

Problem Solvers Activity 11: Collecting the Garbage

CHILDREN ARE LEARNING TO...¹

- Understand spatial vocabulary.
- With adult support, follow directions involving their own position in space.

MATERIALS NEEDED:

16 index cards

2 manila folders or pieces of cardboard

Handout 1: Place Cards

Handout 2: Garbage Truck

Handout 3: Garbage Cans

PREPARATION:

- Make 2 copies of **Handout 1**. Prepare the Place Cards by cutting each spatial image and gluing to an index card. You should have 16 cards all together. Shuffle and keep the Place Cards in a stack close by for the opening activity.
- Print **Handout 2**. Cut out each garbage truck and glue to cardboard or a manila folder so it's sturdy. Keep one image of the garbage truck handy for the opening discussion.
- Make 2 copies of **Handout 3** and cut out 16 small garbage cans. If desired, glue each image to an index card to make them sturdier.
- Hide these 16 garbage cans around the classroom in different positions (over, under, on top, under, between, in, around, next to) objects in your classroom. Be sure to remember where they are as you'll need to provide directions to find them for the activity. You can hide more than one garbage can in the same place if you wish.
- 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. <https://eclkc.ohs.acf.hhs.gov/interactive-head-start-early-learning-outcomes-framework-ages-birth-five>

Activity Instructions

ENGAGE

Gather a group of 4 children.

Show children the garbage truck image.

ASK: Problem Solvers, has anyone seen this type of truck before? What can you tell me about it? (Probe with questions like: Have you seen a garbage truck? What does this vehicle do? How do the people working on this truck help our community?)

Facilitate a conversation where children share what they know about garbage trucks.

ASK: Problem Solvers, today we are going to pretend to be garbage trucks. We have a problem to solve: We need to find some garbage cans all around our classroom! Who is ready to pretend to be a garbage truck? Can I hear your horn?

Teacher Tip

The games in this unit allow children to explore spatial language but they also support a child's self-regulatory skills (specifically, the ability to wait). In these games, children must wait their turn and listen to instructions so they know where to look for the garbage cans.

You may see children struggling with this task or even jumping ahead to find the target before receiving that direction. In these cases, validate that it's "hard to wait." You might ask them to: "Take a deep breath and get ready to listen to what's coming next..."

EXPAND

SAY: Let's look at our classroom. We have to collect garbage cans that are all around our classroom. Has anyone spotted a garbage can yet? (Show children one of the garbage can cards so they see what it looks like.)

SAY: This is how we'll play. There are 16 cans of garbage hidden all around the room. When it's your turn, I will pick a **Place Card** and tell you where to look for the garbage. If you find a garbage can, take one and listen for your next clue. Ready, garbage trucks? Can I hear a honk?

Use the stack of Place Cards to give each child an instruction for looking in a specific place in the room for a garbage can. Choose a different card for each child so they are moving to different places/spaces around the room for every turn. Sample directions are below. Feel free to modify the spatial instructions based on your classroom's space and materials.

For the OVER card: Step OVER the stool and look for garbage cans.

For the IN card: Look IN the crayon basket.

For the BETWEEN card: Walk BETWEEN the chairs.

For the ON TOP card: Look ON TOP of the bean bag.

For the NEXT TO card: Look NEXT TO the teddy bear.

For the AROUND card: Walk AROUND the chair—do you see any garbage cans there?

For the UNDER card: Look UNDER the stuffed duck.

For the BEHIND card: Look BEHIND the blocks.

CONTINUE so that each child has 4 turns (16 cards total). Some locations you send children may have garbage cans and others may not. Remind children to collect 1 garbage can when they find them.

Teacher Tip

Some spatial terms involve a sense of perspective. For example, the idea of what is “behind” something else depends on where you are standing. The playground is behind the school if you are looking at the front door. But the playground is at the front of the school if you are looking at the back door!

If you are standing in line, you are both *in front of* someone as well as *behind* someone else.

