



AT-HOME



SCIENCE LEARNING

#8

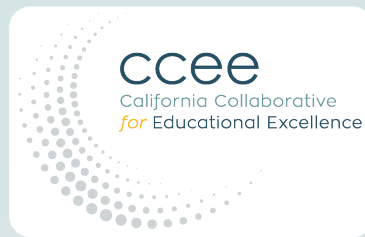

RECYCLING ROUNDUP






PARENTS



At-Home Science Learning is all about you and your children exploring science in a fun, hands-on way using simple supplies found around your home. Use the “Parent Guide” to help support your children through the activities plus see a list of required materials needed. Print out the “At-Home Science Journal” for your child to follow along with each activity. The activities are designed to take 15 – 30 minutes. Get your whole family exploring science together!



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FOR THE PARENT:

#8 RECYCLING ROUNDUP

Overview: Understanding how much trash is created each day and where this trash goes is a great way for children to learn about human impact. By participating in simple activities such as recycling, neighborhood clean-ups, and repurposing items, children see how their actions can help protect the Earth.



Materials/Supplies:

- Electronic device connected to the internet to watch videos and play games.
- Pieces of paper, cardboard boxes or plastic bins.
- Copy of the “Student Science Journal” and a pencil.
- Optional supplies: colored pencils or crayons.

Each of the activities is designed to take 15–30 Minutes.

Activity 1: Scavenger Hunt

1. Begin with a “Materials Scavenger Hunt.” This scavenger hunt can take place inside your home. Your child will be looking for items that are made of different types of materials: plastic, glass, and paper/cardboard. If your child is unfamiliar with these different materials, show them an example in your home of each of these materials.
2. Be sure your child has the scavenger hunt chart in their Science Journal, Activity 1 section, and a pencil or pen. They can write or draw the items they find that match each category in their journal. Optional: if your child has an electronic device, like a cellphone or tablet, they can take pictures of what they find.
3. If you have younger children, partner them with an older sibling or with an adult to find the items together. If you have older children, you can give them an extra challenge by giving them a time limit for finding 5–10 items.
4. After your child has found items for each category, point out a few different items that your child wrote or drew in their scavenger hunt and ask them this question: What would you do if you no longer wanted that item in your home? There are multiple responses your child may give depending on the object. For example, your child might say:
 - a. Save it for a younger sibling.
 - b. Give it away to someone else.
 - c. Throw it away.

Help your child record some of their responses to this question in their science journal.



Activity 2: Keeping Track of Trash

1. This activity will help your child visualize how much trash your family creates during a typical day. It is important that everyone in the family participates in this activity.
2. Keep a piece of paper and pencil by each trash can in your house. When someone puts a piece of trash into a can, they record what was thrown away. To organize the data, brainstorm with your child the categories of the most common types of trash you think your family throws away each day. Some possible categories could include:

- a. Paper
- b. Plastic
- c. Metal
- d. Glass
- e. Food
- f. Other

Using tally marks is a great way to count the trash thrown away throughout the day.



3. At the end of the day, collect all of the papers from near the trash cans and help your child tally this data into their Science Journal – Activity 2 section. Have your child count the total pieces of trash that were thrown away and record in their science journal.
4. Have your child record what they noticed from the data they collected about the trash and what questions they have. Encourage your child to think of ways to they can reduce the amount of trash created during the day.

As your child shares, encourage them to use complete sentences and give them some ideas to begin. For example,

- a. I noticed...
- b. I wonder...
- c. I think we can reduce trash by...

Activity 3: Where Does it Go?

1. Have your child go to their Science Journal – Activity 3 section. Ask your child what they think happens to the trash after it is thrown into the trash can at your home. Let them draw and write their ideas in their science journal.

As your child shares, continue encouraging them to use complete sentences. Provide them with some ideas to begin. For example,

- a. After the trash is thrown into the trash can, I think...
2. Now use your electronic device to watch a Mystery Doug video that answers the question “What do garbage trucks do with garbage?” link: tinyurl.com/video-garbagetrucks
 3. In their science journal, have your child complete the flow chart of where the garbage goes after you throw it in the trash can. Have your child describe what they learned about “landfills” from the video, too. You can let your child rewatch the video if needed.

Encourage your child to tell you their thoughts before they write them. It is often easier for a child to write something once they are able to say it or describe it correctly.

Activity 4: “Recycle Roundup” Game

1. One way to reduce the amount of trash that goes to landfills is to recycle. Use your electronic device to access the “Recycle Roundup” game by going to this link: tinyurl.com/game-recycleroundup
2. Your child has 2 minutes to see how many items they can sort into 3 different bins: recycle, trash, and compost. If the item is put into the wrong bin, you will hear the gorilla make a sad noise. Your child can keep track of how many items they sorted correctly by looking at the “Item” counter on the top right of the screen.
3. After your child plays the game, have them go to their Science Journal – Activity 4 section and record how many items they were able to sort. Also, have your child record some of the items they put into the different bins: trash, recycling, or compost. If your child was struggling with sorting the items, click on the green “Instructions” button on the main menu page and have them read through the instructions. If you have younger children, read the instructions out loud to them. The instructions will give your child hints for what items go into which bins.
4. Now have your child play the game again and record in their science journal how many items they sorted this time around.
5. Your child may not be familiar with the term “composting.” Visit this website to learn more about composting and how to start composting at your home: www.stuff4tots.com/composting-for-kids/.

