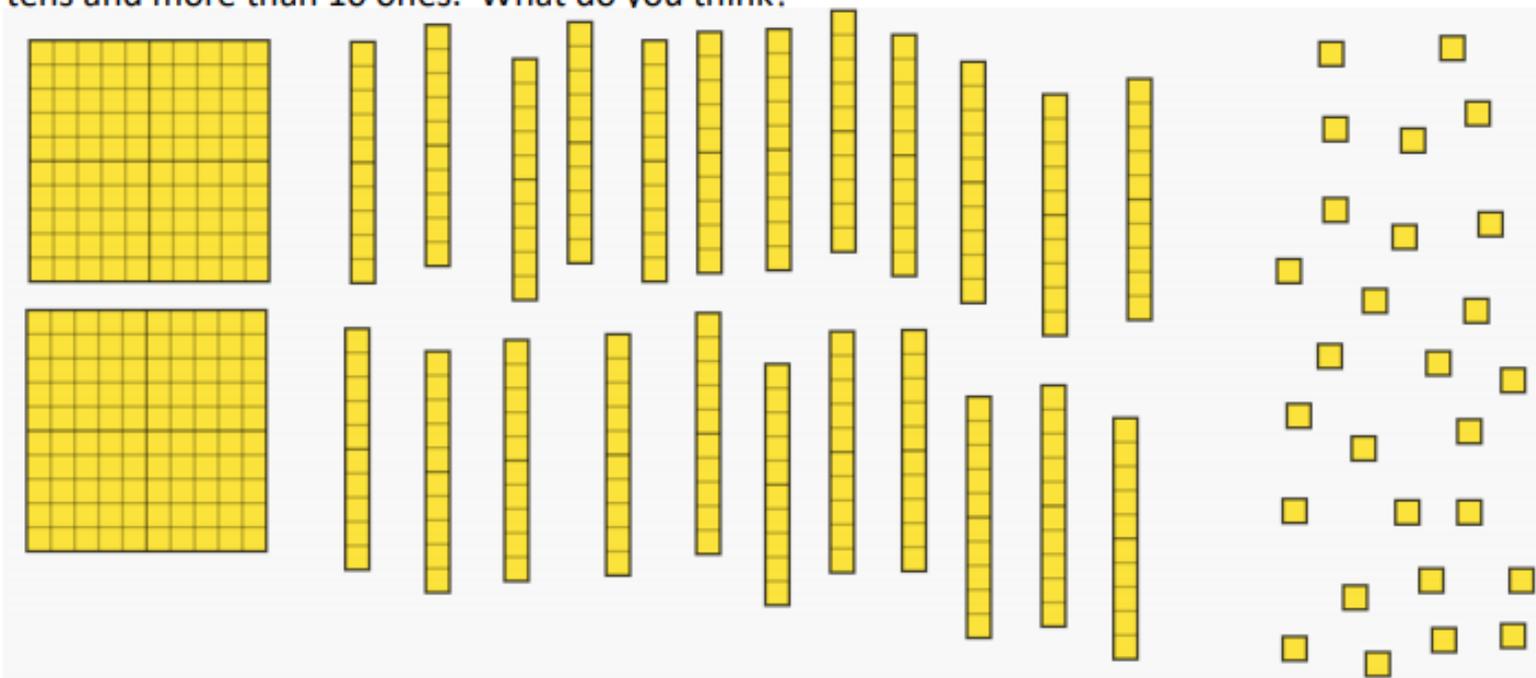
[Diagnostic Task Big Idea: Extend Understanding of Base-Ten Notation](#)



# Student Success Toolkit

## Base-Ten Spill

This morning, a tub of base ten blocks spilled onto the floor. One of the students said that we can't write a number to represent the value of all of the blocks because there are more than 10 tens and more than 10 ones. What do you think?



# Student Success Toolkit

## Base-Ten Spill... The Next Day

The next day, another tub of base ten blocks spilled on the floor. A student counted 3 hundreds, 13 tens, and 35 ones. Some students think the total value of the spilled blocks is 348. Is this correct? Show your mathematical thinking.

## Base-Ten Spill... Day 3

Oh, no! It happened again! Another tub of base-ten blocks spilled onto the floor. This time, we know the total value of the blocks is 584.

What base-ten blocks could have been in the container?

