

Problem Solvers Activity 21: Delivering the Mail

CHILDREN ARE LEARNING TO...¹

- Sort and classify objects by one attribute into two or more groups, with increasing accuracy.

MATERIALS NEEDED:

12 envelopes

Marker

4 cloth bags (such as those used for groceries)

3 boxes or bins (to serve as “mailboxes”)

3 small binder clips

6 index cards

10 larger toy cars or blocks and 10 smaller toy cars or blocks in 2 colors (like yellow and blue)

2 baskets or bins

Handout 1: Mail Carrier

Handout 2: Stamps

Handout 3: Mailbox Labels

Handout 4: All About Us

PREPARATION:

- Print **Handout 1** and glue to sturdy cardboard/manila folder. Have ready for the opening conversation in the **ENGAGE** section.
- Print **Handout 2 in color** and cut out the stamps. Glue one to the upper right corner of each envelope. Use the marker to write names (of the addressees) on the envelopes as well, like “Papi” or “Grandma” or “My Friend”.
- Place the envelopes in different spaces around the room—in cubbies or on shelves or tables—where children can easily see and reach them.
- Print **Handout 3 in color** and cut out the labels. Glue each label to an index card. Keep the labels, binder clips, and cloth bags aside until needed in the **EXPAND** activity.
- Place 5 bigger toy cars/blocks and 5 smaller toy cars/blocks in each basket and keep aside until the **EXPLORE** activity. Make sure each basket has cars/blocks in both colors.
- Prepare copies of the parent handout for distribution.
- Print **Handout 4** only if you plan on implementing the optional book activity. Refer to the preparation instructions in that section for additional information.

¹ California Department of Education (2008). Preschool Learning Foundations. Retrieved from <https://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>

Activity Instructions

ENGAGE

Gather a group of 4 children.

SAY: Problem Solvers, we are going to pretend to be mail carriers today! Let's talk about these community helpers. [Show image of mail carrier from **Handout 1.**] Who knows what a mail carrier does? What do you think they are carrying in their bags?

Encourage children to share what they know about mail carriers.

SAY: Problem Solvers, mail carriers drive or walk from house to house to deliver the mail—like letters and packages. They use small trucks called *mail trucks* to carry the mail to different neighborhoods. Has anyone seen a mail truck? Mail carriers also pick up mail that we are sending to others and bring it to them.

EXPAND

Give each child a bag to use for collecting mail.

SAY: So, let's be mail carriers! You each have a mail bag to carry the mail. There are letters all around our classroom for you to collect. When you collect your letters, you can put them in your mail bag. Each of you can collect 3 letters. Let's count 3 with our fingers: 1, 2, 3 (hold up fingers as you count aloud). You can collect 3 letters and then come back here to the post office!

Take out the 3 boxes and place in your activity area while children are picking up mail. Leave enough space between the boxes for children to walk between them.

After children return:

Encourage children to remove the letters from their mail bag.

ASK: Does anyone have ideas about what this little picture is in the corner of the envelope? [Point to the stamp. Listen to children's ideas.] This is called a stamp. We have to put a stamp on every letter or package. The stamp is how we pay to send the mail.

ASK: What do you notice about the stamps on your letters?

Encourage children's observations of the colors and shapes on the stamps. Restate children's observations if, by chance, they notice similarities in the colors/shapes of the stamps.

Summarize children's comments about the stamps: "Yes, you have two red stamps and one yellow stamp on your letters."

SAY: One of the jobs mail carriers do is sorting letters. When we sort things, we put them into sets based on something that is the same about them. What can we do to sort our letters today? Let's look at our letters. Is there something that is the same about our letters?

Listen and summarize children's thinking. Facilitate a discussion with children that leads to a group decision about how to sort the letters. If needed, you can use questions like the following to help children decide on a sorting rule:

- What is different about the stamps on the letters?
- Do you see anything the same about the stamps?
- What colors do you see on the stamps?
- What shapes do you see on the stamps?

- If this discussion is challenging for children, select three letters: two with the same stamp and one with a different stamp. Ask children again if they see anything the same about the three letters.
- What rule should we use to sort our letters? Encourage children to describe how they plan to sort the letters (by color or by shape).

State the sorting rule that children have agreed on: "We decided to sort the letters by color. We have some with red stamps (point), some with yellow stamps (point), and some with blue stamps (point)."

SAY: Let's make some mailboxes to help us sort these letters.

Take out the 3 labels that match the children's sorting rule and clip these on to the three boxes.