If children notice these relationships, you can point out their helpful observation skills. Validate that they are correct: For some spatial words, it matters what your perspective is (where you are looking).

When you have used all of the Place Cards, come back together as a group and prompt children to place their cards on the floor in front of them.

ASK children how many garbage cans they found. (Discuss and describe the quantities: how the children all found four four garbage cans. They all have the same number, Everyone has an equal quantity of cans.)

SAY: It looks like we’ve done some good work collecting all the garbage in our classroom. Nice job, Problem Solvers, let’s hear a honk!

EXPLORE

Introduce the Go Garbage Truck Go game and implement it as a small group activity. See below for instructions.

Try the Go Garbage Truck Go game as a partner activity—for children aged 3.5 and up. Give each pair of children a set of 8 place cards and a garbage truck (prepared from **Handout 1**).

SAY: Now, we’re going to play a game called Go Garbage Truck Go! In this game, you and your partner will decide on a path for your garbage truck through our classroom. Garbage trucks use a special kind of path, called a *route*, to collect garbage through the community. One of you will choose a Place Card and put your garbage truck in that place somewhere in our room. Then your partner will choose a card and move the garbage truck to the next place on the route. Let’s try it together one time.

Choose a pair for the demonstration. Ask one child to choose a Place Card. For example, let’s imagine they choose the “on top” card. Invite the child to look at the card and describe the place it shows. Wait to see if the child can name the position on the card: “on top.” If not, provide a demonstration and label the position (“I’ve put a block on TOP of the table.”)

Ask the child to move the garbage truck somewhere in the room that is “on top” of something else. When they do, narrate their action: Davon put the garbage truck on top of the cubbies.

Give the child’s partner a turn to choose a card, name the position, and move the garbage truck to a different place in the room (like “in between the snack tables”).

After the demonstration, give pairs an opportunity to work through all of their Place Cards, placing garbage trucks around the room and describing their locations. Tell children they will have a chance to move their garbage trucks on a route around the room until they hear a big HONK. That’s when the game will be over.

Conclude the activity when each child has had 3-4 turns by giving children an auditory cue (a big honk). Prompt children to drive themselves and their garbage trucks next to you.

REFLECT

To close the activity, bring the children back together. Use reflective questions - like those below - to prompt children's thinking about these activities. Listen for the spatial language they may use as they respond to these discussion questions.

- Where was your favorite place to look for the garbage cans?
- What was your favorite place on the garbage route?
- Where do you think is the BEST place to hide something in the classroom? Why do you think that?
- Where are you sitting right now? Who are you next to? What's in front of you? What is behind you?

Dismiss children using spatial language—for example, "The child sitting NEXT TO Braden can return to the group." Or: "The child sitting BEHIND Josefina can return to the big group."

Individualizing the Activity

MAKE IT MORE CHALLENGING:

- Use two spatial words in one instruction: "Look under the chair that's next to the door."
- Introduce the labels "right" and "left" (while recognizing that children won't master these spatial terms until early primary school).

MAKE IT LESS CHALLENGING:

- Use a limited number of spatial terms: "in," "on," "under," and "on top of."
- Use a limited/smaller area of the classroom for the garbage truck games.
- Choose a pair of position words, like "under" and "on top of" and repeat for several turns. "Is it under the table? Is it on top of the table?"

MAKING CONNECTIONS ACROSS THE DAY:

- Play the garbage truck games outside on the playground.
- Offer the Place Cards as a free play activity for children. Observe to see how they might use them to create their own games or activities.
- Look for natural opportunities to use spatial language across the day: *The block area is **next** to the housekeeping area. The milk cartons are **on top** of the tray. Your mittens are **inside** your coat pockets. Oops, you threw the ball **outside** the fence.*
- Play games outside that prompt children to move to or place objects in specific locations: *Can you climb to the **top** of the climbing wall? Can you run **beside** the fence? Next, let's jump **over** the crack in the sidewalk!*
- When giving instructions to children, be intentional about using specific spatial terms: *Can you get my folder—it is **in** the box **on top** of my desk. When you're done, can you put the crayons back **next to** the markers? I see that you are all lined up...Rebecca is **in front** of Carlos. And Julian is **behind** Carlos!*

