Unit 4	<b>Small Groups: Sticky Dot Pictures</b> Low Support	Math SG1	Standards: MELDS.M.CCC.PS.4 MELDS.M.CCC.PS.8 MELDS.M.OAT.PS.1
	This activity should follow the Large Group <i>Is it Red, Is it Yellow? Is it Blue?</i>		



## **Essential Questions and Guiding Math Ideas:**

- Using math and color to communicate ideas
- Using Color as an Organizing Tool for Math and Art Connections
- Rote and Rational Counting

## Math Concepts from Unit Learning Progressions:

- Identifying math words and math ideas that appear in storybooks, outdoors and home
- Counting groups of objects and assigning a number name with increasing accuracy
- Drawing, describing or showing with manipulatives how number names relate to groups.

#### Materials:

- Is it Red? Is it Yellow? Is it Blue? by Tana Hoban
- magazine pictures with easily identifiable colors OR photographs of the classroom, school, outdoors
- baskets of sticky dots
- sticky notes and markers
- wooden or plastic numerals

# Preparation:

Cut pictures from magazines, or print photographs of familiar scenes (e.g., classroom, playground etc.) Have LOTS of pictures. Be sure that the pictures are bright and include easily identifiable colors. Place pictures, baskets of sticky dots, and sticky notes and markers on table. Place wooden or plastic numerals on table for children to use as a counting tool.

#### **Procedure:**

Children will place sticky dots on the pictures that match the colors they find there. This is an exploratory activity and children will need little supervision. Children can create as many pictures as there is time and materials.

Show the pictures and model placing sticky dots on some of the colors. Remind the children that these are special art papers and that is okay to put dots on them, unlike books and other classroom materials.

#### Math Vocabulary:

- Match or matching- findings
   2 or more things that are the same or similar
- Similar- nearly the same

Keying off the children's interests guide them in describing their pictures, counting dots and comparing the amounts of different colors that children find in the pictures. Have materials available for them to either write the number right on the page, or to place a numeral beside their picture as they describe them to you.

Use the word **similar** and define as something that looks almost, but not quite the same. For example, there are a range of colors that are identified as "pink", with gradations of intensity. Discuss with children how colors can differ slightly but still be grouped together.

# Strategies to Provoke Math Thinking:

- Low-key, open-ended activities are often just as effective for solidifying math concepts as more structured ones. Children will work at their current level of understanding. Familiarize yourself with the next steps in learning in order to support their growth.For example, when you ask a child how many dots are on her picture, does she count from one? Does she subitize? If she adds dots, does she have to start over or can she count on?
- Math in the Environment: Using photographs of the classroom and familiar places and people are great ways to place math in context as a practical, integral part of everyday life.

# Adaptations for Additional Challenge:

- This activity has children sorting and identifying by a single attribute, color. Challenge children to
  identify multiple colors and figure out a way to represent the colors in a floral design or print.
  Will they overlap dots or create their own colors? Will they go to the art center and get
  additional colors of markers?
- Expand this idea to shape and color, adding small geometric foam shapes (in your Curriculum Math Materials) that can also be glued onto the page. This is preparation for Week 4 activities which combine geometry and art.
- Designate a class photographer, a child whose responsibility is to take pictures during a certain time of the day at school. Print some of the child's pictures and encourage him/her to create a math/color/number book.

#### **Documentation:**

Let children choose a sample of their work and bring it to Meeting or Lunch Time or another time when they can share work with others. Make notes about the math words they use, their color identification and sorting skills, and any counting skills that they have used.

## **Provocation:**

Old magazine pictures can be used for lots of math activities. Counting people in a picture, finding shapes, comparing tall and short objects. The pages can be folded into different shapes or cut into shape collages. Use this free material to brainstorm with colleagues and with the children, about ways to make math using found materials.