SAY: Now we have a mailbox for letters that have red stamps (or heart stamps) and a mailbox for letters with yellow stamps (or star stamps) and a mailbox for blue stamps (or square stamps). Let's take a few minutes for you mail carriers to sort your letters into the matching mailbox.

Allow children to sort their mail into the mailboxes. Observe to see if they are doing so according to the rule (color or shape) that the group decided to use.

If a child needs assistance, you might:

- Observe the color of the stamp: "I see the stamp on your letter is red."
- Observe the labels on the mailbox: "I see that one of our mailboxes has a red label. Do you see it too?"
- Restate: "Our sorting rule is that all the letters with red stamps go in the red mailbox."
- Wonder together: "If we deliver letters with red stamps to the red mailbox, where does *your* letter go?"

When children are done, restate the sorting rule: We had a sorting rule for colors (or shapes) this time, didn't we? We decided to deliver letters with red stamps here, and letters with yellow stamps here, and letters with blue stamps here.

Point to the first mailbox: Here is our red mailbox. Let's see what letters are inside! (Take out each letter and repeat: *It has a red stamp so it goes in the red mailbox.* If children have made an error—like putting a blue stamp in the red box—you can simply observe: *Here is a blue stamp in our red mailbox. Let's hold on to this letter and see if we can find its matching mailbox.*)

Repeat with the other two mailboxes.

SAY: Now we're going to send the mail out again to our classroom neighborhood so we can collect it one more time.

Quickly place the envelopes around the classroom for children to collect.

Prompt the children to go collect 3 pieces of mail again.

Remove the labels on the mailboxes. Have the next set of labels handy.

When children are done collecting mail:

SAY: Welcome back to the post office! I see you found some mail. Last time, you decided to sort the letters based on the *color* of the stamps. But let's look at the letters again. What can we do to sort the letters a different way this time?

FLEXIBLE THINKING IS KEY TO SORTING

Toddlers begin to sort by shape and color starting at 30-33 months of age.

But in the beginning, their thinking is very rigid. Once a collection is sorted by color, children have a hard time shifting their attention and sorting by another attribute, like shape.

Over time, and with practice, children's thinking becomes more flexible. This means that they are able to sort first by one attribute (color), and then sort again by a different attribute (like shape).

Because this thinking process develops across the third year, the goal of this activity is not the "right answer." (As with all Problem Solver activities, we don't make a big deal about errors.) The goal is to give children the opportunity to practice the complex skills of sorting and flexible thinking.

Listen and summarize children's thinking. Do they suggest sorting by shape of stamp (if they previously suggested color)? Or have they identified another sorting rule? Facilitate a discussion with children that leads to a group decision about how to sort the letters a second time. If needed, you can use questions like the following to help children decide on a sorting rule:

- What is different about the stamps?
- What is the same about the stamps?
- What colors do you see on the stamps?
- What shapes do you see on the stamps?
- Last time we sorted our letters by [color/shape]. What is another way we can sort them? *If needed, take three letters, two with one shape and one with a different shape, and ask children if they see anything the same about these letters.*

State the sorting rule that children have agreed on: "You decided to sort the letters by shape this time. We have some with stamps that are squares, some with hearts, and some with stars."

SAY: Let's make some mailboxes to help us sort these letters. (Clip the new labels on the 3 mailboxes.) Now we have a mailbox for letters that have heart stamps, and a mailbox for letters with star stamps, and a mailbox for letters with square stamps.

ASK: Let's take your letters out and see what shapes are on your stamps. (Give children time to look and describe the stamps.) Who would like to go first and sort a letter?

After the first demonstration, prompt children to sort their letters into the mailboxes. When children are done, as above, review each mailbox label and then review the stamps on each letter inside.

SAY: Thank you for being helpful mail carriers today—because of your problem solving, we made sure all our letters got to the right mailboxes. Now let's play another sorting game!

EXPLORE

For children aged 30 to 42 months: Run the sorting activity described below as a group activity.

For children aged 42 to 48 months: Implement the activity outlined below with children in pairs.

SAY: You and your Problem Solver partner will each get a collection of things to sort into two sets. Just like in our letter activity, you and your partner can choose a sorting rule.

Give each pair of children a prepared basket of items. Allow them time to explore the items and discuss sorting them. Some children may even begin sorting items together, which is fine.

ASK: What can you do to sort these things into two sets?

Facilitate a discussion with each pair about what their "sorting rule" might be—perhaps they suggest sorting by color (most likely) or by size, or by another attribute.

