EARLY CHILDHOOD PRE-MATH ACTIVITIES FOR
WE COUNT! CENSUS FAMILY FUN EVENTS

Introduction to Pre-Math Development and Skills

One-to-one correspondence and seriation are the foundational concepts that children must learn in preschool in order to be ready to learn other math concepts as they grow older. Counting involves the ability to demonstrate an understanding of number and amount. It involves the ability to answer the questions, “Which number is this?” and “What comes next?” “How much does it represent?”

One-to-one correspondence is the distribution of related items in direct relation to each other, such as one cookie for each child, one pillow for each bed, or one chair for each child. Seriation is the ability to put things in order, first by size (smallest to largest) and then by number.

Mathematics overlap with many other areas of knowledge, especially language and logic. A child must recognize numerals and be able to assign a quantity to them.

Timeline for Activities with Children

During the weeks leading up to the 2020 Census, counting activities in songs, finger play, and art work would be an excellent way to sensitize parents to the upcoming 2020 Census and to prepare children to perform or present their art to their families at WE COUNT! Census Family Fun Events.

The timeline could be as follows:

**During Month of:**

- **February**
  - Send a notice to parents about the plan to prepare children for the 2020 Census with specific counting and census learning projects your children will be doing
  - Ask parents to collect and send into school materials you will need for your projects
  - Participate in a WE COUNT! Webinar to learn how to engage families with the WE COUNT! book

- **February/early March**
  - Set aside time each day to work with children on their projects and teach them counting songs, finger plays

- **End of March/April**
  - At regularly scheduled home visits, parent meetings, parent conferences, give a WE COUNT! book to parents as a gift and engage them in authentic conversation about the 2020 Census

- **2 weeks before event**
  - Give or sent invitations to parents designating a day or week in late March for a WE COUNT! Census Family Fun Event

- **End of March/April**
  - Hold a WE COUNT! Census Family Fun Event(s) where children’s artwork is displayed; children perform songs and fingerplays for families; support families to accurately complete the Census
ART PROJECTS

My Counting Book

Objectives:
- To learn and write numbers from 1-10, each on a separate piece of paper (one-to-one correspondence)
- To put the sheets of paper in consecutive order from 1 to 10 (seriation)
- To draw or paste pictures representing the number on each page (one-to-one correspondence)
- To create a WE COUNT! counting book of their own

Materials needed:
- Ask children to bring in old magazines, newspapers, etc. Send a note home with children asking for these items. Start a calling tree to call or text all families to send these items to school with their children
- Magazines with pictures of people of different ages
- Scissors
- 10 sheets of paper of the same size; different size sheets with qualities of at least 10; one set for each child – allow the children to choose the size of their book
- Paste
- Crayons or pencils
- Ribbon, string, wool
- Hole punch
- stapler

Preparation:
Choose and cut out of magazines many pictures of figures to represent the children’s families – mothers, fathers, grandparents, different-aged children and adults, babies, pets (pictures need to have the same skin tones as the children in your class). For older children, they can look through the magazines and choose their own pictures and cut them out.

Instructions:
1. Work with children in small groups of 3 or 4 for this activity. The project could take could take a few days or even a week.
2. Ask children to write or you write the numeral from 1-10 on each sheet of paper.
3. Ask children to put the pages of their book in the right order from 1-10.
4. Have children choose or cut out objects that represent the number on each page or draw the objects.
5. Ask questions about what they have chosen and why. Make sure that each page has the correct number of objects corresponding to the numeral on the page.
6. Make a cover for the book with their name as author. You may use the WE COUNT! book as an illustration, but don’t show them the book until after they finish their own work.
7. Finish the book with 3 or 5 holes and weave ribbon, string, or wool and tie or staple at the seam.
8. On the inside cover of the book, write a “dedication” that the child has dictated to you.
9. Children can present their book as a gift to their families at the WE COUNT! Census Family Fun Event.
Family Collage

Objectives:

- To encourage children to think and talk about their families.
- To practice counting pictures of individual people: adults, children, babies, pets

Materials needed:

- Ask children to bring in old magazines, newspapers, etc.
  Send a note home with children asking for these items. Start a calling tree to call or text all families to send these items to school with their children
- Magazines with pictures of people of different ages or drawings
- Scissors
- Large sheets of paper or a roll of paper
- Paste
- Crayons or pencils

Preparation:

Choose and cut out of magazines many pictures of figures to represent the children’s families – mothers, fathers, grandparents, different-aged children and adults, babies, pets (pictures need to have the same skin tones as the children in your class). For older children, they can look through the magazines and choose their own pictures and cut them out.

Instructions:

1. Work with children in small groups of 3 or 4 for this activity. It could be done over several days or a week
2. Have children choose and cut out pictures to represent their own families and paste these on the sheets of paper.
3. Ask questions to help children talk about their families and what they have chosen, e.g. Talk to each child about the members of his/her family; how many live in your family? How many live in your house? Help him/her select from magazines, pictures that represent his/her family. Who lives in your house? Which picture can you use for your mother? Brother? Grandfather? And so on. Talk about family relationships. Is Musu your sister? Is Uncle Amara your mother’s uncle? Whose daughter is Maria? Is your brother James taller than your brother Ronald?
   When the child is satisfied that they have all of those living in their house represented, have them glue them on a large piece of newsprint/paper roll/paper.
4. Encourage children to draw on the paper as well.
5. Display these collages/pictures/mural on a wall with each child’s name next to his or her family. During group time children can also talk about their art.
6. Have the mural/art work on display at the WE COUNT! Census Family Fun Event. Make sure children show their family their art.
Family Pictures

Objective:
• To encourage children to talk about their families, count people, and learn more about family relationships.

Materials needed:
• Paper
• Photos of children’s families (if desired)
• Crayons, scissors, paste

Preparation:
Ask parents to bring photos of their families, individual photos of family members etc. to school OR photograph children with their family members at school

Instructions:
1. Work with children in small groups of 3 or 4 for this activity.
   It could be done over several days or weeks.
2. Have children draw pictures of themselves and their families from memory or using a photograph or draw each family member on a separate sheet of paper.
3. If the children have individual drawings of family members, have them cut them out and arrange them on a sheet of paper. Take drawing off the paper.
4. Ask them to draw a background for their family including where they are, pets etc.
5. Ask children to name their family member. Write the names on the paper next to each person or for older children, have them write the names of the family members.
6. Have the children present their families to their classmates and have a discussion about each of the children’s pictures.
7. Display the families for the WE COUNT! Census Family Fun Event. If a child is willing, have them present their family to the families at the event as part of the children’s program.
8. This activity can also be expanded to My Family book or combine all the pictures for a book about the Families in My Class
**WE COUNT! Stick Puppets**

**Objectives:**
- To explore different family structures and dynamics
- To learn count and to count in sequence
- To match numbers and objects
- To encourage language in social interactions with puppets.

**Materials needed:**
- Heavy paper
- Print outs of children and Miss Faith in the WE COUNT! book
- Popsicle sticks
- Tape
- Paste

**Preparation:**
Print out the children and Miss Faith onto paper. For younger children, cut out the figures for them.

**Instructions:**
1. Cut out each child and Miss Faith.
2. Paste the figures onto heavy paper.
3. Tape each figure to a stick.
4. Use the puppets to engage dialogue and conversation between two children or among small groups of children about the puppets and their families.