

# The DC Recycle Right! Competition

SY2019-2020



# About the Recycle Right! Competition

The DC Recycle Right! Competition rewards schools for recycling right, not for recycling more.

Inspired by the [Green Schools Alliance's Green Cup Recycle Challenge](#), students participating in the competition use math skills in a real-world application to conduct weekly classroom bin surveys. During each bin survey, students count the number of recycling and trash bins used correctly and incorrectly. Students and teachers then take action to improve the bin survey results over the course of the competition. Schools can choose to participate together as a whole school or pit classroom against classroom.

## Why Recycle Right?

**What does it mean to recycle right?** To recycle right, the right materials have to get sorted into the right bins and then from the bins to the correct outdoor containers so that they can be transported to the proper waste management facilities. This happens when people follow the labels on the bins and only put acceptable items in the recycling bins. It's important to remember that just because something is *recyclable*, it does not mean that the item is *acceptable* at your local recycling facility. In Washington, DC, the [Mayor's List of Recyclables and Compostables](#) dictates what items are acceptable at local recycling and compost facilities.

**Why recycle right?** Recycling right is important to ensure that recyclable materials are actually able to be sorted, sold, and reused to create new products. For example, paper can be recycled into new paper items including newspaper, tissue products, paper towels, insulation and even kitty litter. There are many additional benefits—for example, recycling one ton of paper saves enough energy to heat an average home for six months.<sup>1</sup>

**What is contamination, and why is it a problem?** Contamination is when non-recyclable items are disposed of in the recycling bin. Contamination is a problem because:

- It ruins the otherwise recyclable material so that it is sent to either a landfill or incinerator instead of getting recycled. *Contamination from one school can cause an entire truckload of recyclables to become trash!*
- It increases the cost of sorting the material at the recycling facility.
- It decreases the value of the recycled material, which negatively affects revenues and profits for the city.
- The District can lose money in the form of penalties for having trash in recycling truckloads.

China placed a [ban on waste imports](#) due to high rates of contamination. The U.S. is unable to sell many of our recyclables to China, where the materials could be made into new items.

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<sup>1</sup> Tools to Reduce Waste in Schools. U.S. Environmental Protection Agency.  
[http://www.capitalregionrecycling.com/Libraries/Program\\_Files/EPA\\_toolstoreducewasteinschools.sflb.ashx](http://www.capitalregionrecycling.com/Libraries/Program_Files/EPA_toolstoreducewasteinschools.sflb.ashx)

## 5 Steps to Prepare

### Step 1: Assemble a Recycle Right! team.

This group of students, along with at least one teacher or administrator, will be responsible for conducting bin surveys throughout the school building.

### Step 2: Review correct recycling procedures in your school.

DCPS Schools: Correct sorting means following the DCPS Zero Waste program procedures, which dictate that blue recycling bins are for mixed recycling. Classrooms should have one blue bin labeled for mixed recycling and one black bin for trash.

Other Schools: Correct sorting procedures and set-up depends on your school's recycling program. If you are unsure about your school's recycling procedures, ask your school's business manager and/or custodial staff.

### Step 3: Identify your sample.

Identify which classrooms' bins you will survey throughout the competition. This will be your sample, and should not change throughout the competition. You should survey bins in a minimum of 10 classrooms. You may also choose to survey bins in common areas, copy rooms, or teachers' lounges. Ideally, you will survey all the bins in your school!

### Step 4: Set up bins, labels and additional signage.

Make sure recycling and trash supplies are set up correctly throughout your school according to your school's recycling procedures. Place additional posters and signage as you see fit.

### Step 5: Set deadlines for the competition. See deadlines below for 2019 competition.

	Action	Deadline
Week 1	Conduct your baseline survey (#1)	Friday, Oct. 11
Week 2	Conduct survey #2	Friday, Oct. 18
Week 3	Conduct survey #3. Analyze results.	Friday, Oct. 25
Week 4	Submit make-up results. Analyze results.	Friday, Nov. 1

## Awards & Recognition

Schools can compete for Highest Performance, Most Improved, and Most Replicable Solution awards, which will be determined by the Department of General Services after the competition has concluded.\*



**Highest Performance** – An objective category that awards the school with the highest percentage of correct bins throughout the competition. This is calculated by evaluating each school's average percentage of correct bins across all three weeks.



**Most Improved** – An objective category that awards the school that improved their percentage of correct bins by the most percentage points from week 1 to week 3. This school may have started with a low percentage of correct bins but improved the most throughout the competition.



**Most Replicable Solution** – A subjective category to award the school that came up with the most replicable solution to improve sorting.

\*As an option, you can also choose to give these awards to individual classrooms at the end of the competition.

## The Competition

### Week 1: Conduct a Baseline Survey

In order to measure how much you improve over the course of the competition, you must know where you start. Conduct a bin survey to establish a baseline and submit your results. Use [the bin survey worksheet](#) provided on page 6.