Activity 5: Recycle Boxes

1. Recycling is one the easiest ways to reduce the amount of garbage you throw away. If you don’t have a recycle bin in your home, help your child create one! If you do have a recycling bin in your home, help your child sort the recyclables for a week to collect information about how much your family recycles during the week.
2. You can use cardboard boxes or plastic tubs. Label the different items that should go in each bin. For example, one box could be labeled “Paper and Cardboard,” another box “plastics and glass,” and a third box could be “aluminum cans.” It’s highly recommended that you check with your local waste management company to confirm what they allow to be recycled.
3. After a week of sorting your recyclable items, help your child count and compare the number of items in each box and record this information in their Science Journal – Activity 5 section.
4. What happens to items you recycle? Here is a video that shows how the Adidas company recycles plastic bottles to make shoes. Use your electronic device to watch the video by clicking on this link: tinyurl.com/video-shoesofplastic.



Activity 6: Litter Clean-Up

1. Use your electronic device to listen to the story “Michael Recycle Meets Litterbug Doug” by using this link: tinyurl.com/video-MichaelRecycle.
2. After watching the video, have your child go to their Science Journal – Activity #6 section. Help your child answer the questions from the story.
Continue encouraging your child to share their answers with you first using complete sentences. Provide them with some ideas to begin if needed. For example,
 - a. “The problem on the hill next to town was...”
 - b. “This problem was caused by _____ because...”
 - c. “The problem was solved when...”
3. Now do a family litter clean-up activity by walking through your neighborhood or nearby green space and pick up trash. Be sure to wear gloves or other protective gear while picking up trash. You can have two trash bags, one for trash and one for recyclable items.
4. Have your child go back to their science journal and summarize their litter clean-up experience.

Activity 7: Trash to Treasure

1. It’s time to get creative and repurpose items that might have been thrown away or recycled! Help your child look through the recycle bin and think of ways they can design something new that can be used around the house. For example, use a cleaned soup can as a pencil holder or a glass jar as a vase for flowers. Have your child go to their Science Journal – Activity 7 section and draw a picture of what they created and describe its new purpose.
2. If you need ideas for possible craft project ideas using items such as plastic bottles, toilet paper tubes, paper plates, and more, use your electronic device to access this website link: tinyurl.com/craftprojects.
3. Be creative! Be Earth-friendly!






AT-HOME SCIENCE LEARNING

#8 RECYCLING ROUNDUP

NAME: _____

Activity 1: Materials Scavenger Hunt

Draw  or write  items you find around your home that are made of these different materials.

PLASTIC	
GLASS	
PAPER OR CARDBOARD	

If I didn't want _____ anymore, I would _____

If I didn't want _____ anymore, I would _____



Activity 2: Keeping Track of Trash

After keeping track of the items your family throws away for the entire day, tally the types of trash you collected here:



PAPER	PLASTIC	METAL	GLASS	FOOD	OTHER

The total amount of items we threw away today = _____

Looking at your data, draw or write responses to the following prompts.

1. I notice...

2. I wonder...

Draw  or write  ways you think you can reduce the amount of trash your family creates.

Activity 3: Where Does it Go?

Here is what I think happens to trash when I throw it away in my trash can...

After watching the video, draw  and write  where the garbage goes in the flow chart.



First, the trash goes into the trashcan.



Then, the trash





Finally, the trash

Draw  or write  what you learned about landfills:



Activity 4: "Recycle Roundup"

The first time I played the game, I recycled _____ items.

Draw  or write  some of the items that can be sorted into each of the bins:

TRASH BIN

RECYCLE BIN

COMPOST BIN

The second time I played the game, I recycled _____ items.

Activity 5: Recycle Boxes

Here is the amount of items we recycled this week:



ITEM	NUMBER OF PIECES IN BOX
Paper and Cardboard	
Plastics and Glass	
Aluminum Cans	

We collected the most items to recycle in the _____ box.

We collected the least amount of items in the _____ box.

Activity 6: Litter Clean-Up

After listening to the story, “Michael Recycle Meets Litterbug Doug” answer

draw  or write  your answer to these questions.

1. What was the problem on the hill next to the town?

2. Who was causing this problem?



3. How was this problem fixed?

Do a litter clean-up in your neighborhood or nearby green space.

Draw  or write  some of the trash that you found.



Activity 7: Trash to Treasure

Draw  or write  what you created from “trash” and describe its new purpose.