If they are struggling, observe: *Some of the cars (or blocks) are big and some are small. Some are blue and some are yellow. We could sort by size. Or we could sort by color. What should we do first?*

Once children have suggested a sorting rule, restate it: "Okay, Problem Solvers, you've decided to sort by size. Can you and your partner make two sets of cars—one with big cars and one with small cars?"

As children work, observe how they are describing and categorizing the items. If children are struggling, make an observation to focus their attention on the attributes of the items: *I see the cars are different sizes. What can you do to figure out which car is bigger? What would happen if you lined them up next to each other? Could you see which is bigger?*

When the pairs have sorted their collections, ask them to tell you what they did to sort the cars. Repeat their sorting rule: *This time, you sorted by _____, so you looked at each car's color/size and decided what set it belonged in.*

SAY: Now, let's put all your items back in the basket. Do you think the two of you can figure out a *different* sorting rule for these toys?

Facilitate another discussion with children about what the new "sorting rule" might be—perhaps size, or another attribute (children may focus on the number of doors on the toy cars or the shape of blocks).

Once the partners have suggested a new sorting rule, prompt them to sort the collection again.

Note: This task will be *much* more difficult for younger children to do independently. Observe carefully and, as suggested above, provide observations that may prompt children to notice *different* attributes of the items: *I see that some of the cars are red and some are blue.* When younger children sort a set, it is sometimes very challenging for them to reorganize the set based on another sorting rule (or attribute). Learning how to do this takes time and you may need to assist for now. See the sidebar "Flexible Thinking Is Key to Sorting" on page 3.

When the pairs have sorted their collections a second time, ask them once again to tell you about what they did to sort the toys (the sorting rule).

If time allows, you might ask: Is there *another* way we could sort the cars/blocks?

Note: There is no right answer here. The goal is to get children thinking about other ways to sort the cars—for example, if you are using cars, you might sort by number of doors or whether they are construction vehicles or not, etc. If you are using blocks, you might sort by the shape of the block (cube or rectangular prism). Note that younger children may not be able to answer questions like this yet.

Summarize: We can sort collections of things in different ways and make different sets. We can sort things based on their color, their size, or something else—as long as we have a sorting rule!

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 capacity language they may use as they respond to these discussion questions.

- What did you discover when you were sorting our letters today?
- What did you enjoy about making sorting rules?
- What do you think is tricky about sorting collections into different sets? What did you do to figure out which thing belonged in each set?

Individualizing the Activity

MAKE IT MORE CHALLENGING:

- Add a fourth color/shape to the stamp sorting activity.
- Offer a collection of items that is more challenging to sort—for example, 3 metal forks, 3 plastic forks, 3 metal spoons, and 3 plastic spoons can be sorted by type of utensil or by what it's made of (metal/plastic).
- Offer a collection of items that can be sorted into three groups (baby socks, children's socks, adult socks).

MAKE IT LESS CHALLENGING:

- Use only two colors/shapes for the stamp sorting activity.
- Run the **EXPLORE** activity as a small group and sort the toy cars by only one attribute (color).

MAKING CONNECTIONS ACROSS THE DAY:

- During clean-up, talk about different ways to sort items as you put them away—for example, sorting animal figures into one basket and human figures into another basket.
- As children are waiting to go outside, form sets of children who are wearing jackets with hoods and jackets without hoods, or jackets with stripes and jackets with no stripes.
- Help children transition between activities by calling them as a group based on an attribute: *Anyone who is wearing sneakers, please find a seat at the snack table. Now, anyone who is NOT wearing sneakers, please find a seat the snack table.* The next time, choose a different attribute: *Anyone who has hair LONGER than their shoulders, please find your cot. Now, anyone who has hair SHORTER than their shoulders, please find your cot.*
- Collect some "treasures" from a nature walk: leaves, pinecones, acorns, pebbles, sticks, etc. Sit outside with children and discuss: Can these items be sorted in some way? Do any of the items in our collection have something in common? (Think about sorting by color, by size, or whether the item came from a tree or not.) Children may not be able to come up with a sorting rule on their own so the teacher may need to suggest one.
- Create a classroom mailbox and let children draw pictures and put them in envelopes to deliver to classmates.

Song: *Sorting Mail*

The lyrics to the song are below. Distribute the prepared envelopes to children prior to playing the song. Play the song through once without stopping. As you listen a second time, pause the song to give children time to sort the letters.

Mail, mail
Lots and lots of mail!
Sorting mail is loads of fun,
And we'll deliver ev'ry one!
Mail, mail
Lots and lots of mail!

