Unit 5



# Small Groups: Fill Your Puddle Pail Medium Support

Math

Standards: MELDS.M.CCC.PS.1 MELDS.M.CCC.PS.8 MELDS.M.OAT.PS.2



# **Guiding Math Ideas:**

Rational Counting: Keeping track of numbers counting; Counting Patterns

# Math Concepts from Unit Learning Progressions:

- Rote Counting Strategies: Finding patterns in counting above 10
- Rational counting strategies: Keeping track of numbers counted

#### **Materials:**

- The Puddle Pail by Elisa Kleven
- Number Charts 1-20 resource
- White paper- one per child- The larger the better, but choose size that fits your small group table area.
- Markers or pencils
- Small collage items suitable for gluing
- Organizers such as muffin tins, snack trays
- Puddle Pail Rebus resource
- Glue Sticks
- Cups for individual collections of 20 items

# **Math Vocabulary:**

 Counting Helpers: Ways that help me keep track of numbers as I count.

## **Preparation:**

**IMPORTANT:** Our MELDS standards feature Rote Counting up to 20 and beyond, and rational counting such as forming groups and making comparisons, up to 10. **Adjust the difficulty of the activity according to your class's needs.** 

Gather LOTS of **small** collage items, enough for each child to have plenty of choices in creating their groups of 20 items: old buttons, pieces of cardboard puzzles, strips or shapes of paper cut from magazines. The art center collage area is a great source. Place items by type in organizers.

Your classroom number chart should be visible. Also, make copies of the 1-20 Number Chart for children to share and use as a counting strategy. (Laminate if possible)

Wait to distribute the glue sticks until children have used some counting strategies.

#### **Procedure:**

This activity takes place after Read- Along, The Puddle Pail.

We read The Puddle Pail this week. What was Ernst the Blue Crocodile was collecting in his pail?

Ask children for ideas.

Puddles of all colors, shapes and sizes!

Today we are going to collect things in our Puddle Pails. We love to count big numbers in our class! Today we are going to work on collecting **20** things for our Puddle Pails.

Show 20s Number Charts, and also point to Number Chart on the wall.

Let's count to 20 together right now.

Lead children in rote counting.

This special picture shows how we are going to make our Puddle Pail Pictures.

Show Rebus and point to the different steps as you do them.

First I am going to draw a Puddle Pail. I want it to be big so I can have plenty of room for all the things I want to collect in my puddle pail.

Model drawing a large oval on a paper. Invite children to draw their Puddle Pails.

Show the collage items.

What number are we counting to today?

Yes, **20!** 

I'm going to choose **20** things for my Puddle Pail Picture. When I count big numbers sometimes if forget what comes next or I can't remember which things I've counted. I can use **Counting Helpers**. Here's what I do to help me count: (Demonstrate counting helpers)

- Show 1-20 Number Chart. Place one collage item on each number
- Choose a pile of items, and then count them one by one, moving the item from one side to the other
- Point to items as you count and count out loud.

After I count my items, I am going to put them in my own little puddle pail cup. It reminds me of Ernst's Puddle Pail!

Give children their individual cups. Children can choose different items, count and fill their cups as many times as they wish, choosing different items.

Now I'm going to make my Puddle Pail Picture.

Place glue sticks on table and model counting and gluing the items as you take them out one by one.

Children create their "Puddle Pail "Pictures by gluing items inside the "Puddle Pail".

If some children want to continue counting items using different combinations of materials, rather than create a Puddle Pail picture—that is fine.

As children finish their work, count along with them as they point to the 20 items inside their "Puddle Pail" picture. Use 1-20 charts as needed.

# Strategies to Provoke Math Thinking:

Counting Strategies: Several basic counting strategies help children keep track of numbers: Place
one item on one square in a number chart; move an item from one side to another as the item is
counted; using fingers to count (works well for 1-10 counting), and pointing to one item as a
time. Others are breaking large numbers into smaller groups, such as groups of 5 and matching
two groups (comparing sets). Model several ways to count items. Children often start out

- pointing to items one of the harder ways to learn accurate counting. One-item, One-number—a huge math concept that takes a lot of practice.
- Seeing Patterns in the Number Chart: By using the 1-20 chart, it is easy to see the logical number patterns. It is the NAMES of the numbers, especially the teens and decades, which can get confusing. The 1-20 chart can be less overwhelming than 1-100 for children learning to count big numbers. Other children will enjoy counting to 100. Follow children's lead and interest.

## **Adaptations for Additional Challenge:**

- Use a Bucket Balance and Scale: Set up the Bucket Balance and Bathroom-type Scale in the math area, along with cups and manipulatives, or small collage items. Children can do their own investigations, placing items in cups and comparing their weights on either side of the bucket balance. Include some heavier items, such as small blocks. Children can weigh their collections items on a scale and make a record of the varying weights in a journal.
- Rebus Instructions: This activity introduces the use of Rebus Instructions for Math Activities.
   When children are working on self-initiated projects, such as building an airport in the block center, invite them to write down the steps they used (or want to use) to create their project.
   This planning process is part of the engineering in STEM.

## **Documentation:**

- Display the beautiful collage Puddle Pail Pictures in your classroom or hallway. Later, send them home with a brief explanation of the math included in the activity. For planning purposes, make note about children's skills with both rote and rational counting.
- Plan counting activities during SWPL for additional practice in counting up to 20 and beyond.

## **Provocation:**

- Extend Puddle Pail Pictures as an Art activity, using watercolors or thinned tempera. Children drop colors onto the paper creating a background. When dry, they can add collage items.
- Science: Place the water table or a tub of water in an area where the sunlight can shine on the surface of the water. Invite children to drop small items into the water one by one and observe the ripples and the ways the look of the items change when under water. Children can also drop different colors of water into the water table or individual buckets.