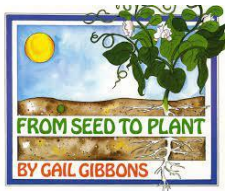

WEEK 2, Day 2

Math Center: Build and Count Flowers

Children use pattern blocks to create flowers and count the total number of shapes used to make each flower.

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	**compare**: to look at and notice similarities and differences between two or more numbers, groups, or objects **equal**: being the same amount, or number, as another **less than**: when comparing, a way to describe the smaller quantity, or number; fewer **greater**: when comparing, a way to describe the larger/bigger quantity, or number; more **add:** to put two or more numbers, or things, together to make a new total.
Materials and Preparation	● *From Seed to Plant* by Gail Gibbons ● pattern blocks ● sticky notes and pencils

	• 100's chart • recording page Print for each child or put into a plastic sleeve for reuse. Have a routine in place to photograph and document children's creations. Additional materials can be added to build shapes such as sticks, paper, cardboard, tape, and connecting cubes.
Intro to Centers	Show *Seed to Plant* and draw students' attention to different flowers and shapes. *The Block Center last week helped us to look closely at* From Seed to Plant *written and illustrated by Gail Gibbons. We built flowers and plants. We will bring this work back into the Math Center.* *Let's look back at the illustrations to remind ourselves of the different flowers found in this text.* Show a few pages, giving children quiet time to study the illustrations. Invite children to share what they notice. Record key words that they use to describe the flowers. *I notice that the flowers had different shapes and different sizes. Some flowers are tall and some are much smaller.* *This week at the Math Center you will build flowers using our pattern blocks.* Display the pattern blocks. *How might you use these shapes to show a flower?* Invite children to turn and talk. *At the Math Center you will get to explore and create flowers. I am going to challenge you to make a flower with the fewest amount of blocks and another flower that has more. As you work, how could you count the blocks to find the total number? At the Center, you will also find pencils and sticky notes. You can use these tools to record your total number. I also have a paper where you can record your findings.* *It would be interesting to compare your flowers or plants with a partner. Comparing numbers to see who had the most blocks used and who had the least? How will you know?* Describe the expectations for cleaning up and leaving the area when finished.

During Centers	Children compose solid shapes to represent flowers and plants. Children can build either flat on a surface or build up. Children may notice attributes of shapes in the context of building. Focus on listening to the language that children use to describe the shapes that they put together and their relative location. Follow the children's lead and use precise mathematical vocabulary to narrate what they are doing. Direct their attention to use their own language when describing their creations. Encourage children to use various methods when counting their total number of shapes used. Invite children to use number charts or other number resources to write the total number of shapes used.
Facilitation	● How did you decide which shapes to use? ● How did you decide where to place the shapes? ● Could you revise your model to show more features from the illustration? What shapes would be helpful to add or take away? Would moving any shapes be helpful? ● What shapes did you/_____ use? How many shapes did you/_____ use? ● How is your model the same or different from _____'s model? ● What strategies helped you the most today? Possible extension opportunities to incorporate math within other centers: ● Add more illustrations from the book or real images of flowers to the math center ● Have children draw and record their models of the stages on pieces of paper to display for others.
Standards	**Addressing:** **QR.C.1** Know the number names and the count sequence. ● **K.CC.A.1; K.CC.A.3** **GR.C.1** Identify, describe, analyze, compare, create, and compose shapes based on their attributes. **Standards for Mathematical Practice:** 1-8