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County Superintendent of Schools



Organic Waste Challenge Family Investigation

OVERVIEW

Your family creates more compostable material than you might think! In this challenge, you'll keep an eye on your weekly trash and track how much you generate. After graphing your results over one week, you'll set goals to reduce your household's waste over the next few weeks.



WHAT YOU'LL DO

First, your family or household will reflect on why you want to divert organic waste and keep it out of the landfill.

Then the data fun begins: you'll track and graph how much waste shows up each week in each of your household bins over the course of a month.

During the first week, you'll collect baseline data on the kinds of trash that you generate. After graphing the results, you'll come up with a plan to divert more of your organic waste to the green waste bin. As you put your plan into practice, your family will see the changes over time and celebrate the progress you make together.



WHAT YOU'LL LEARN

By participating in this activity, you'll learn how to:

- Set family goals around composting and diverting organic waste from the landfill.
- Graph how much is deposited in your green waste, trash, and recycling bin over a four-week period.
- Create a home composting plan to reduce the amount of organic waste that your family or household sends to the landfill.



WHAT YOU'LL NEED

- Device with internet access
- A way to collect organic waste like a pail, bag, or container.
- A pledge card
- Data form: You can choose between the table data sheet or the graphing data sheet
- Something to write with, like a pen or pencil

Optional:

- Gloves for handling messy items



WHY THIS MATTERS

Tracking what we throw away and shrinking the amount that ends up in the landfill is a powerful way to make a real difference for the environment. Organic waste comes from living things, such as food scraps, yard trimmings, paper, and food-soiled cardboard. When organic waste is buried in a landfill, it's packed tightly under layers of trash where very little air can reach it. Without oxygen, these materials break down in a way that produces methane, a greenhouse gas that traps heat in the atmosphere and contributes to climate change.

California's [**Senate Bill 1383 \(SB 1383\)**](#) sets statewide targets to reduce methane and other greenhouse gases from entering our atmosphere. To accomplish this, it requires residents and businesses to place certain organic materials in the green waste or organics bin.

When you throw your organics waste into your green waste bin at home instead of the trash bin, the materials you collect are sent to a special facility at Orange County's landfills. There, they're transformed into nutrient-rich compost for plants and local landscapes. This means that by diverting more waste to the green waste bin, you're helping reduce methane and protect our climate.





BEFORE YOU BEGIN: FIND YOUR REASONS TO COMPOST

Before we start monitoring our trash and diverting green waste from the landfill, the most important step is getting the whole family on board. It's tough to change a habit like tossing trash unless everyone understands why it matters.

To build a strong case to start composting — and to make sure everyone knows exactly what can go in the organics bin — we're starting with a family research mission!

The OC Waste and Recycling website has lots of useful information about composting and sorting organic waste. Check out oclandfills.com/organics or browse around on the internet to research why it matters.



Once you're ready, answer the following question together:

- How does composting help the environment?
- Why does composting matter to our neighborhood or community?
- Why does our family care about composting at home?

Talk together as a family to share why composting would be a great idea. This will help you build motivation to make the change stick!

Fill out the **Zero Waste Pledge Card** on **page 6** to put your commitment in writing before you start taking action!





ACTIVITY INSTRUCTIONS: CONDUCTING A WASTE AUDIT

Step 1: Prepare an Organics Collection Spot

Take a walk around your home. Where are your bins or trash cans for collecting trash or recycling? Is there a separate spot where the organic waste goes?

If you don't have a spot that is already designated for organic waste, plan how you will collect it. Visit oclandfills.com/organics to view a video from OC Waste & Recycling that shares some ideas.



Step 2: Get Ready to Track Your Waste

Together, review the options on p. 7-9 and decide how to track the amount of waste that your family produces:

- **A daily table and weekly bar graph (pages 7-8):** This works well if you live in an apartment with shared trash facilities! You'll record whenever you take out a waste container or trash bag throughout the week and then graph at the end of the week.
- **A weekly bin graph (page 9):** This may be most helpful if you live in a home or apartment that has your own curbside bins! You'll create a graph at the end of each week before you wheel your bins to the curb.

Review the two options and decide which method works best for your family's needs. If you really love data, you can even try both!



Week 1: Baseline Week Data Collection

For the first week, we want to find out how much trash is typically generated at home. Throughout the week, keep track of how much trash, recycling, and organic waste end up in the different bins.

At the end of the week, add up the totals to see how many total bags or units of waste you counted for each category. (The end of the week is also a great time to give your organics collection container a rinse.)



Setting Goals for Week 2

As a family, get together and take a look at your data:

- What patterns do you notice?
- Are you surprised by how much trash you generate? Or is it about what you expected?
- Where might you have room for improvement to either reduce waste overall or divert more organic waste into your green waste bin?



Talk together and come up with one or two concrete goals. These might include:

- Make it a household practice to sort your organic waste after each meal.
- Review your waste hauler's guide to organic waste. Choose two or three new items that you didn't know were compostable to start diverting to your green waste bin.
- Reduce green waste overall by meal planning, turning leftovers into meals, or storing food properly.

Once you've set a goal, add it to your pledge card! Keep it posted where everyone can see it.



Weeks 2-4: Implement Your Goals & Collect Data

For week 2, week 3, and week 4, continue tracking how many trash bags, organic waste, and recycling the family is throwing into their curbside waste bins. You can use the tables and graphs at the end of this document to help your family keep track of all the information.

If you feel like you've achieved the goal that you set, you can choose a new one! When our Orange County community all takes action together, even small changes can make a big difference for our planet.



Celebrate Your Success

Congratulations! By the end of this four-week audit, your family hopefully lowered the number of trash bags going to the landfill — and that is a major win for our community and our planet!

