Problem Solvers Activity 1: Presents for My Friends

CHILDREN ARE LEARNING TO...¹

- Say or sign some number words in sequence (up to 10), starting with one.
- Understand that counting words are separate words, such as “one,” “two,” “three” versus “onetwothree”.
- Understand that one number word represents one object being counted (one-to-one correspondence).
- Understand that the last number represents how many objects are in a group (cardinality).

MATERIALS NEEDED:

20 cube blocks
2 small baskets
2 envelopes
Sticky notes
Marker

Handout 1: My Friends

- Note: If you are teaching 4-year-olds, plan for 30 blocks, 3 baskets, and 3 copies of Handout 1.

PREPARATION:

- Put 10 blocks in each basket.
- Make 2 copies of Handout 1: My Friends. Cut out the 10 friends on each handout. If desired, glue each cut-out to a piece of cardboard or manila folder to make them sturdier for repeated use.
- Put 10 friends in each envelope for use during the activity.
- Keep the sticky notes and marker handy.
- Prepare copies of the parent handout for distribution.
- If you plan on implementing the optional book activity, refer to the preparation instructions in that section.

¹ Head Start Early Learning Outcomes Framework: Ages Birth to Five.
Activity Instructions

ENGAGE

Gather a group of 4 children at a table or in a circle on the floor.

ASK: Let’s talk about friends. Who is one of your friends? What is their name? What do you like to do together?

Moderate a short discussion of children’s friends.

ASK: Sometimes we give our friends a gift. Have you ever done that? Well, today we’re going to play a game called Presents for My Friends.

EXPAND

Line up a set of 4 cut-out “friends” in front of the children.

SAY: Let’s be Problem Solvers! Here are my friends! (Point to cut-outs on table.) I want to give each of my friends a gift.

ASK: Hmmm, I want to give each of my friends here a gift. Can you help me figure out how many gifts I need? What can I do to figure out how many gifts I need?

Pause for children to answer. If no one does, ASK: What do you think I can do to find out how many friends I have here?”

If a child suggests counting the friends, cue them by pointing to each friend as they count. Encourage other children to join in.

If more help is needed, SAY: We can count how many friends I have. Let’s count together!

Point to each friend as you count aloud.

Whey children are done counting, ask: “How many friends do I have?” and elicit child responses.

Confirm there are four friends: “Yes, four. Let’s count again: 1, 2, 3, 4 – I have four friends.”

Note: Teachers can set the stage for later math learning by focusing on the process of “figuring out” and being curious about whether answers make sense.

Don’t stop when someone gets the right answer. Encourage them to demonstrate how they solved the problem.

Take out a basket of blocks and ask, “Hmmm, okay - I have four friends and I want to give them each one of them a present. How many of these presents do you think I will need? Can anyone show me what to do?

Encourage a child to try this task—moving a block/”present” from the basket to the friend, until they have moved all six. Then ask: “Now each of our friends has a present. Let’s figure out how many presents we have.” Ask the child to point to each present as the group counts out loud. Then count the friends again. When done, say: “4! We have four friends and we have four presents. All of my friends have a present now! Thank you, Problem Solvers!”

Write the number 4 on a piece of sticky note and place it next to the collection of friends.
EXPLORE

Choose a different number of friends and repeat the activity. Give different children a turn to select a group of friends and presents, until each child has had a turn in each role.

Try Presents for My Friends as a partner activity—for children aged 3.5 and up.

Form pairs of children. Give one child in the pair an envelope of “friends” and give the other child a basket of blocks. The child with the friends selects how many friends they would like to use for the game and lays them on the table or floor. The child with the blocks selects how many presents are needed and places one block on each friend. Encourage children to count friends first and then count presents together.

(If this becomes difficult to implement as partners, you can run as an independent activity, but you will need additional copies of the “friends” to do so.)

After a few minutes, prompt children to switch roles—children with the friends now work with the blocks, and children with the blocks now select the friends. Allow children to play again 2-3 more times.

