



Math Routines

Summer 2016





Do Now

What is the purpose of math routines (*i.e. fact practice, counting activities, etc*)?

How do you believe they support the work that students have to do in Math Workshop and Math Story Problem?



Core Idea:

To ensure students are adequately prepared to tackle the rigor of the Common Core, we must offer practice and review of the key concepts at each grade level.



Objectives and Agenda

Objectives:

- WWBAT develop a clear vision for how to execute various K-1 math routines introduced in unit 1
- WWBAT gain a deeper understanding of how the math routines support Common Core standards and the work that happens in Math Workshop and Math Story Problem

Agenda:

- Counting Around the Class
- Attendance
- Today's Question





Counting Around the Class

K.CC.1

1. Count to 100 by ones and by tens
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1)

Kinder - students will count by 1's, 10's, and 5's to 100

1.NBT.1

Count to 120, starting at any number less than 120.

First- students will count by 1's, 10's, 5's, and 2's, and increment by 10's.



Counting Around the Class

Steps to the Routine

Step 1: Have the class sit in a circle.

Step 2: Tell them the start number and how they are going to count (i.e. by 1's, 2's, 5's, 10's, etc based on grade level benchmarks)

Step 3: Starting with the first person, each student says a number. Continue to go around the circle, giving each student as many at bats as time allows for.



Counting Around the Class

Key Teacher Actions

- Cue students to state the number that comes next by pointing to individual students (early on)
- Chart the numbers vertically as students say them.
- Make note of students that are struggling to count accurately
- Check for understanding and strategy variation by asking students to share how they knew what came next.

Key Student Actions

- Follow the sequence of numbers as students count.
 - Prepare for/anticipate their number
- Thinking job of determining what number will come next and being prepared to share how they know.



Counting Around the Class

See It!

As you participate, take notes on the following:

1. How does the teacher keep students engaged throughout the lesson?
2. What does the teacher do when a student does not know what comes next?
3. Other observations or questions that arise.



Counting Around the Class

What if.....

- A student doesn't know the next number in the sequence?
 - Ask scaffolded questions/prompts that put the heavy lifting on the the student.
 - “Use the number line or the hundreds chart to find the number that is one more than 12. Do you know what number that is?”
 - Call on another student to give the response. Circle back to the original student to have them repeat the correct response. *Not a bad idea to go back a few numbers/students in the sequence to have that student repeat the correct answer in sequence.



Attendance

K Objective: Accurately count; Establishing one-to-one correspondence between equal groups (i.e. students and cubes)

1st Grade Objective: Accurately count and determine if a number can be made into groups of two.

*Look at the standards addressed in unit 1 for your grade.
Which common core standard(s) are addressed in this routine?*



Attendance

Steps to the Routine

Have the class sit in a circle.

Step 1: Take attendance. Count the number of students present in at least two different ways.

Step 2: Determine how many people, if any, are absent, and record data.

Step 3: Use the attendance stick to represent the data (K)
Determine if everyone can have a partner (Gr. 1)



Attendance

Key Teacher Actions

- Providing at least two ways for students to take attendance
- Recording attendance
- Constantly prompting students to answer, “how many?”
- Allow students time to analyze the data (i.e. make comparisons, determine if everyone can have a partner, etc) and share responses

Key Student Actions

- Follow the sequence of numbers as students count.
 - Prepare for/anticipate their number
- Thinking job of how they can determine how many people are at school today, and how can they determine if everyone can have a partner.



Attendance

See It!

As you participate, take notes on the following:

1. How does the teacher keep students engaged throughout the lesson?
2. What prompts does the teacher use to push the math goals for the day?
3. Other observations or questions that arise.



Today's Question

Objective: Collect, count, represent, describe, compare and interpret data.

*Look at the standards addressed in unit 1 for your grade.
Which common core standard(s) are addressed in this routine?*



Today's Question

Steps to the Routine

Step 1: Prepare a chart for collecting data.

Step 2: Explain the survey and collect the data.

Step 3: Discuss the data



Today's Question

Key Teacher Actions

- Explain the survey and help students display their data.
- Once data is displayed, ask questions that encourage students to read the representation to describe and interpret the data
- Record student noticings

Key Student Actions

- Thinking job of analyzing the data. What does the chart tell us? (Looking for students to compare the two categories, as well as the amount of votes for boys and girls within and across the categories.)



Today's Question

See It!

As you participate, take notes on the following:

1. How does the teacher keep students engaged throughout the lesson?
2. What prompts does the teacher use to push the math goals for the day?
3. Other observations or questions that arise.

