

Week 1



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Guiding Math Ideas:

- Empowering Mathematical Thinking- Habits of Mind for School Success
- Review and Reinforcement: Quantity- Creating Sets
- Manipulating Shapes

Math Concepts From Unit Learning Progressions:

- Math is energizing and useful in many contexts: school, home, and the wider world
- Integrating and utilizing shape and space concepts in class projects and problem solving.
- Sets are special kinds of groups that can be manipulated in operations

Adaptations for Using Large Group In Alternate Schedule Slots:

• The larger the "garden" the better, so take this activity outside: Bring stretchy bands Color Cards and Dice. Use a designated area, such as a blacktop or grassy area as the "garden".

Materials:

- Zinnia's Flower Garden by Monica Wellington
- Jumbo Inflatable Dice, or any large dice (Math Materials)
- Color cards (optional)
- Blue painter's masking tape or other removable tape
- Stretchy bands- optional for extension activities (Math Materials)

Math Vocabulary:

- Grouping- putting things that are alike together
- Sorting- making different groups from an assortment
- Rows- numbers, people or things in a line
- Order- the steps in a project, such as a flower garden.
- People Math- groups of people having fun doing math together
- Total- the members of the entire group.

Preparation:

This large group takes place AFTER the read-aloud Zinnia's Flower Garden.

Assemble materials. Tape off a large area (rectangle or square) that will be the garden.

We are learning about things that grow, and we read this book – <i>Zinnia's Flower Garden</i> Who can tell me one thing about this book? Zinnia planted a lot of different kinds of flowers.She had to follow an order , a plan, for her flowers to grow.	Show book and flip through a few pages and recall key points of the story with the children. Point out the order Zinnia used to plant flowers: First, next, then. Call on a few children.
We are going to pretend to make our own Garden, right here in Math Large Group! Wait! What did Zinnia need to make her garden?	Children recall some of the things Zinnia used- soil, tools, seeds, signs, water, etc.
Do we have any of the things right here in our Large Group that Zinnia used to make her garden?	Children answer.
I'm thinking of how we like to have fun with math by using people. What is people math ?	Children give various answers about people math, recalling other activities where we used our bodies to illustrate math concepts. Unit 5 LG 5 is a People Math Activity for example.
I wonder how we could make a pretend flower garden using people math ?	Children give ideas- some may say that the children could be the seeds or flowers.
I have an idea—What if we were the flowers in Zinnias garden?	
Here is our garden- I've marked it out on the floor.	Show children the designated "garden" area.
What shape is our garden?	Children identify the shape.
Zinnia planted a lot of kinds of flowers. They were many different colors. You know that in math we are always Sorting making Groups. How can we use our math brains to help us make a People Math Garden?	Children may think about using the colors of their clothes to be different colors of flowers or other ideas, such as their favorite colors. As children brainstorm, they will form groups.
Let's make some groups of flowers for our garden. What colors would you like to be? Zinnia planted her flowers in rows. Could we do that too?	Make different rows by grouping certain colors of "flower children" and have the children get inside the "garden"

Now let's make some different groups. We will sort again. I have an idea about how we could add some more math to our flower garden. Here is our dice How could we use these to help make our garden? Here XXX, roll the dice. XXX, choose a color. Let's make some rows. Which row has the most flowers? Which row has the fewest flowers? How many groups of flowers do we have? How many flowers do we have all together?	Add additional concepts: Children will add ideas about how to make groups of flowers in different shapes, colors, and numbers and fit inside the "garden" area. Use the color cards, or simply have children name a color. Count together as children form groups with different quantities. Guide children in comparing groups, using words such as more , same and fewer. Children can take turns being the "gardeners" to answer questions and provide clarity. Let children problem solve if they have more or fewer color-people than the roll of the dice. Continue counting groups, having children make small subsets inside the big garden, counting and sorting.
I notice that our groups of flowers changed, but	Use three summary questions to support
the total flowers stayed the same Why is	children's growing understanding of
that?	comparisons, equivalencies and operations .

Strategies to Provoke Math Thinking:

- Stepping back: By Unit 6, children have had lots of experience in forming groups, sorting, comparing, and counting. They may be using the counting strategy of placing items in rows, which aids in accurate 1:1 counting as well as group comparisons. Throughout this activity, invite children to use their imaginations and math skills to create a people-flower garden. They will create and then solve their own problems. Observe their skills and provide support.
- Adaptation and Extension: Include group problem-solving by creating one or two large garden maps on tag board that children can use together, creating rows of different "crops" using pictures or different colored post-it notes, comparing quantities and grouping. This will also stimulate map-reading and map-making skills.

Provocation:

• Continue Large Motor Math as SWPL: Use the stretchy bands (Math Materials Large Motor) and create all sorts of people math groups using the bands and the large dice. Groups of children get inside the stretchy band. Have children suggest categories for grouping, such as tie shoes/Velcro shoes, or long sleeves/short sleeves, etc.