

Environmental Education: 3Rs (Reduce, Reuse, Recycle)

What's in Your Garbage?

Background Information

We all have an important role to play in reducing and diverting waste from the landfill. The 3Rs (reduce, reuse and recycle) can help guide us towards having fewer materials ending up in the garbage. Reducing the amount of waste created and finding ways to repurpose and reuse, eliminates the need to dispose of items later or needing to find ways to recycle or donate. Inevitably most of us still end up with things at home that we want to get rid of. Ideally, a number of these items would be recycled.

The CRD curbside program has three streams of recycling: paper and cardboard, mixed containers and glass. The region also has drop-off and recycle depots that take many more items not usually accepted in at home recycling programs. Becoming familiar with recycling options in the region will greatly reduce the amount of recyclables ending up in the landfill. Recycling also conserves natural resources and reduces the amount of energy and water needed to create products from new natural resources.

Are you keeping as much waste out of the landfill as possible?

Do you know all the different items that can be recycled in the region? Complete the Home Garbage Audit and find out!

Activity Instructions

Set-up your work area.

Depending on what gets thrown in your garbage bin at home you may need to consider different set-ups. If you think you will have messy items (like food scraps) consider putting down a tarp, a towel or work outside. If you choose to work outside make sure nothing escapes and becomes litter!

Gather your garbage and recording tools.

Collect garbage from all bins in your house or just focus on one main garbage bin. You will also need something to record your findings. Use the provided table, make your own table or use a computer program.

Categorize your garbage.

Divide everything in your bin into groups and categories. You will most likely add and shift categories as you go so take your time.

Record your findings.

Start by writing down each type of item and how many of each were in the garbage (e.g., three coffee filters).

Analyze your findings.

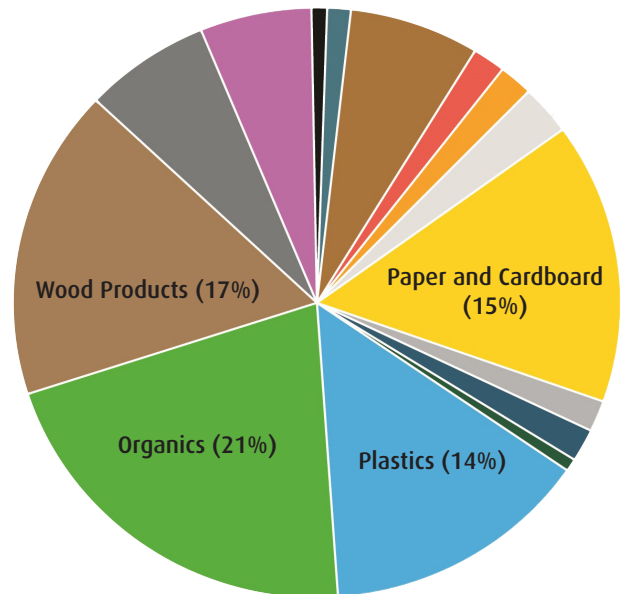
Using the six categories (food scraps, paper, glass, containers, drop-off or depot and garbage) listed on the table provided, sort all of your items into their corresponding categories. If you are unsure about which category an item belongs to, use the sorting guide links below.

Were there items in your garbage that could have been recycled or composted?

Sorting Guides

CRD curbside [accepted items](#) list and [myrecyclopeda](#) product search.

Recycle BC's [What Can I Recycle?](#) and materials list.



Hartland landfill 2016 waste composition
(four largest categories)

Expand and Connect

Determine which material each of your items is made of (plastic, paper, glass, organics, etc.). Calculate the composition of your garbage by material and compare your results to the [summary waste composition](#) breakdown (pg. 15) from Hartland Landfill or compare to the single family (pg. 6) or multi-family (pg. 7) charts depending on what type of home you live in.

Choose a product. Research and draw the lifecycle of that product starting from natural resource through production and use, to recycling or end of life.

Organics and food waste is the largest category of waste ending up in the landfill. Organic waste in a landfill slowly decomposes and releases methane gas, a greenhouse gas, which contributes to climate change. Look in your fridge, are there any items that are nearing their expiry or prime ripeness? Look up recipes and use them to make something for your family. [Love Food Hate Waste Canada](#) has many recipe ideas or come up with your own!

Make your own [beeswax wraps](#) to help reduce the amount of single use products used to store foods at home.