- Notice the children's community and describe it in spatial terms: *The bakery is **next** to the coffee shop. Or: Our playground is **behind** the school.*
- Participate in block play and as you observe children, narrate their actions using spatial language: *The big block won't stay on **top** of the tower. You lined up all the rectangle blocks **next** to the square ones. The toy car is **between** the wall and the chair.*

Song: *Picking Up Garbage*

The lyrics to the song are below. As you listen to the song, have the children follow you through the classroom according to the directions in the song. Place a garbage can (from Handout 3) on the floor behind the door to discover at the end of the song. As you listen again, give children a turn to lead the group.

We're driving **around** (lead children around the room on the "route")

Picking up garbage. (pretend to pick up garbage)

We made our route

Now we're on our way! (Wave)

First, let's drive

Around the corner. (pretend to drive around a corner)

Is it **under** the chair? (Stop and look under a chair)

No, not there! (shake head, "no")

Now, let's drive

Next to the bookshelves (lead children to bookshelves or book nook in the room)

On top of a book, (pretend to look on the shelves)

Let's all look! (look on top of books, shake head, "no", shrug shoulders)

Honk, Honk! 5-1 (pretend to pull horn cord downward twice)

We're driving through town

Honk! Honk! 1-5 (pretend to pull horn cord)

Picking up the garbage.

Now, let's drive

Between the tables (lead children between tables in the room)

Is it under the mat? (Stop at a mat; look under it)

Imagine that! (shake head, "no")

Last, let's drive

Through the classroom (lead children through the classroom)

Look **behind** the door, (stop at a door, look behind it)

It's there on the floor! ("Find" a garbage can card and nod yes!)

Honk, Honk! (pull horn cord)

We found the garbage! (thumbs up, smile)

We picked it up,

Now our job is done! (wipe hands as if finished)

Making Literacy Connections

Share the following book with children as an opportunity to deepen their understanding of spatial relationships. The literacy extension activity below suggests another play-based experience to build spatial awareness.

Suggested Book: *Rosie's Walk* by Pat Hutchins

AS YOU READ:

This story takes the reader along Rosie the hen's daily walk. As she walks, she is followed by a fox. Although the fox tries to catch up to Rosie, he is not successful. Rosie arrives home in time for dinner. The story uses rich spatial language to describe Rosie's path—"across the yard...around the pond" and so on. As you read:

- Wonder together with children: What is the fox doing? Why is he following Rosie?
- Encourage children to make predictions: Do they think the fox will catch Rosie? What do they think will happen when the Fox's wagon bumps into the bee hives?
- On the page with the pulley, show children the rope wrapped around Rosie's ankle. Follow the rope with your finger. Point out how the rope goes up to the pulley. The pulley is holding a bag of flour. What do children think will happen to the bag of flour when Rosie walks and pulls the rope? Can they make a prediction?
- Consider coming up with hand gestures to go with each of the spatial words in the book (across, around, over, past, through, and under). Children can perform the gestures while you read the word.

BUILD ON THE BOOK:

Materials: Popsicle stick or unsharpened pencil. Photocopy of a picture of Rosie from the book. Photocopies of the following pages of the book: the yard, the pond, the haystack, the mill, the fence, the beehives.

Preparation: Glue Rosie's picture to a circle of cardboard and tape a popsicle stick or unsharpened pencil to the back to make a stick puppet. Cut the other images from the book to fit on building blocks. Tape each image to a different block. Stand the blocks up in a line along a table or the floor.

Have children re-tell the story in pairs. One child tells their partner where Rosie should go ("around the pond") and the other child uses the Rosie puppet to perform this action. Then they switch. Allow children to use whatever spatial words they wish to provide instructions, rather than sticking to exactly what the text says.

