

KENTUCKY CENTER
FOR MATHEMATICS

Choral Counting & Counting Collections

**Presenter: Julie Adams,
Kentucky Center for
Mathematics**

Franke, Megan L. Choral Counting & Counting Collections: Transforming the PreK-5 Math Classroom . Stenhouse.

What is choral counting?



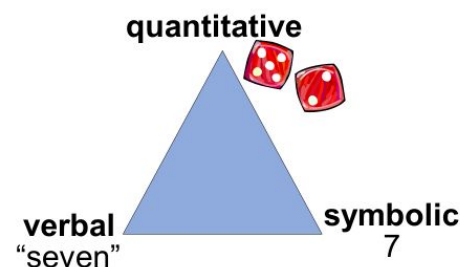
Big Mathematical Ideas of Choral Counting

- Three Aspects of Number
- Number names and the order of counting sequence
- Coordinating the number word with the written symbol
- Counting by ones and counting in groups
- Thinking about relative size and quantity
- Developing place value understanding
- Skip-counting
- Patterns and features of number
- **Equity**

Additionally, students are developing their curricular competencies through:

- communicating their thinking
- sharing and reflecting with classmates
- estimating
- predicting and analyzing the patterns involved

3 Aspects of Number



What does it look like?

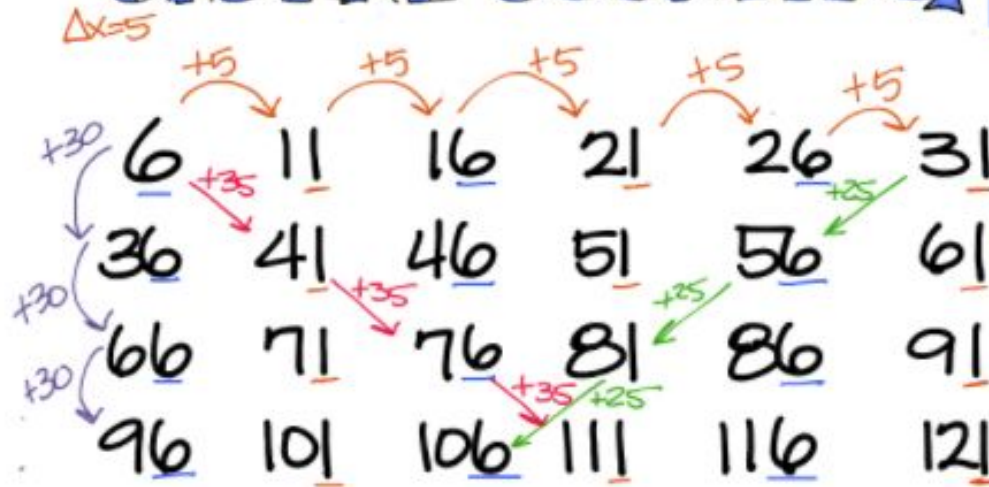


Activities to promote choral counting

Whole Number		
Task	Big Mathematical Ideas	Sample Recording
Count forward or backward by 1 ... from 0 ... from 20 ... from 80 and beyond	<ul style="list-style-type: none"> Fluency with the counting sequence Notice repetition of base-ten number system 	
Count forward or backward by 2 ... from 0 ... from 20 ... from 80 and beyond	<ul style="list-style-type: none"> Fluency with the counting sequence Notice repetition of base-ten number system 	
Count forward by 5 ... from 0 ... from 20 ... from 80 and beyond	<ul style="list-style-type: none"> Develop skip-counting skills Ideas about composition of 10 and base-ten number system 	
Count forward by 10 ... from 0 ... from 70 or 170 ... from 64 or 164	<ul style="list-style-type: none"> Developing efficient strategies for +/-. counting on by tens Begin to generalize the structure of the base-ten number system beyond 100 	

CHORAL COUNTING

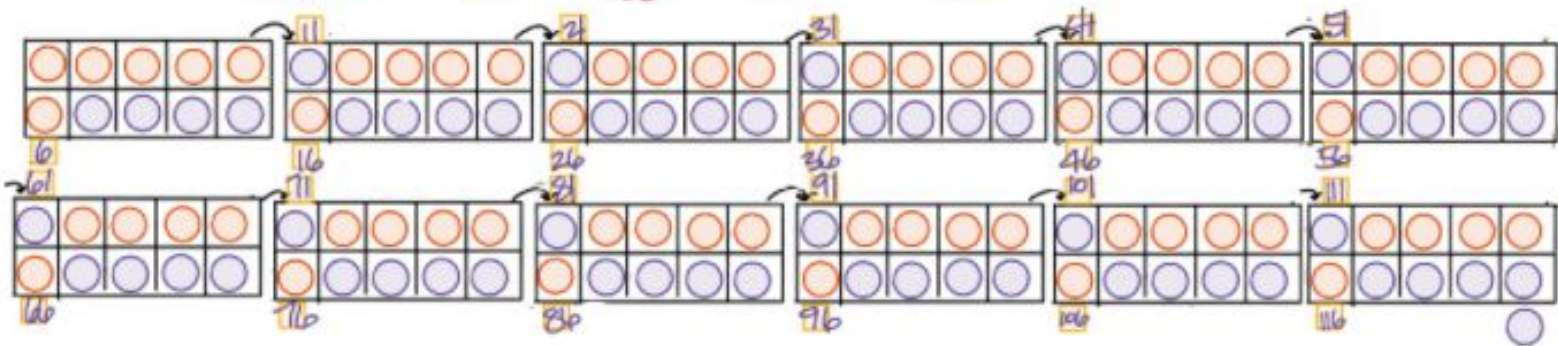
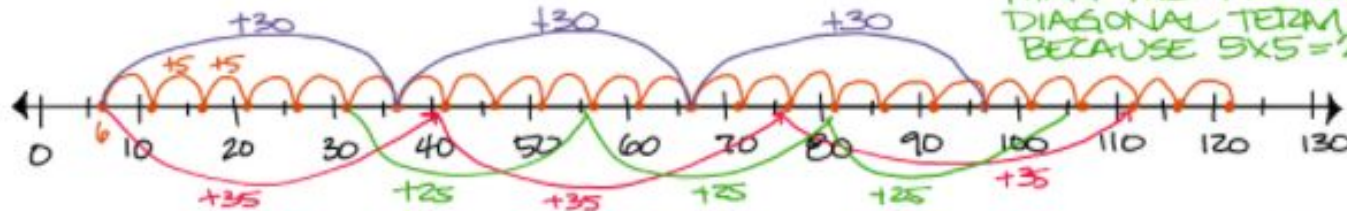
from @MEGANFRANKIE,
@EKAZEMI, @ANGELATURRIZOS



