

Choral Counting Primer

Choral Counting: What is it?

Choral Counting is an activity in which the teacher leads children in counting aloud together by a given number. As the class calls out each number the teacher records the count on the board, pausing the count at strategic moments.

To begin, the teacher decides on a number for the students to skip count by, whether to count forwards or backwards, and what number to start and end the count on. Different numbers lend themselves well to surfacing different mathematical ideas. Some examples include:

Count

Counting back by tens from 438

Counting by ones from 84

Counting by fours from zero

Counting by tenths from 2

Counting by thirds from zero

Counting by nineteen from zero

Mathematical Idea

Structure of the base-ten system

Learning the number sequence beyond 100

Multiples of even numbers are always even

Decimal language and notation

One whole is made up of 3 thirds

Multiple efficient computation strategies

The goal of this activity is not just to practice rote counting, but to engage children in reasoning, predicting, and justifying. To do this, teachers record the count so that patterns within the numbers are readily noticeable and pause during the count to ask questions like,

“What do you think will come next? How do you know?”

“If we continue with this count, will we ever say the number 212?”

This instructional activity is a powerful tool for novices and practicing teachers in that it has a predictable structure, engages children in rich mathematics, and can continue to be refined and modified to pursue a broad range of mathematical goals. It is a small chunk of instruction, taking about ten to fifteen minutes and is often used as a warm-up at the beginning of a math instruction session. Teachers with varying levels of expertise can enact this task and continue to learn about student thinking and the mathematics involved as they engage with students in the activity.

What are kids working on: What's the math?

In this activity, children have the opportunity to work on a variety of mathematical content, depending on the goal for the lesson and the numbers selected. Some important concepts that children might work on in Choral Counting include:

- Forward and backward number sequence for whole numbers
- Counting by fractional or decimal numbers
- Name-symbol relation: How do I write that number?
- Base-ten structure of the number system
- Place value
- Predicting and justifying
- Generalizing

What are teachers working on: What practices of ambitious teaching are embedded?

The protocol for the Choral Counting activity asks teachers to *elicit and respond to student's reasoning* throughout the count. The planning protocol supports teachers to do this with guidance on when to pause and ask questions and also some sample questions which might elicit student thinking. Through careful number selection and planning, teachers can anticipate some of the ideas that children might share and how they will respond, allowing teachers to practice *teaching toward an instructional goal*.

Another important practice that teachers have an opportunity to work on in Choral Counting is *orienting students to one another's ideas and the math content*. As children share the patterns that they notice, teachers must develop strategies for orienting the whole class to the ideas being shared in order to make the discussion productive for all students.

One way teachers do this in Choral Counting is to record student thinking on the board during the count. Again, anticipation of the ideas children might share can help teachers plan ahead of time how they will *use mathematical representation* to make student thinking public. This takes some of the demand off of the teacher in the moment of enactment and provides teachers with a space to consider the advantages of a variety of representations.

