## 1 - Daily Fluency Activity, Clap, Stomp, and Count to 10 (large or small group, about 2 minutes) $\leftarrow$ Great Transition Activity!

- Let's clap 9 times and count our claps! Join in when you are ready. 1, 2, 3, 4, 5, 6, 7, 8, 9. (Repeat until most students are either clapping, counting, or ideally, both clapping and counting. Pause between counts.)
- Let's stomp 9 times and count our stomps! $1,2,3,4,5,6,7,8,9$. (Follow the same process as above.)
- Let's clap 10 times and count our claps! 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- Let's stomp 10 times and count our stomps! $1,2,3,4,5,6,7,8,9,10$.


## 2 - Fluency Activity, Wind \& Trees (small group, about 4 minutes)

Work with a group of 4-6 children. Each child needs a baggie with 5 manipulatives (e.g., blocks or dominoes)

- Let's pretend our blocks are trees. Let's stand our trees up in a row. Have the flat side face you. Count them.
- How many trees are standing up? (5)
- Let's pretend a big wind came and knocked 1 down. (Pause, then knock one down.) Count how many are still standing. (4)
- Repeat until there are no trees standing. The word "zero" will be formally introduced in the Concept Development. Here, you might say, "The wind knocked down all the blocks."
- Tell students that if the wind blows over one tree, that can make all the trees fall down. How could that happen? Let them experiment and then show them if necessary. Emphasize that there are no trees standing after they all fall down! Note: This activity naturally leads students to experience "no trees" or "none" before assigning this quantity a number, zero.

3 - Concept Development (large group, about 8 minutes)

- Gather students in a circle and show them 5 inflated balloons. Ask students to count the balloons, " $1,2,3,4,5$ balloons!" Tell them, "Imagine it's a windy day. The wind came along and blew 1 balloon away!"
- Have students blow as you move one balloon into hiding as if they are blowing it. Ask students, "How many balloons did not blow away?" "4!" Continue until no balloons are left.
- Ask students, "How many balloons are left? When there are no more left we answer 'zero.' 0 is the number that means 'none.'"
- Tell students, "Let's pretend Sara, Leonhard, and Mayumi are fish. Let's count as they swim away one by one." As each student swims away, guide the class to count, "3 fish, 2 fish, 1 fish, 0 fish!" Ask, "How many are left after they all swim away?" "Zero!"
- Invite students to suggest scenarios. For example, invite 4 leaves to blow away as the class counts, or invite 2 crayons to roll away. Repeat until all students have had a chance to participate in the play-acting.


## 4 - Concept Practice and Debrief (large or small group, about 3 minutes)

- Provide each child with 3 goldfish. Ask them to count their goldfish, "1 goldfish, 2 goldfish, 3 goldfish."
- Say, "We are going to catch each fish one at a time and eat them up!" Guide students to say how many goldfish they still have each time one is eaten: " 3 goldfish, 2 goldfish, 1 goldfish."
- Say, "There are no goldfish left. How many goldfish are left?" Guide students to say, "Zero! 0 goldfish!"
- Listen for misconceptions or misunderstandings that can be addressed in the Debrief. You may choose to use any combination of the questions below to help students express ideas, make connections, and use new vocabulary (zero).
- Show 2 blue cubes.) How many cubes are blue? Yellow? Green?
- How many flying elephants with green shoes are there in our class right now?
- What else is there zero of in our classroom? In your house?


## 5 - Learning Center

This center calls for a mini-parachute (small enough for 2 children to handle) - you can easily substitute a small receiving blanket (borrow from an infant room) or even a beach towel. Invite children to work in pairs to bounce 5 inflated balloons (or rolled socks) on the parachute, counting how many balloons are left as some are bounced off of the parachute. For sake of example, each pair's process should be to:

- Spread out the parachute.
- Place 5 balloons on top of the parachute. Touch and count them 1, 2, 3, 4, 5 .
- Bounce the parachute, until 1 or more balloons falls off. Touch and count again (1 balloon flew away! Now there are 1, 2, 3, 4 balloons left!)
- Continue bouncing and counting until there are zero balloons left.

Monitor children's play to assist with counting strategies and scaffold language. Consider asking a $3^{\text {rd }}$ child to act as the videographer, using a tablet to capture brief videos of math play that can be shared with families.