Listen to a podcast about garbage or recycling:

But Why: A Podcast for Curious Kids - But Why is a show led by you, kids! You ask the questions and they find the answers. It's a big interesting world out there. On But Why, they tackle topics large and small, about nature, words, even the end of the world.

- **How is Glass Made?** (26:53) [<https://www.vpr.org/post/how-glass-made#stream/0>]
"How is glass made? Why does glass break? Why do bubbles pop? What's it like inside a bubble? We make everything clear in this episode! Our questions from kids in Arizona, Brazil, California and Cambodia."

Brains On! — An award-winning audio show for kids and families.

- **Plastic: Why it's Everywhere** (40:32) [<https://www.brainson.org/shows/2019/07/30/plastic-why-its-everywhere>] "Human-made plastics are super useful -- they're lightweight, can be molded into anything, and they don't break down. And because plastic is so versatile, we humans have found lots of uses for it. But the fact that it lasts forever means we find ourselves with a plastic problem. In this episode, we'll learn about the invention of plastic, how it's made and recycled and what you can do to help handle plastic waste."

The Big Fib — Each week, a kid interviews two experts in a particular topic – one, a genuine, credentialed expert, the other a low-down dirty liar. Hilarious and fast-paced, the show encourages kids to teach themselves how to ask insightful questions, weigh the evidence before them, and when to trust their gut.

- **Garbage** (18:32) Ep. #67 [<https://radiopublic.com/the-big-fib-6vVq1l/s1!3e191>]

Still Curious?

[Solid Waste Management](#) planning and [Working Together To Rethink Waste](#) — information about the CRD's plan to decrease per capita garbage disposal from 380 kg to 250 kg per person, per year.

General information about [waste and recycling](#) in the region.

Solid waste and Hartland landfill [2019 Progress Report](#)

CRD Videos: [Hartland Landfill: A Year of Garbage](#) and [Garbage at Hartland Landfill](#)

[Recycle BC](#) - is the stewardship group responsible for residential packaging and paper recycling in BC. They collect household packaging and paper recycling and get it to processing facilities and markets.

Recycle BC Videos: [What happens to my recycling?](#) and [Recycling home tour](#)

If you have any questions about recycling in the region, or are looking for ideas on how to connect this topic with other learning opportunities, please contact us at education@crd.bc.ca.

Home Garbage Audit Worksheet

Item	Food Scraps (Organics)	Paper or Cardboard (Blue Bag)	Glass	Containers (Blue Box)	Drop Off or Depot	Garbage

Discussion

1. What percentage of the items in your garbage could have been diverted (recycled or composted)?
2. If you were going to take items to a drop-off or recycling depot which location is closest to you?
Hint: use the residential packaging [drop-off guide](#) or look up items on [myrecyclopedia.ca](#) and refer to list of drop-off locations listed.
3. Were there any items in your garbage that could have been reduced or avoided in the first place? Hint: consider single-use items such as plastic wrap, zipper-lock bags, paper towel, and items with lots of packaging.

Home Garbage Audit Worksheet — EXAMPLE

Item	Food Scraps (Organics)	Paper or Cardboard (Blue Bag)	Glass	Containers (Blue Box)	Drop Off or Depot	Garbage
Coffee filter and grounds —	✓					
Tissue —						✓
Milk carton —				✓		
Jam jar —			✓			
Fruit stickers —						✓
Yogurt lids —					✓	
Chip bag —					✓	
Receipt —		✓				
Bread bag —					✓	
Toothpaste tube —						✓
Banana peel —	✓					
Plastic clothing tag —						✓
To-go coffee cup —				✓		
Ice cream bar wrapper —					✓	
Dental floss —						✓
Paper towel —	✓					
Totals items: 50	7	3	1	4	6	29

Discussion

What percentage of the items in your garbage could have been diverted (recycled or composted)?

- Food Scraps 14% (7/50); Paper 6% (3/50); Glass 2% (1/50); Containers 2% (4/50); Drop Off 12% (6/50); **Total 42% (21/50)**

If you were going to take items to a drop-off or recycling depot which location is closest to you?

- London Drugs on Yates St. (other flexible plastics — foil yogurt lids, chip bag, ice cream bar wrapper; plastic bags and overwrap — bread bag)

Were there any items from your audit that could be reduced or avoided in the first place?

- paper towel could be replaced with a cloth or towel; reusable coffee filter; travel mug instead of to-go cup; reuse jam jar; homemade bread