For every bag of organic material you successfully diverted into the green bin, you prevented the harmful release of methane gas in the landfill. Instead, you contributed valuable material that OC Waste & Recycling can turn into nutrient-rich soil.

As you're reflecting on your success, discuss the following with your family:

- Were you able to generate less waste after the end of the four weeks? Were you able to divert more organic waste to your green bin?
- What was the hardest part about sorting your kitchen waste, food scraps, or other organic waste?
- How confident does each family member feel about composting?
- Is there something else you can do to make composting easier?



TAKE IT FURTHER

If you're interested in learning more about what happens to organic waste after your green waste bin is emptied by your waste hauler, check out OC Waste & Recycling's other resources at oclandfills.com/learn.



Zero Waste Pledge



Why does our family care about composting at home?



TRACKING YOUR WASTE

OPTION 1: DAILY DATA COLLECTION

If you take out your waste frequently or empty it into a shared dumpster, fill out the data table to track the number of trash bags, organic waste bins, or recycling bins that you bring down to the curb. If you didn't bring something down, record it as zero.

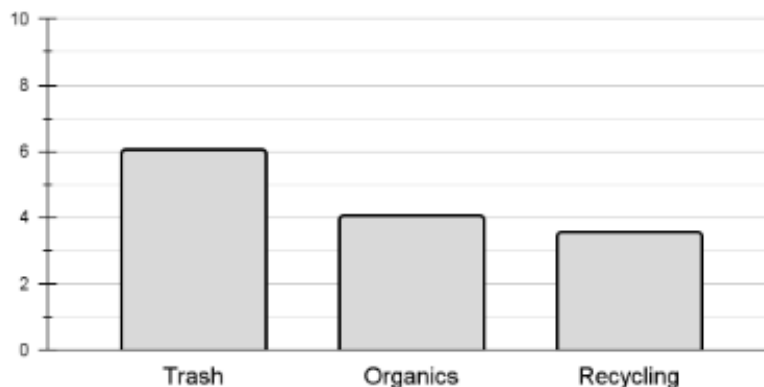
Sometimes, a bin might get emptied when it is only partially full. If that's the case, use fractions or decimals to estimate how full it was when you emptied it.

Example Daily Data Table:

Day	Trash bags	Organics Collection Bin	Recycling Bin
1	1	0.5	0
2	0	0.25	0.25
3	1	0.25	1
4	1	0	0.5
5	0	1	0.25
6	2	1	1
7	1	1	0.5
Total	6	4	3.5

At the end of the week, add up your totals to see how many units of each type of trash you generated. You can then turn your data into a bar graph to make things more visual and show your totals for the week.

Example Weekly Bar Graph:



TRACKING YOUR WASTE OPTION 1: DAILY DATA COLLECTION

Daily Data Table: Week ____

Day	Trash Bags	Organics Collection Bin	Recycling Bin
1			
2			
3			
4			
5			
6			
7			
Total			

Weekly Bar Graph: Week ____



TRACKING YOUR WASTE

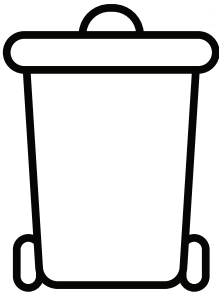
OPTION 2: WEEKLY DATA COLLECTION

If your family has your own curbside waste bins, another way to track how much waste is being generated is to check how full the bins are before you wheel them out to the curb.

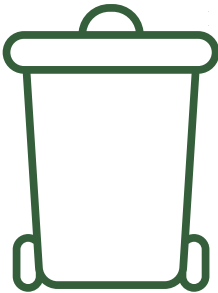
Before you bring out your bins, color each bin in to show how full it is! Then, use your data to track how you're reducing the waste in your trash bin and increasing your organic recycling over time.

Week 1

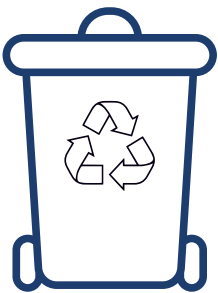
Trash



Organics

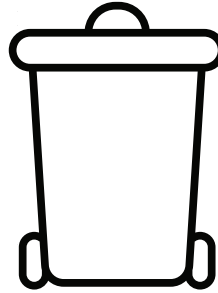


Recycling

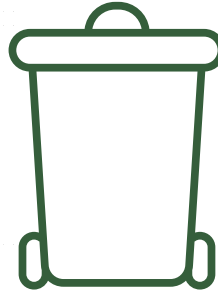


Week 2

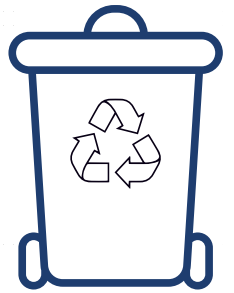
Trash



Organics

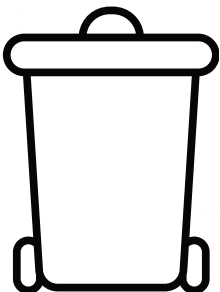


Recycling



Week 3

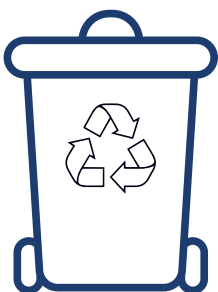
Trash



Organics

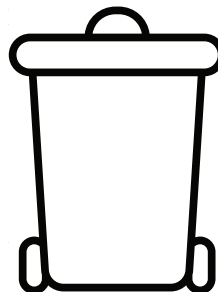


Recycling



Week 4

Trash



Organics



Recycling