- In the "Classroom" column, enter the classroom number for the bins.
- In the "Correct" columns, enter the number of bins that contained ONLY items that belong in those bins according to the bin labels.
- In the "Incorrect" columns, enter the number of bins that contained ANY items that didn't belong in those bins.

**Submit your data  
each week using this  
form:**

<https://forms.gle/HKUbh34D7gAuoQK8>

### Week 2: Share Results, Take Action, and Conduct Survey

**Share results and create an action plan.** Share the results of your first survey with the whole school. Each classroom should create an action plan to improve recycling "correctness" throughout the remaining weeks of competition. Review the [Action Ideas](#) section on page 5 for ideas.

You can use this opportunity to apply science concepts such as writing a hypothesis and conducting an experiment. For ideas on how to improve recycling, review the resources below. You can also get come up with your own creative ideas!

**Conduct Survey.** Conduct weekly bin surveys using the same survey form that you used to establish your baseline during Week 1. [Submit your results](#) to DGS.

### Week 3: Conduct Survey and Analyze Results

Conduct third and final weekly bin survey using same survey form from weeks 1 and 2. [Submit your results](#) to DGS.

By the end of this week, you should have completed and submitted three bin surveys of your entire bin sample. *However, there is one additional week built into competition for schools that may not have been able to complete surveys for three consecutive weeks.*

### Week 4: Make Up Week.

If you were unable to conduct bin survey for three consecutive weeks, this is an opportunity to catch up and submit final results. By the end of this week, you should have completed and submitted three bin surveys of your entire bin sample.

*Optional: Analyze Results and Award Winners*

Schools may choose to give the following award to individual classrooms that were surveyed throughout the competition. You can make up your own awards, too!

For **Highest Performance**, award the classroom with the highest percentage of correct bins throughout the competition. Use the scoring worksheet on page 7.

*When you're done, celebrate! Then continue to recycle right all year long!*

## Connect to Classroom Learning

The Recycle Right! Competition is designed for you to be able to integrate with or supplement your in-class lessons with a real world activity. Examples of how to do this include:

- **Math**— Apply math skills, including counting, addition, calculating percentages, creating graphs, and calculating slope (in calculating improvement over the 3-week period), etc.
- **Science** – Explore nutrient cycling, climate change, limited resources, etc.
- **Art** – Create posters and signs.
- **Economics** – Explore secondary materials markets and commodity prices.

Check out Recycle Right curriculum-linked lesson plans written by DCPS teachers [here](#).

## Action Ideas

RANKING	CLASS	SCORE
# 1	Thomas	7
# 2	McLean	6
2	Hammit	6
2	Ewing	6
2	Warren	6
2	Harrod	6
2	Brown	6
3	Ross	5
3	Beard	5
4	Graham	4
5	Wehner	3
6	Smith	2
6	Ridley	2
6	Nojan	2
7	Idemudia	0
7	Cross	0
7	Fulford	0
7	Watts	0
7	Duvall	0

- Share your weekly results with your school and use them to improve your recycling "correctness" throughout the three-week period.
- Announce survey results on the morning announcements and encourage correct recycling procedures in classrooms.
- Have students make posters and signs to label classroom recycling bins.
- Provide incentives for classrooms that recycle right.
- Post a leaderboard in a common area, like the lobby, so everyone can see which classrooms are the best at recycling right.

## Frequently Asked Questions

**Question: Can tissues and napkins go in the mixed recycling bin?**

**Answer:** No, tissues and napkins should NOT go in the recycling bin. They are dirty and contaminate the bin.

**Question: Can milk cartons go in the mixed recycling bin?**

**Answer:** Yes, milk cartons are recyclable in D.C. and therefore are able to go in mixed recycling bins.

**Question: My school only does “paper only” recycling in our classrooms. Can we still participate in the competition?**

**Answer:** Yes, you can! A bin is considered ‘correct’ if ALL items in the bin are sorted correctly according to the label on the bin.

## Worksheets

## Recycle Right! Competition

### Weekly Bin Survey Worksheet

Name(s) of Surveyors:

Date:        /        /

Circle One:      Baseline (week 1)      Week 2      Week 3

	A	B	C	D	E	F
Classroom (Room #)	# of Correct Recycling Bins	# of Incorrect Recycling Bins	# of Correct Trash Bins	# of Incorrect Trash Bins	Total # of Correct Bins (A+C)	Total Bins Surveyed (A+B+C+D)
<b>Totals</b>						

## Recycle Right! Competition

### Scoring Worksheet – Highest Performance

*You can use this scoring worksheet to calculate the Highest Performance winner.*

	A	B	C	D
Classroom (Room #)	# Correct Bins (Add up all from Weeks 1- 3)	Total Bins Surveyed (Add up all from Week 1 – 3)	Overall Percent Correct $= (A/B) \times 100$	Highest Performance Ranking (Rank Column C in order from largest to smallest)