Unit 4	Large Group: Making Sense of Data	Math LG	Standards: MELDS.M.CCC.PS.5 MELDS.M.MD.PS.9
Week 5			

Guiding Math Idea:
- Representation- Making Math Visible through manipulatives, tools and symbols.
- Problem-Solving- Representation Tools

Math Concepts From Unit Learning Progressions:
- Rational Counting: Growing understanding of cardinality
- Organizing data: Recording data graphically in charts and graphs. Describing patterns.

Adaptations for Using Large Group In Alternate Schedule Slots:
- Move the Graph Analysis to SWPL or a Transition Time, and use the *Crayola Sorting Book* to organize the materials in the art center by color or texture, describe and graph.

Materials:
- Color Data Chart from this week's collection
- *The Crayola Sorting Book* OR *Sort it Out from* Unit 2
- photo of graph from Week 1
- sticky color dots
- marker
- 100's charts

Math Vocabulary:
- data: another word for information or facts.
- estimate: using math to make a guess
- analysis: making sense of our color information.

Preparation:
This week, the Large Group Activity involves analyzing the Color Data Chart. You may have shortened the time period. Insert the analysis stage **at any point during the Unit**, based on children's interests. The longer the data is collected, the more dots there will be as children rote count to 20, 30 and beyond.

Place Color Data Chart in Large Group Area along with dots and marker.

"Everyday this week/month/unit, we have been collecting information about what colors we have on. We have a LOT of information on our graph."	

"Who remembers what a graph is?"	*Children may recall the definition or example from the initial creation of the graph in Week 1. Show the photo of what it looked like before you started entering data.*
"What do you see on our graph, just by looking at it?"	*Children make observations.*
"Yes, we can **estimate-** that means use math to make a guess- before we count. We **estimate** that blue will be the most popular".	*Children may be able to estimate what color is most popular by looking at the amounts.*
"Were there any days that we forgot to collect our data?"	
"Let's find out which color was the most popular? Popular means that more people wore that color than any other. How could we find out?... Let's find out by counting- What color should we start with?"	*Children suggest ways. Counting will be one of the ideas.* *Begin to count the colors one by one. Note how you added colors as needed during the unit. Write the numbers.* *Children may enjoy rote counting us as high as they can. Use the number chart to guide counting as needed.*
"It looks like _____(blue) is our most popular color. Wow these are some big numbers! Many more than 10, many more than 20."	
"What color has the fewest dots?"	
"When we look at a graph, we can use it to help us find out things- that is called **Analyzing.** Analyzing can help us solve problems, such as the problem of finding out what is the most popular color of clothes in our room!"	*Children guess again and the activity continues as children and teacher explore different ways to analyze the data.*

Strategies to Provoke Math Thinking:
- Analysis is a BIG math idea- and a step is often omitted, even when after collecting data. Children are natural problem solvers. Graphs are very exciting tools for them to use as they investigate different sorts of problems.

Provocation:
Build on children's new skills at using graphs by including people graphs, blank graph sheets in the
math or are area and using graphs to record data in science. This will be done frequently in Unit 6.