Red stamps, red stamps
Place them over here!
Blue stamps, blue stamps
Place them over there.
Ev'ry letter in its box
Ready for delivery!
Mail, mail
Lots and lots of mail!

Heart stamps, heart stamps
Place them over here!
Star stamps, star stamps
Place them over there!
Ev'ry letter in its box
Ready for delivery!
Mail, mail
Lots and lots of mail!

Mail, mail
Lots and lots of mail!
Sorting mail is loads of fun,
And we'll deliver ev'ry one!
Mail, mail
Lots and lots of mail!

Spoken: How else could we sort the mail?
You decide!

Making Literacy Connections

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

Suggested Book: *Five Creatures* by Emily Jenkins

AS YOU READ:

This story introduces the reader to a family of five: two parents, one child, and two cats. Readers then discover that this group of “five creatures” can be sorted into a number of different sets based on different attributes—like who can fit under the fridge or who likes milk.

As you read:

- The title of the book is *Five Creatures*. Help children understand that a “creature” is another word for an animal or person. (Children may think a *creature* is a monster, so it’s important to define this word as you introduce the story.)
- Show children the cover illustration and ask: This book is called *Five Creatures*. Let’s see how many creatures are in this cover illustration: 1, 2, 3, 4, 5. Who are the creatures you see in this picture?
- As the group of five is split into different groups in different ways, ask children if *they* fit into each category (“Can you open the cupboards in your house?”).
- Ask: In the story, the girl sleeps with her two cats, so three of them sleep together in the bed. Do you have any pets or stuffed animals that sleep with you?
- Make sure that children understand that the word “knack” (as in “has a knack with yarn”) means “skilled” or “is good at.” Share something about yourself: “I have a knack for baking cookies.” Ask children what they have a knack for (what are they good at)?
- Ask: When the story says one of the creatures likes to sing late at night, what kinds of sounds do you think this cat is making at the window?
- Observe: The story tells us that all five creatures like birds, but in different ways. Let’s look at the picture and see if we can figure out the different ways.
- Ask: The story ends by saying that all five creatures like to sit together by the fire in the evening. Is there something that your family likes to do all together?

BUILD ON THE BOOK

Materials: Flipchart paper (about 8 pages), 5 colors of dot stickers or dot markers, **Handout 4**, glue stick and marker

Preparation:

Make two columns on each of five pieces of flipchart paper. Glue the images from Handout 4 at the top of each column to make the following headings:

- Chocolate Ice Cream / Vanilla Ice Cream
- Slides / Swings
- Apple / Banana
- Blocks / Painting
- Dogs / Cats

Explain to children: Just like in the story, we're going to play a game where we sort ourselves into different sets.

Give each child a different color of dot sticker or dot marker, and keep one for yourself.

Post the first flipchart and ask children: Let's try to sort ourselves into sets based on our favorite ice cream. Who likes chocolate ice cream more? Who likes vanilla ice cream more? You can put your dot under the kind of ice cream you like best. I'll go too! I like ____ ice cream best so I'll put my dot there.

Let children respond by placing their dot. When they are done, ask questions like: *Let's look at the dots on either side. What set looks like it has more?* Make observations like: *It looks like our group prefers vanilla ice cream.*

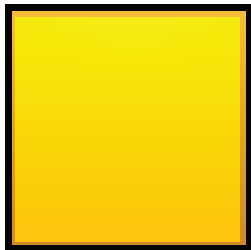
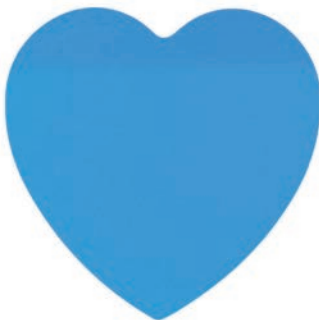
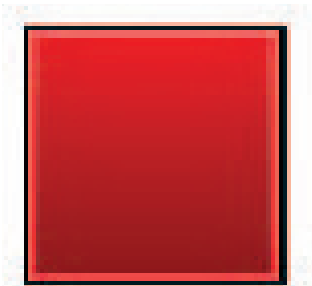
Continue with the other four flipcharts. With each flipchart, observe how the sets have different quantities and are made up of different children.

Ask children to create some categories of their own with extra flipchart pages. Ask children draw simple pictures to label the columns and have children sort themselves in response.

