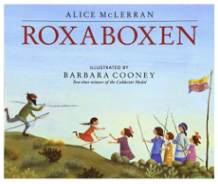
WEEK 7, Day 4



Math Center: Counting Collections with Roxaboxen

Inspired by Roxaboxen, children count collections and record their numbers.

Big Ideas	Children will: ● communicate mathematically through multiple forms of expression. ● persevere in solving questions with a growth mindset. ● solve mathematical problems using a variety of strategies. ● make sense of the world around them through mathematics. ● connect math to other learning and real-world examples. A strong, interdependent math community has qualities, such as: ● shared responsibility, collaboration and support for each other.
Guiding Questions	What does it mean to be a member of a math community? How do you use math tools? How do you most effectively communicate your mathematical thoughts and ideas? Why is collaboration and listening to the ideas of others important?
Vocabulary	**collection:** a group of things that belongs together **compare:** to look at groups and recognize which has more or fewer
Materials and Preparation	● collections of small materials, similar to items found in *Roxaboxen,* such as small rocks, shells, colorful counters, etc. Use the labels to number each collection: "Counting Collection #1" and "Counting Collection #2" and so on. ● small boxes or baggies to hold each Counting Collection ● Counting Collection recording sheets ● pencils ● 100's chart, number line for a resource ● 10's frames
Intro to Centers	*While reading Roxaboxen, we identified some details about the materials used to construct different places in Roxaboxen. What*

	were some of the materials they used to create their town? Provide 30 seconds of quiet think time and invite children to turn and talk. Invite children to share their ideas. *At the Math Center you explore counting collections inspired by Roxaboxen. A counting **collection** is a group of objects that belong together.* Show children the counting collection boxes. Emphasize looking at the number on the front looking at the items and then closing the box so they don't get mixed up. *Watch how I choose a counting collection. I will model how I can organize my collection and count it carefully. I can work on my own or with a partner.* Invite a child to support the modeling. Work together to organize the Counting Collection and model by counting and thinking out loud. Show how to draw the collection and demonstrate writing the total number. *When I am finished with one counting collection I can put it away and count another one. I want to make sure I clean up the Counting Collection first before getting a new one. I can compare the counting collections and see which has more or fewer. I can compare my counting with my classmates and see if we agree on the total number in the collection.*
During Centers	Children use the Counting Collections and various math tools to help them count efficiently. Children use the paper recording sheet to share their thoughts and record the total number. Children can complete multiple counting collections and compare the total numbers in each individual box. Take observational notes about children's exploration and language. Follow the children's lead and use precise mathematical vocabulary to narrate what they are doing as they count and record. Extension: Have children make a chart with the counting collections at the top and use a sticky note to record the counting collection totals. When you talk about centers another day you can refer to this chart and affirm students counting.
Facilitation	● Tell me about how you are counting. What strategy are you using? ● What else might you need to help you count?

	● What groups do you see? ● What was challenging about using these materials or when counting? ● How did you solve the problem if you and a partner got a different number?
Standards	**Addressing**: **GR.C.1** Identify, describe, analyze, compare, create, and compose shapes based on their attributes. ● **K.G.A.1** A variety of standards may be posted, based on the math curriculum used in the classroom. Common options might include: **QR.C.1** Know the number names and the count sequence. ● **K.CC.A.1**: I can count to 100 by ones and by tens ● **K.CC.A.3**: I can write numbers from 0 to 20. I can write the numbers 0-20 to **represent** a number of objects. **QR.C.2** Count to tell the number of objects. ● **K.CC.B.4a:** When counting objects, I say the number names in the right order, making sure I say only one number for each object that I count. ● **K.CC.B.5:** I can count to answer "how many?" questions for as many as 20 things arranged in different ways. Given a number from 1-20, I can count out that many objects. **Standards for Mathematical Practice:** 1-8