# Base-Ten Spill – Anticipating Student Thinking

Anticipated Student Thinking	Students and Their Thinking	
<p><b>Making Groups</b> Students make hundreds with groups of tens and tens with groups of ones.</p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation
<p><b>Place Value Equation</b> Students count the number of hundreds, tens, and ones, then accurately write an equation using place value numbers</p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation
<p><b>Identify Place Value Parts</b> Students Identify the correct number of hundreds, tens, and ones</p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation

# Base-Ten Spill – Anticipating Student Thinking

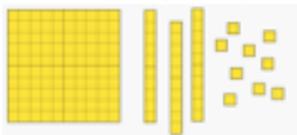
Anticipated Student Thinking	Students and Their Thinking	Big Idea
<p><b>More than One Place Value Equation</b></p> <p>Students write at least one equation to represent the amount shown by the base-ten blocks</p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation
<p><b>Inaccurate Place Value Grouping</b></p> <p>Students are unable to group tens to make hundreds and/or group ones to make tens</p> <p>Students show a lack of consideration of place values i.e., <math>2 + 23 + 27 = 52</math></p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation
<p><b>Inaccurate Identification of Place Value Parts</b></p> <p>Students are unable to accurately identify the correct number of hundreds, tens, and ones</p>		2 <sup>nd</sup> grade: Extend Understanding of Base-Ten Notation

## Instructional Design

### Engage

Place Value [Number Talks](#)

Use base ten blocks to model a 3 digit number and ask students what number you are representing and how they know? Step by step instructions for completing a Number Talks are in the Link.



For example,

### [Virtual Base Ten Blocks](#)

- **Synchronous** Complete during a classroom discussion or virtual classroom meeting.
- **Asynchronous:** Introduce the problem to students in a virtual platform; this can be done via e-document or video. Allow students to share responses and provide feedback to their peers within the virtual platform/classroom. Provide feedback to individual student responses and highlight multiple strategies used by students.
- **Unplugged/ Offline:** Encourage students to provide a written explanation of their thinking and how they reached their solution when solving problems. Provide feedback that demonstrates different strategies to solve problems. Alternatively, share a problem along with a strategy and solution; ask students to explain a different way to solve the problem.

## Instructional Design

### Explore

***"Straws, Straws, Straws" 3 Act Task: Use base-10 knowledge to develop strategies to count large quantities more efficiently.***

- **Synchronous:** Complete during a classroom discussion or virtual classroom meeting.
- **Asynchronous:** Pre Record each act or create an e-document for each act. Allow students to share their thinking within the virtual platform/classroom. When students are asked to share their solutions and strategies in act 3, ask them to illustrate with drawings. Showcase different strategies students used and allow them to respond/give feedback within the virtual platform.
- **Unplugged/ Offline:** Provide students with information from Act 2 and provide them with the main question "how many straws are there?" Ask students to answer the question and provide a drawing that demonstrates how they solved the problem.

## Instructional Design

### Apply

**Base Ten Pictures Arts Integration/PBL:** *In this task, students create pictures using base ten blocks. They then record base ten information about their creations.*

- **Synchronous:** Complete during a classroom discussion
- **Asynchronous:** Provide students with the materials to complete part one on their own. Allow students time to virtually share the types of animal they created and how that animal travels. Create a table with the information students shared and encourage them to complete the graphing task in part two.
- **Unplugged/ Offline:** Provide students with the materials to complete part one on their own. For part two, provide students with a pre-populated table showing the different ways animals travel.

Name	Tally	Value
Walk	      	12
Fly	 	6
Slither		2

For example:

## Instructional Design

### Reflect

*Would you rather problem: Would you rather have 23 hundreds, 48 tens, and 9 ones OR 26 hundreds, 17 tens, and 22 ones. Encourage students to explain their reasoning.*

- **Synchronous:** Complete the problem as an exit/out the door ticket.
- **Asynchronous:** Have students share their answers in a shared documents or online comment forum.
- **Unplugged/ Offline:** Have students respond to the prompt in a math journal or on paper.

# Student Success Toolkit

## Success

- Include formative and summative assessment options (during learning or at the conclusion)

“Straws, Straws, Straws” 3 Act Task Formative Questions:

- What models did you create?
- What organizational strategies did you use?

“Base Ten Pictures” Formative Questions

- How many blocks did you use to create your animal?
- How did you count the number of blocks?
- How many blocks did your partner use?
- Who used the most blocks?
- How could you create an animal to make it easiest to count? • How did you count the total number used?
- Can you show me this number in standard form?
- What is the number in expanded form?

[Diagnostic Task Big Idea: Extend Understanding of Base-Ten Notation](#)

# Student Success Toolkit

## Suggestions for Acceleration and Intervention, as needed

- Identify additional strategies to support students as they progress towards mastery of the big idea.

## At Home Support

- Identify additional support materials or resources that can be used at home to support student understanding of the big idea.
- May connect to Georgia Home Classroom resources

# Mathematics Resources

Introduction		
Kindergarten	1st Grade	2nd Grade
3rd Grade	4th Grade	5th Grade
6th Grade	7th Grade	8th Grade
Coordinate Algebra	Algebra I	Analytic Geometry
Geometry	Algebra II - Advanced Algebra	Precalculus
	Calculus-Based HS Courses	All Other HS Courses
Additional Teacher Resources		

<https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Mathematics/GADOE-Remote-Learning-Supplemental-Resources-for-Mathematics-K-12.pdf>

# Questions?



# Contact Us

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