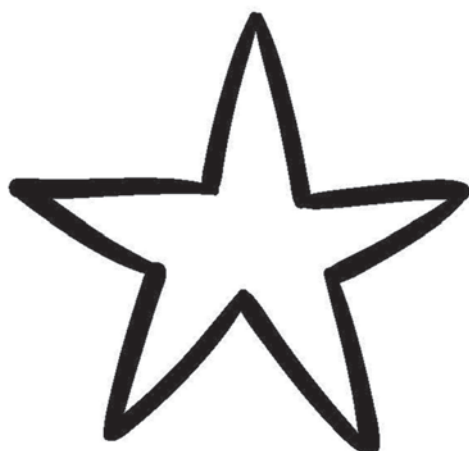
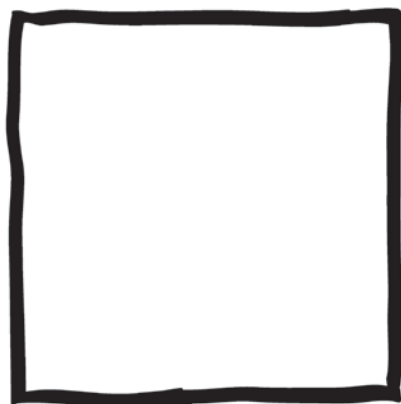
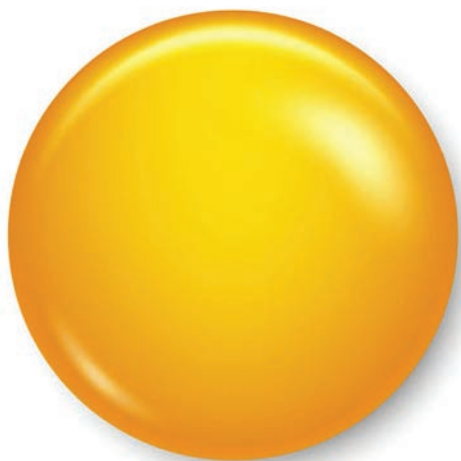
Handout 1: Mail Carrier



Handout 2: Stamps

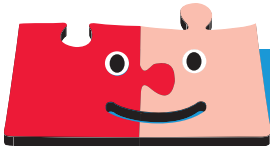


Handout 3: Mailbox Labels



Handout 4: All About Us





Making Sets

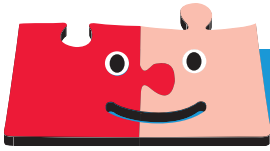
This week, the children are discovering that they can sort items into sets based on something the items have in common—their color, their size, or another feature. For example, we can sort animals into a group with fur and a group with feathers.

On laundry days, help your child learn about making sets! Here are some ideas:

- Ask your child to find all the clean socks and put them into one pile. Then put all the clean t-shirts into another pile.
- Ask your child to sort the socks into a pile of *their* socks, and a pile of your socks.
- Ask your child to sort the t-shirts into BIG t-shirts and LITTLE t-shirts.
- Ask your child to put all the white clothes into one pile, and put all the blue clothes into another pile.
- You can keep playing by making up different ways of sorting clothes—like clothes *with* zippers and clothes *without* zippers.
- When it's time to put things away, ask your child to sort the clothes into piles for each family member. They may even be able to “deliver” those piles to the right room for you too!



Making sets by noticing features that items have in common is an early math skill that helps children learn to classify and sort.



Solo para familias

Hacer conjuntos

Esta semana, los niños están descubriendo que pueden clasificar elementos en conjuntos, algo que los elementos tienen en común: su color, su tamaño u otra característica. Por ejemplo, podemos clasificar los animales en un grupo con pelaje y otro grupo con plumas.

¡Ayude a su hijo a aprender a hacer grupos a través del juego cuando sea el momento de doblar la ropa!



- Primero, pídale a su hijo que encuentre todos los calcetines limpios y que los ponga en un montón. Luego ponga todas las camisetas limpias en otro montón
- Pídale a su hijo que clasifique los calcetines del montón de sus calcetines y del montón de los suyos
- Pídale a su hijo que clasifique las camisetas, en camisetas GRANDES y camisetas PEQUEÑAS.
- Pídale a su hijo que ponga toda la ropa blanca en un montón y que ponga toda la ropa azul en otro montón
- Puedes seguir jugando inventando diferentes formas de clasificar la ropa, como ropa con cierre y ropa sin cierre.
- Cuando llegue el momento de guardar las cosas, pídale a su hijo que ordene la ropa en montones para cada miembro de la familia. ¡Incluso pueden “entregar” esos montones a la habitación correcta de ellos y a la de usted también!

Hacer conjuntos al notar las características que los elementos tienen en común es una habilidad matemática temprana que ayuda a los niños a aprender a clasificar y ordenar.