**Preschool Math** **Unit 3 (November 28 – January 13)**

Unit Objectives:

- Encourage ongoing "math talk"
- Build competence in understanding of "same and different" and 2D shape recognition (concept reinforcement)
- Introduce and reiterate more and less (concept development)

To do so, please complete the following:

| What | When |
|---|---|
| Incorporate math talk into classroom routines.<br>Video - What is Math Talk? Video - Promoting Math Talk | Daily |
| Repeat a Math fluency activity daily, as part of your circle time routine. This can be as simple as counting how many friends are present today or introducing a counting song. Suggestions include:<br>• Select one of these Math Fingerplays and Chants<br>• Play Body Count – an On the Go Math game | Daily |
| Each day, offer a "Concept Development" Math center to introduce and reiterate 2D shape recognition; select from the options on page 2. It is recommended that you offer a center for at least 2-3 days before changing the materials. | Daily |
| Weekly, offer a "Concept Reinforcement" Math center that builds competence in understanding "same and different" (Unit 1) or "2D shape recognition" (Unit 2); select from the options on page 3.<br><br>Note that concept reinforcement is IN ADDITION TO concept development (more and less) as it is intended to assist friends who may need support or are new to the classroom. | Weekly<br>(offer for 2 days) |

Please Note:

As long as the guidelines above are respected AND all of the activities on the following pages are offered at least once during Unit 3, timing and pacing decisions (which centers to offer on which days, how many days to offer them, and time of day) are at teachers' discretion and should be based on children's needs and interests.

Many teachers find that it works well to offer only "Concept Development" centers on Monday, Tuesday, and Wednesday, then ADD in a "Concept Reinforcement" center on Thursdays and Fridays. You might also find it helpful to offer an "anytime" Math center once weekly (see Unit 1 Guide for ideas), to continue to promote math talk and to help you assess children's comfort level/familiarity with the classroom materials.

**Concept Development: More and Less**

Please offer one of these "Concept Development" Math centers daily; it is recommended that you offer a center for 2-3 days before changing the materials. Note that "Concept Development" Math centers are offered IN ADDITION TO "Concept Reinforcement" Math centers, which are offered 1-2 days per week (see page 3).

**More and Less – Dice and Blocks**


Children will roll a number dice and stack the shown amount of blocks. Children can also take turns with a partner, building towers.

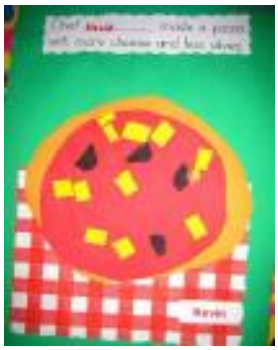
Extend this activity by using a dot dice instead of a dice with numbers, or use one of each.

**More and Less – Giant Dice**

Divide a small group of children into 2 teams. Each team has a giant game die. One child on each team tosses the dice and says the amount. The group decides which die has the most dots.

(Use an empty box to make your own giant dice!)

**More and Less – Pizza!**



Provide children with precut "pizza crusts and sauce circles" along with assorted "toppings." Invite children to freely create a pizza with at least 2 different toppings in order to compare more and less. Once children are finished, ask specific questions for more information: "How many pieces of cheese are on your pizza? How many green peppers?" Finally, ask each child: "Which topping do you have more of?" and record their response.

*Note that pizza could easily be COOKIES instead, suggesting colored sprinkles, chocolate chips and M&M's for toppings.*

**More and Less – Dreidel Sorting**

Children sort dreidels by color. (If your dreidels are only wooden, mark them with a marker or sticker.) When all dreidels have been sorted, choose 2 cups – count the contents of each to determine which has more and which has less.

You can extend this activity by inviting children to count the contents in every cup, then compare quantities to determine most, least, and same (if applicable).

**More and Less – Ornament Counting**


Create a set of trees with tree toppers labeled with numbers 1-10. Provide an assortment of pompoms along with tongs/tweezers to build fine motor skills. Encourage children to count out loud while placing each ornament to strengthen one-to-one correspondence. When at least 2 trees are full of ornaments, ask "Which tree has more ornaments? Which tree has less?" to invite conversation.

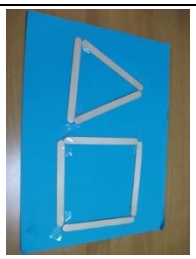
**More or Less – Comparing Creations**

This activity is very adaptable. Provide materials and then invite children to count and compare quantities to determine more, less, most, least, and same.

- Use playdough to make Christmas trees and compare the number of ornaments (beads)
- Use playdough to make gingerbread men and compare the number of buttons (beads)
- Stack wrapped boxes/blocks (gifts) then count and compare two stacks

**Concept Reinforcement: Same and Different (Unit 1) and 2D Shape Recognition (Unit 2)**

Please offer one of these "Concept Reinforcement" Math centers weekly, for 1-2 days. Note that "Concept Reinforcement" centers are IN ADDITION TO "Concept Development" Math centers, which are offered daily (see page 2).

| | |
|---|---|
| **Shape Recognition – Shape Puzzles**<br>Use craft sticks and markers to create a shape matching puzzle.<br><br>Separately, provide a variety of craft sticks or cotton swabs for children to build their own shapes (glue onto paper to display or take home). |   |
| **Shape Recognition – Gingerbread Man Matching**<br>Use the Gingerbread Man Matching color copies (provided by the Education Team) as a template to create a felt Gingerbread Man matching game. Be sure to encourage lots of "math talk" as children play, including naming the shapes.<br>You can find a description of this activity here. |  |
| **Same and Different –Duplo Challenge**<br>In advance, build several very basic structures from Duplos or other classroom blocks. Use a tablet to capture a photo of each structure (create an album on your tablet so children can easily view the pictures one at a time). Provide each child with an image and challenge him to create a structure that is exactly the same.<br><br>ALTERNATIVE – if you have enough materials to do, place your actual structures (not photos) on the table instead, so children can duplicate and place the items side-by-side to compare and self-correct. |  |
| **Same and Different – Pom Pom Sorting**<br>Invite children to sort pom poms by size or color; vary colors to align with different holiday celebrations. |  |
| **Same and Different – Playdough Patterns**<br><br>Provide children with playdough and thematic cookie cutters to duplicate a pattern (for example, bell, tree, bell [as pictured], or star, star, gingerbread man, etc.) and/or create their own. |  |