

Unit 4  Week 3	<i>Small Groups: Making Groups with Blocks</i> Medium Support	Math SG1	Standards: MELDS.M.CCC.PS.7 MELDS.M.CCC.PS.8 MELDS.M. OAT PS.2
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Guiding Math Ideas:

- Representation and Problem Solving: Making math visible through manipulatives
- Parts/Wholes in Number Groups

Math Concepts from Unit Learning Progressions:

- Counting groups of objects or persons and assigns a number name (Increasing accuracy)
- Drawing, describing or showing with manipulatives how number names relate to groups.

<i>Materials:</i> <ul style="list-style-type: none"> ● 1" colored blocks sorted into color groups in piles or bowls ● number cards 1-20 ● paper to write color names (optional) ● greater than and less than symbol cards (optional) ● number chart for reference (optional) 	<i>Math Vocabulary:</i> <ul style="list-style-type: none"> ● grouping: putting objects together that are alike in some way
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Preparation:

Prepare Color Cards- Be sure that the color cards match the block colors (use cards from the Dog/Spot game in Week 2, or an old Candyland Game). Sort the 1 " blocks by color into bowls or have the children sort them at the beginning of the activity. Use assessment information to adjust the amounts on the number cards (1-5, 1-10, or 1-20)

Procedure:

4 or 5 children can play this game at once (larger groups will have to wait too long between turns).

This game is best played on the floor, due to the large amount of groups that will be made.

Make a stack of color cards, face down, and a stack of number cards, face down. Place the bowls or piles of 1 " blocks on the table.

Adjust the number until the group masters the game.

A child draws a number from the number pile. Help children identify the number name and numeral.

The child then draws a color. Child counts out the number of that color and places the number card beside it.

Another child takes a turn. The numbers will appear in random order, and ordering them is a key concept in this game. Have children arrange the numbers in a long line or in a chart form similar to a number chart.

Help children arrange the numbers in order, by asking questions such as, “This number is 7. I wonder if it is more or less than 10,” etc. When all numbers have been used, count together. Start the game over.

This game can be played with partners. One child draws the number, the other partner draws the color, and they count together and create their group.

Strategies to Provoke Math Thinking:

- Counting out 1-20 objects can be challenging for young children to keep up with 1:1 correspondence, remember where they are in the counting process and identify the number names. Model counting strategies such as moving a block from one side to another and encourage children to make groups as a counting strategy.
- Using a single color of block helps children to focus on number rather than color.

Adaptations for Additional Challenge:

- Select a single number, such as 10. Ask children to use different colored blocks to create groups that are “hiding” inside the number 10. This encourages composition and decomposition of number and is a foundation for addition and subtraction. Repeat with increasingly large numbers.
- Have children create their own number cards, which encourages the writing of numerals and matching numeral symbols to manipulatives.
- Add Color Name cards to the activity for children who show interest in reading/recognizing color words.
- Add Greater Than and Less Than Symbols as children arrange the numbers in order.

Documentation:

Use the Rote and/or Rational Counting Steps from Unit 2, creating a sheet for each child as you repeat this small group activity several times. Observe and note the child’s mastery of the individual counting concepts as they play this game.

Provocation:

Are children responding to the many math games that are used in this unit? Brainstorm about how to change other small group activities into games.