As children explore in groups, teachers may observe and ask questions like:

- What did you do to figure out how many friends there were?
- I’d like to hear what you did to make sure there was a present for each friend.

Note: This activity is self-correcting—meaning that children are matching presents to friends and therefore will tend not to over- or under-count presents. If presents don’t match the number of friends, say: “I want to give each friend a present, so let’s put one present in front of each friend and then count again.”

REFLECT

To close the activity, bring the children back together. Use a reflective question/s - like those below - to prompt children’s thinking about counting and quantity.

- When your partner laid out a group of friends, what did you do to find out how many friends there were?
- What do you think we can do to decide how many presents we need for our friends?
- Tell me about how you discovered how many presents you needed.
- If there are 3 friends, what can I do to find out many presents do I need? Tell me about how you know that you need three.
Individualizing the Activity

MAKE IT MORE CHALLENGING:

- Use larger sets of friends (10-15). Note that this requires additional copies of the friends.
- Ask children to make a pile of blocks, instead of putting one block on each friend. This removes the visual “check” of one block per friend. They should continue to check their work by counting friends and presents.
- Introduce early calculations by adding another friend to the set: “Oh look, you made a new friend! Now how many presents do you need?” Or, remove a friend from the set: “One friend had to go home. Now how many presents do you need?”

**Note:** Teachers can support children’s growing understanding of cardinality by asking “how many” after children count out their set. This helps the teacher determine if children understand the total number in the set.

MAKE IT LESS CHALLENGING:

- For toddlers (2-3 years), use smaller sets of friends (1-3). For 3-year-olds, use a set of up to 5 friends.
- Wait to introduce the “present” portion of the activity. First, focus on helping the child count the set of friends correctly. When done counting, ask: “So how many friends do we have?” to ensure the child understands that the last number counted is the total number of friends (cardinality). When the child can count two different sets correctly, then introduce the “gifts” portion of the activity.

MAKING CONNECTIONS ACROSS THE DAY:

- Place a set of friends and basket of blocks in a center area and make this a free play choice for your students.
- Count snacks out loud as you distribute them. Ask, “How many crackers do you have?” As children eat snacks, wonder together how many are left and count them. If children want more, as if they want “1 or 2 more” and count out as you serve.
- Count how many tricycles or swings are on the playground.
- Wonder aloud how many children can ride or swing at the same time.
- Count other collections of items children find—like leaves or pieces of mulch.
- Count nap mats out loud as you position them for rest time. When you are done, say: “15! We have 15 nap maps. And we have 15 students. So every student has their own mat!”
- Count the number of hooks, backpacks, or lunchboxes in the classroom. Ask, “How many lunch trays are on the table?”
- Count a child’s fingers as they are washing hands before/after meals or during bathroom breaks.
**Song: Presents for My Friends**

Every day, when I play
Counting is my favorite game.
1-2-3, count with me,
We can count most anything!

How many friends are here today?
Let’s count presents then shout, “Hooray”!

Open presents, then we’ll say,
Let’s all count again today!

Let’s start with 1-2-3 (clap clap clap)
It’s easy as can be
Then 4-5-6 (clap clap clap)
We add them to the mix
7-8-9 (clap clap clap); we’re doing mighty fine.
And when we come to 10, we’ll start all over again!

Every day, when I play
Counting is my favorite game.
1-2-3, count with me,
We can count most anything!

(Spoken) – Now it’s your turn to count!
Help Teacher count friends and presents!

**BUILD ON THE SONG:**

- After the song, count to 10 out loud as you clap for each number. Invite children to join in.
- Have a basket of blocks nearby and count out blocks as the song is sung.
- Give each child a set of ten blocks. Play the song again and invite a child to count out blocks as the song is sung. You may need to pause the song to give children time to count.
- Play the song in the background while children are doing other centers or activities. Make the basket of blocks available across the day. This invites children to count along with the song as they play.
Making Literacy Connections

Share the following book with children as an opportunity to deepen their understanding of counting and quantity. The literacy extension activity below suggests another play-based experience to invite counting.

