Unit 1		Math	Standards: CC: Transitions from rote to 1:1
Week 4	Small Groups: Dot Pictures Medium Support	SG1	CC: Transitions from rote to 1:1 Correspondence OA: Responds with number words and /or counting strategy when asked the question How Many?

### **Guiding Math Ideas:**

• Numbers are counting words.

# Math Concepts: [From Unit 1 Learning Progressions]

- Demonstrating perceptive (intuitive) number in play and other activities
- Some writing marks are called numbers and some are called letters.

<ul> <li>Materials:</li> <li>Dot (Bingo-Type) Markers (use non-toxic ones made for children)</li> <li>Writing Markers</li> <li>Blank 5 X 7 Index Cards</li> <li>Sticky Notes</li> <li>Hole Punch</li> <li>Binder Rings</li> <li>10 Black Dots by Crew (Optional use for Provocation)</li> </ul>	<ul> <li>Math Vocabulary:</li> <li>Dot Markers- special markers that make different colored circles</li> </ul>
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# **Preparation:**

This activity follows up on Week 3 *Small Group Bears and Dots*. Gather materials. Cover table with newspaper as dot markers can stain. Gather materials.

### Procedure:

Remember last week when we played with bears and dots and blocks? We had some number cards with dots on them. Today, we are going to play with dots and cards and markers.

Introduce and demonstrate Dot (Bingo-type) Markers if they are a new item for the children.

See these special markers- They are Dot Markers. They make circles. We can also call them "dots". Show Writing Markers.

I can use these markers for all kinds of things- writing, drawing pictures and making lines.

After I make some dots I'll use some markers to connect my dots, or make pictures. I'm counting my dots.

Distribute all markers and several index cards to children. Make sure that each child has a work space.

Children can use materials as they wish. As children place dots on the paper and/or use markers they may count or identify it as a picture. They may also place dots in random order or fill their paper with dots. Preserve the open-ended nature of this activity while you continue to model making groups, drawing pictures and counting.

As children finish their cards, offer to count with them, writing the number of dots and a description on each card if they show interest. You can write on it or place a sticky note on it depending on what the child wants.

## Create number books:

*I'm going to make a number dot book*. Model taking your cards, punching holes in the corner and putting cards together with the binder ring. Children can make their own books if they wish. Put child's name on book and place in Math Center

Throughout this activity, describe the two types of symbol systems you are using:

*I use <u>letters</u> to write your name and the name of your picture. I use <u>numbers</u> to write How Many dots you have on each page. We also make a lot of marks that aren't numbers or letters when we draw.* 

### Strategies that Facilitate Math Thinking:

- 1:1 Correspondence: This activity follows up the Bears and Dots activity from Week 3 with an open-ended creative approach that connects art and math.
- Open-Ended Materials: These materials are inexpensive. Be generous. Children often "have to do too much and too many" [Bev Bos] before they can focus on a discrete task.
- Initially, all writing marks will look random or unidentifiable to children. This activity helps children's first efforts in differentiating numerals from letters or other marks.
- Distribution of materials: Arrangement and distribution of materials is a subtle but important math strategy. By offering children more than 1 card, modeling placing some dots on each card, and writing numbers as children count, children are learning from the environment and each other as well as from direct instruction.

### **Documentation:**

The number books are an artifact for portfolios or other tools. Date and identify the books. There will be several number book activities throughout the year for comparison.

### **Provocation:**

Place Dot Markers, paper, markers in the Math Center for the remainder of the Unit to encourage children to experiment with materials.

This activity can be a companion to the counting book *10 Black Dots*. Read it during SWPL and notice if children make the connection.