Handout 1: Place Cards



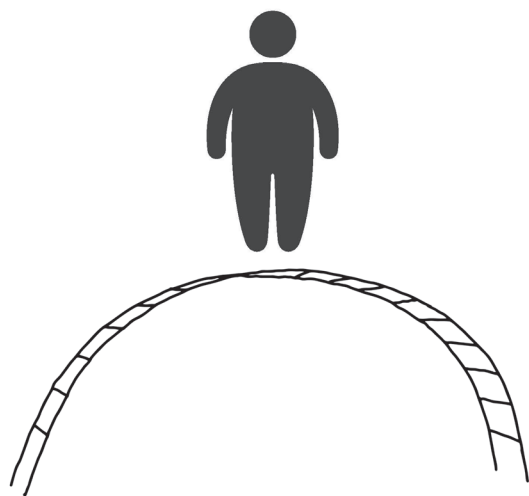
Over



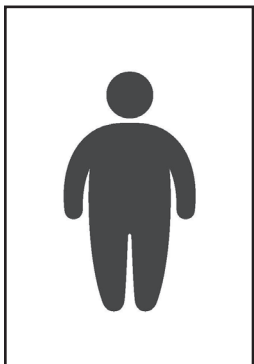
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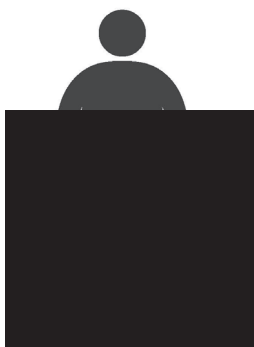
On Top



In



Around



Behind



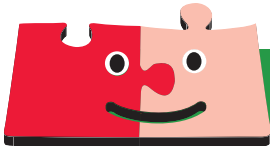
Between

Handout 2: Garbage Trucks



Handout 3: Garbage Cans





Just for Families

Where Is it?

This week, we're learning about words that describe the location of objects:

- **In**
- **On Top**
- **Under**
- **Next To**
- **Behind**
- **In Front**
- **Between**

Play a "Where Is It" game with your child. Place a familiar object (like a spoon or small toy) in a specific location. Give your child directions for where they should look, like:

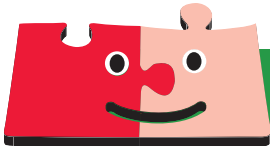
- Look on top of the kitchen chair.
- Look next to your shoes.
- Look behind the pillow.

Your final direction should take them to the hidden object.

Then give your child a turn to hide the object and give you directions on where to look!

You can also use this location language during everyday conversations with your child:

- Put the book **IN** the diaper bag.
- There are beautiful flowers growing in **FRONT** of that house.
- Come sit **NEXT** to me so I can read you the story.
- I'm going to put your chicken on **TOP** of the rice.



Solo para familias

¿Dónde está?

Esta semana, estamos aprendiendo sobre las palabras que describen la ubicación de los objetos:

- **En**
- **Encima**
- **Debajo**
- **Al lado**
- **Detrás**
- **Enfrente**
- **Entre**

Juegue un juego de “Dónde está” con su hijo. Coloque un objeto familiar (como una cuchara o un juguete pequeño) en un lugar específico. Dele a su hijo instrucciones sobre dónde debe ver, como:

- Mira encima de la silla en la cocina.
- Mira al lado de tus zapatos.
- Mira detrás de la almohada.

Su dirección final debe llevarlo al objeto oculto.

Luego dele a su hijo su turno para ocultar el objeto y dele instrucciones sobre dónde mirar.

También puede usar este lenguaje de ubicación durante las conversaciones diarias con su hijo:

- Pon el libro **EN** la bolsa de pañales.
- Hay hermosas flores creciendo **ENFRENTE** de esa casa.
- Ven a sentarte **AL LADO** mío para que pueda leerte la historia.
- Voy a poner tu pollo **ENCIMA** del arroz.