**Suggested Book:** *Wheels on the Bus (Las ruedas del autobus)* by Melanie Williamson

**AS YOU READ:**

Count the people and objects in the story, for example, *How many...:*

- *People are on the bus*
- *Children are on the bus*
- *Things are on top of the bus*
- *Drums are being played*
- *Babies are on the bus*
- *Wheels going “bang”*
- *Children eating a snack on the blanket*
- *Buses are parked on the final page*

Teachers can also ask related questions about the book, like:

- *Where do you think the people are going?*
- *Have you ever ridden the bus? Where did you go?*
- *There are moms, dads, grandmas, babies, and children on this bus. Who do you ride the bus with?*
- *Have you ever seen a bus? What color was it? Was it bigger or smaller than a car?*

**BUILD ON THE BOOK:**

**Materials:** Toy school bus or shoebox covered in yellow paper with black paper wheels; 7-10 small figures that fit inside the school bus

1. Take the school bus out and say, “Let’s drive our own bus and pick up some friends.”
2. Take out the figures: “How many people should be on our bus?” Ask a child to choose a number. Let the count out that number of figures and place them in the bus. Encourage children to count along with them.
3. Place the remaining figures in a line. There should be about 12-24 inches between each figure. Explain: “The rest of our friends are waiting at their bus stops for the bus.” Choose a child to push the bus to the first figure and put it inside the bus. Point and count all the figures again.
4. Select another child and repeat, until all the “passengers” have been picked up and counted. Ask: “Where do you think our friends are going?”
5. Say, “Now let’s drive our bus into town [point to a cubby] so all our friends can go to [insert destinations suggested by children].”
6. Close the activity: “Thank you for helping to pick up all our friends at their bus stops today!”
Handout 1: My Friends
Counting Fun During Everyday Moments

This week, look for ways to practice counting with your child up to 10.

Here are some ideas to try:

• Ask your child to help you set the table for dinner. Ask: “How many people are there in our family? How many forks do we need? How many plates do we need?” Let your child practice counting these items and placing them on the table.

• At mealtime, count how many carrots (or other food items) your child has on their plate. After they have eaten a few, ask: “I wonder how many carrots you have now? Can you count and see?”

• As you are folding clothes or putting clothes away, ask your child to help you count “how many socks we have in this pile.” Model how to count by pointing at each item as you count it.

• Collect a few pairs of shoes and point them out to your child. Say, “I wonder how many shoes we have! Let’s count!”

• At bedtime, ask your child: “How many hugs do you want before bed: 1, 2, 3, 4 or 5?” Then count out loud as you give your child their chosen number of hugs.
Contar es algo divertido en los momentos de cada día

Esta semana, busque maneras de contar con su hijo hasta 10.

Estas son algunas ideas que pueden intentar:

- Pídale a su hijo que le ayude a arreglar la mesa para la cena. Pregúntele “¿cuántas personas tenemos en nuestra familia? ¿Cuántos tenedores vamos a necesitar? ¿Cuántos platos vamos a necesitar?” Permite que el niño practique contando estos objetos mientras que los coloca sobre la mesa.

- Durante la cena, cuente la cantidad de zanahorias (u otros alimentos) que su hijo tiene en el plato. Después de que se haya comido unas, pregúntele “¿cuántas zanahorias crees que te quedan ahora? ¿Las puedes contar y vemos, si es así?”

- Mientras que doblan la ropa o la están guardando, pídale a su hijo que le ayude a contar “¿cuántas medias tenemos en este grupo?” Usted puede demostrar cómo se cuenta al señalar cada media mientras la cuenta.

- Seleccione unos pares de zapatos y puede preguntar “¿cuántos zapatos crees que tenemos? ¡Ven y los contamos!”

- En el momento de ir a la cama, pregúntele a su hijo, “¿cuántos abrazos quieres antes de ir a la cama: 1, 2, 3, 4 o 5?” Y mientras le abraza cuente en voz alta cada abrazo, hasta el número de abrazos que su hijo haya escogido.