


<p>Unit 4</p>  <p>Week 3</p>	<p><b>Large Group: Swan Harbor: Counting and Colors</b></p>	<p>Math LG</p>	<p><b>Standards:</b>  MELDS.M.OAT.PS.1  MELDS.M.MD.PS.6  MELDS.M.G.PS.7  MELDS.S.LS.PS.5  MELDS.S.LS.PS.6</p>
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**Guiding Math Ideas:**

- Using color as an Organizing Tool
- Expanding the Number Word List
- Growing understanding of cardinality
- Geometry-Directionality and Orientation

**Math Concepts From Unit Learning Progressions:**

- Matching numerals with their names- verbally (up to 20)
- Counting groups of objects and persons and assigning them a number name
- Playing games and initiating activities that involve directionality and orientation
- Measurement and Time: Describing Past, Present and Future Events

\* This activity provides context connecting Maine's environment with math skills.

**Adaptations for Using Large Group In Alternate Schedule Slots:**

- Use as a Math/Art Activity: Project the pages of this book onto a large screen using available technology as you read the book. Point out the different colors and the beautiful illustrations of the artist. Keep the pictures up during Center time and have similar shades of paints and large paper available at the easel for children.

Note: This book/activity has science standards embedded in it.

**Materials:**

- *Swan Harbor* by Laura Rankin
- large paper divided into 4 sections. Each quadrant labeled with a season: Winter Spring Summer Fall
- small (3X4) strips of drawing or construction paper with various shades of colors to roughly match the seasons. OR paint sample chips if available
- photocopied pictures of the animals from the book
- regular or double sided tape
- marker

**Math Vocabulary:**

- grouping- Putting things that are alike together
- seasons- The way we describe how the weather changes during the year
- facts- words that tell us interesting and true things about our world.

### **Preparation:**

Read the book, taking note of the ways that the numbers grow larger. If possible, make a copy of the map at the end of the book for easy reference during the read.

Prepare the large paper with the 4 seasons. Tape or tack onto the wall or whiteboard so children in whole group can see it. Cut small strips of various colors of paper in shades that roughly match colors we associate with seasons (e.g., blue, silver, white for winter, light green and pastels for spring, etc).

Alternatively, use paint sample chips.

Copy pictures of the animals in the book, reducing the size so that they will easily fit on the large paper. Have tape available to place pictures and colored paper on the large paper.

“Here is a special piece of paper. It has some different parts. How many parts this paper is divided into?”

“Yes, there are 4 parts. I’m going to write a different word in each part. Winter, Spring, Summer and Fall- What do these words mean? These words describe different times of the year, called **seasons**. Does anyone know what **season** we are in right now?”

“Here are some different colors. Colors often remind us of a certain time of the year. Let’s look outside- What are some colors that we see during the winter time here in Maine? I wonder what colors are seen in Fall? In Spring? In Winter?”

“I have a book called **Swan Harbor** and it is about a town in Maine, where we live. It shows some animals that might live near this town. The beautiful pictures show animals during different seasons of the year. At the very back of the book, it has a picture of this town showing animals and what it might look like during different times of the year. It is also a counting book!”

*Ask children to guess the number of squares.*

*Write the names of the seasons while introducing the book.*

*Children will give ideas about the seasonal words. Some children will identify winter.*

*Show the colored paper laid out on the floor. Children can describe the colors. Have children tape the colors in one of the quadrants for the seasons.*

*Read book. This book has only numerals and animal names.*

*Turn to the back page and show the way the artist has drawn the different seasons in one picture.*

“This book has a lot of plants and animals. I have some pictures of them. If you have that animal when we read the book, hold it up.”

“Let’s look at the pictures in the book again. Now let’s look at the special picture, the map at the back of the book again. The illustrator has put animals in different seasons. Let’s look at these pictures and our book. Can we put the animals into different seasons, just like the illustrator did?”

“Let’s count one more time.”

“This book has a special part that tells us nature **facts** about the plants and animals. A fact is a piece of information that tells us something true and interesting.”

“We’re going to put this book and the Seasons Chart in our \_\_\_\_\_ Center. You can use it this week and change the colors and the animals. You can also ask a teacher to read the nature facts to you.”

*Pass out pictures of the animals to children.*

*Give example if needed: See this robins look like they might belong in the Spring. Some children may respond with ideas about where animals “belong”. Note that there are no right or wrong answers. Accept all ways of categorizing, listening for the children’s reasons for placing the animals in a particular time of the year.*

*Lead children in rote counting using the map at the end of the book while pointing out the numbers 1-20.*

*Show facts at the end of the book.*

*Place chart , the book, the color strips and the animals pictures/numbers in a center for several days and encourage the children to play the game of placing the animals on the map.*

*Optional: Give examples of facts and fantasy. Example: Fact- there are 4 seasons in our year in Maine- Fantasy- all 4 seasons will never happen at the same time, as in the map at the end of the book.*

***Strategies to Provoke Math Thinking:***

- Rote and Rational Counting Revisited- Number chants are fun ways to learn rote counting up to 100. Use the Cliffhanger technique (See SWPL, Unit 2 and 3) to create a chant for counting numbers –Observe children as they count to identify those children who are ready for the Adaptations below, and those who will continue to need regular repetition of oral counting patterns.
- Color as an Organizing Tool- Color is one of the first attributes that children identify and begin to name and it is a much-used tool for organization in many areas of life. This activity encourages children to use color as a way to describe the seasons, to group subtle variations in color, and to use descriptive language.
- Time- The passing of time is a difficult concept for young children to grasp. Using nature as a time “marker” is a way of making time meaningful and understandable.

### ***Adaptations for Enrichment/Complex Skills***

- Using the Number Chart to Expand Counting Reciting the number word list up to 20 is an important skill. In the number system, unique number names must be memorized through 19. From 20 and beyond, a dependable pattern occurs that requires only memorizing the decades- 20 30, 40, etc. Use the number word chart to point out the patterns in counting (NOT the calendar). Some children will be able to memorize counting patterns up to 100. Encourage this skill by providing small number charts to those children who express interest. Have them cover the numbers with 2 color counters, using different colors for the decade number. Example: Numbers 1-9 are blue. 10 is red. Numbers 11-19 are blue, 20 is red, etc.
- Use paint chips with myriad variations of color instead of colored paper to represent the gradations of colors found in nature. Encourage children to make up their own names for the colors that they choose.
- Creating Season Collages: Assemble a compartmented tray of collage materials in the art area,, organizing by color. Encourage children to create Winter, Spring, etc. pictures and describe them.

### ***Provocation:***

Finding Groups within Groups: Advanced math thinkers can use manipulatives to find the smaller numbers that exist within bigger numbers, a forerunner of addition and subtraction. See Small Group 1 for games with different colored blocks to encourage children to form and re-form groups.