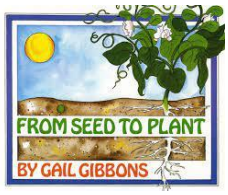

WEEK 1, Day 4

Math Center: Seed Collections

Children count seed collections and use various strategies to count numbers to 100.

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	**total:** the final number found after counting all items in a collection **tens:** a group of 10 objects **ones:** single objects that are not in a group of 10
Materials and Preparation	● small items, to serve as 'seeds,' such as dried beans, beads, buttons, mini erasers, pom poms, etc. ● small containers for each counting collection such as small envelopes, empty yogurt containers, small boxes, cups, etc. ● small cups or trays for sorting ● small envelopes or snack-size bags Label with "Seed Packet." ● paper ● writing tools ● 100s chart, laminated or in sheet protectors

	• tens frame
Intro to Centers	*In our new unit, we will learn about plants and trees, and how to care for our earth. We will be environmentalists, people who learn about and protect the environment! This week we are studying and writing about seeds. The Math Center will be inspired by that work. We will revisit counting collections but with different seed packages.* Show children the 'seed collection' and Centers materials: 100's chart, blank paper, seed containers, sorting trays. *When you go to the math center you will find different containers of seeds to count. As you can see these seed packets are all different and have different **totals** inside. Each seed collection will have different numbers. It will be important that you only count one seed collection at a time.* Model picking one seed packet and preparing to count the total number. Remind children to only count one packet at a time and to count each collection independently. *There are a lot of seeds in this packet! What are some strategies I could use to find the **total**?* Harvest a few ideas on how to count the total number of seeds. *We heard that we could count the seeds by using a 100's chart. Let's try that. Let's watch as I put one seed on each square. Count with me to find the total number of seeds.* Demonstrate using the 100's chart and model using one-to-one counting. *Another strategy we heard was to group the seeds into groups of tens and ones. We can use this strategy by making little piles of tens and counting them like this: 10, 20, 30, and 6 more. That's 31, 32, 33, 34, 35, 36. Wow, there are 36 seeds in this packet!* Show where the math tools belong when they are put away. Prompt children to clean up their collection prior to getting a new one. Model using a piece of paper to record a collection if they are interested. This can include drawing their collection, or showing their groups of tens and ones.
During Centers	Children will count collections using various strategies. Encourage children to talk out loud about their strategies. Model how to combine the groups of tens and ones and how to find the number on their 100's chart if they don't know the number on their own. If interested, encourage children to create class recording chart. Have children write their totals on the chart and notice if they are finding the same totals or if they have different numbers. This will lead to a conversation about checking our work and comparing numbers.

Facilitation	● What strategy did you use to count? ● What is your plan for counting? ● What materials will you use to help you count efficiently? ● Did you count each seed once? How do you know? ● What happens if you and a friend find a different total number? What could you do to solve the problem? ● What packet of seeds had the most in total? What package had the least? How do you know?
Standards	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

Notes