Unit 1



Small Groups: Bears, Dots and Blocks-Creating Small Number groups

Medium Support

Math

SG2

Standards:

CC: Transitions from rote to 1:1 Correspondence

OA: Responds with number words and /or counting strategy when asked the question How Many?

MD: Matches and groups similar objects.

Guiding Math Ideas:

Matching and Grouping

Math Concepts From Unit 1 Learning Progressions:

- Grouping objects of 1 or 2 (arbitrary or attribute based)
- Matching and Grouping
- Taking apart and putting together toys, puzzles & manipulatives

Materials:

- Small bear manipulatives
- Several sets of number cards with black circle dots in quantities 1-5. (Teacher Materials Packet)
- 1 " unit blocks
- 2 part puzzles
- I have 2 eyes For Extension- SWPL Unit 1

Vocabulary:

Preparation:

Gather materials.

Procedure:

Place bears and number cards in Small Group area.

Children play with bears. Model 1:1 correspondence. Count as you place bears in a row. Look through the number cards and choose the number of dots that matches your group.

Place 1 bear on top of 1 circle sticker.

1-2- I have 2 circles on my card. I have 2 bears in my group.

Invite children to play with the number cards and bears and observe how they create groups and if they verbalize counting while they do so.

Add the 1 " unit blocks. Model placing 1 bear on one block.

This action will create a group of 2.

Count 1 bear, 1 block and place "2" number card beside it.

I have 2 things in my group- 1 bear and 1 block.

Children will continue to play with 1 " blocks, bears and cards.

Ask children to give you "2" of something- bears, blocks, or other items in the Math Center.

Add the 2 part puzzles from the Math Center shelves to children's play to reinforce the idea of "2" but affirm children's creation of different size groups up to 5. Continue to create small groups and count. Some children may want to create larger groups than 5. Observe how they solve the "problem" of only having cards with up to 5 dots on them.

Strategies that Facilitate Math Thinking:

- 1:1 Correspondence: Self- correcting materials- The small sizes of the bear manipulatives, the circle stickers, and the 1" blocks naturally lead children to 1:1 correspondence as they play. The small blocks have room for only 1 bear. A child usually puts 1 bear on top of 1 sticker.
- Using Black Dots on Number cards helps children focus on number, rather than matching colors.
- Counting to two: Two is a naturally occurring number in the environment that is easy for children to identify: Body parts (eyes, ears, arms), 2 teachers, clothing such as shoes. To help children quantify, ask children to bring you "2" of something. Some children will easily and accurately complete this request. Others may bring a group of things. Some may try to find the numeral 2 or point to it. All are important indicators of understandings that a counting question should be answered with some type of counting strategy.

Documentation:

Observe children as they place bears on stickers and on blocks and as they count. Refer to stages of Rote and Rational Counting (Where's the Math?) to guide your planning of counting activities.

Provocation:

Extend thinking: Lead children in the SWPL *I have 2 Eyes*- Focusing on groups of 2. Ask the children to name other things that they see that are in sets of 2 that are in the room. Children can go around the classroom and place sticky notes with the number 2 and 2 dots beside those things that are in twos.

Similar activities can be found in many early childhood math activity books, including *More than Counting* (2011), Moomaw and Hieronymous