● EACH TERM IS 30 MORE THAN THE TERM IN THE ROW ABOVE IT BECAUSE $6 \times 5 = 30$.

● EACH TERM ON THE DIAGONAL TOP LEFT TO BOTTOM RIGHT IS 35 MORE THAN THE PREVIOUS DIAGONAL TERM BECAUSE $7 \times 5 = 35$.

● EACH TERM ON THE TOP RIGHT TO BOTTOM LEFT DIAGONAL IS 25 MORE THAN THE PREVIOUS DIAGONAL TERM BECAUSE $5 \times 5 = 25$.



What is counting collections?

Started with this...



Ended up with this!

Big Mathematical Ideas Supported by Counting Collections

- Number names and the order of a counting sequence
- Counting by ones and counting in groups (such as 2s, 5s, 10s, 25s, 100s, and so on)
- 3 Aspects of Number
- One to One Correspondence
- Cardinality
- Thinking about and figuring out *how many?* and structures that help you keep track
- Putting together and taking apart numbers and quantities
- "10ness"
- Understanding operations of addition and subtraction



What does it look like?



Printable Resources for Planning/Enacting/Reflecting

Choral Counting Quick Plan Sheet

Choral Count: _____

Big Idea: _____

Choral Count Outline

Math Talk Plan: _____

Counting Collections Planning Protocol

Instructional Decisions to Consider	Notes
What size count is appropriate for my students? Which students are ready to count sets of objects?	<i>try moving some students toward hundreds</i>
Will I have students work individually or in pairs? Will I base pairings on social skills or math skills?	<i>pairs who will work well and pair to try 100s today</i>
How often will we do collections? How much time will we spend counting?	
What are the social goals for the lesson? Examples: <ul style="list-style-type: none"> Count with my partner. (Make decisions about where to work, how to count, how to record) Stay on task. 	
What are the mathematical goals for the lesson? Examples: <ul style="list-style-type: none"> Keep track of the items counted. Record efficiently. (Using tallies rather than drawings.) Record in a way that shows how you counted. Count efficiently. (Use groups to count.) 	<i>for some—group efficiently others—work on ideas around 100; how would we count that? what do the written numbers look like?</i>
What do I want to pay attention to as I observe students? How will I ensure that I observe all students over time?	
Social Challenges	
<ul style="list-style-type: none"> Students may have difficulty staying on task. Students may have difficulty working with a partner. 	
Math Challenges	
<ul style="list-style-type: none"> Students may get distracted by the items. Students often misstep at predictable or consistent numbers: (decades 29..30; century marks 399...400; counting by tens 100, 110, 20) Students can count higher than they can record, especially if they are counting by ones. Students may not record the way they counted. (For example, they counted by tens, but recorded ones) 	<i>listen for how students count past 100; do they have the number sequence by tens? ones?</i> <i>tools that might support this new count: 200s chart</i>

Virtual Resources

Choral Counting Planning Tool



Select one of the frequently used counts or make your own count using the form below.

Frequently Used
Counts

Choose an option



Title

Count by 15, start at 15

Type of Number

Integer



Starting Number

15

Count By (Interval)

15

Rows

6



Columns

5



Count Down



Count Across



Increment



Decrement



Frequently Asked Questions

[How do I save a count as a PDF?](#)

[How do I save a count for later use online?](#)

[How do I enter the starting number and interval for mixed numbers?](#)

[See more FAQs](#)

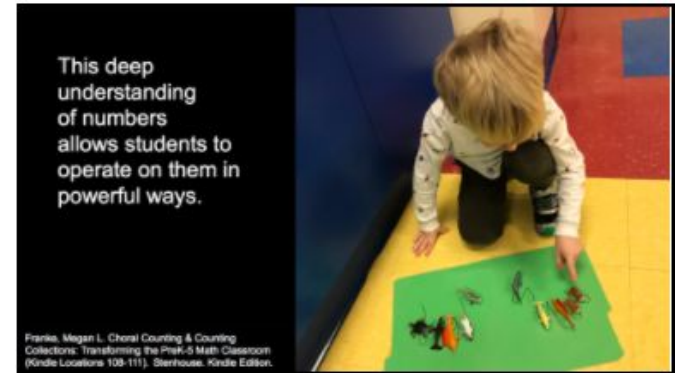
Count Everything, Count all of the Time!

Twitter Hashtags

#countingcollections

#choralcounting

#tmwyk (talk math with your kids)



Counting Matters!

