Community Recycling Centre

Activity Overview
In this activity, students will learn which items should be brought to the Goodwill and the Community Recycling Centre (CRC) rather than placing them at the curb for landfill. At a mini CRC model, students will be faced with a large pile of items and will need to decide where they belong. The importance of and how to safely dispose of household hazardous waste will also be discussed. All of the materials used to construct this activity (right down to the paint!) are reused and recycled materials from the various CRCs in the Region of Peel. The activity should run 10-15 minutes.

3 High school Volunteers are needed to run this activity:
- 1 host to start the activity by explaining it and wrapping it up at the end.
- 1 at the CRC to help out the students along the way
- 1 at the Goodwill and HHW to explain that portion of the activity.

Key Messages
The elementary students will learn:

- What a Community Recycling Centre is and where they are located in Peel
- About the items collected at the Region’s various CRCs
- To identify household hazardous waste (HHW) materials around the house
- To dispose of household hazardous materials in a safe manner
- To describe how to handle household hazardous materials and reduce their use
- To identify what items should be brought to the Goodwill for re-use

Operational Requirements
This activity will take place outside and doesn’t require water or electricity.

Materials

- Sink
- Curbside bins (garbage can, Blue box, Organics bin, Yardwaste bin)
- 7 Bins that go around the CRC labelled (electronics, metal, wood, tires, recycling, yard waste, Drywall/Construction Material)
- Empty paint can and aerosol can
- Nearly empty shampoo bottle and dish detergent bottle (for the only liquid that can be poured down the drain)
- HHW/CRC products (bleach, motor oil, full paint can, batteries, tiles, small tire)
- Re-usable goods (radio, DVD player, small computer monitor, t- shirt and pants, kids toys)
- Garbage items (chip bag, candle stick, garden hose)
- Organics item (Toy food)
- Table for HHW
- Wagons
- Childrens loaders
- Gloves, vests, lab coats
- CRC model made out of plywood
**Setup/Takedown**

*Set up*
- The mini CRC and Goodwill will already be set up
- Place the blue box, garbage bin, organics bin and yard waste bin at one end of the grass 10-20 feet away from the activity. Pretend they are at the curb for collection
- In the middle of the space line up the wagons and put a pre-made kit (composed of different materials) into each wagon
- Place a table for the second part of the activity (HHW) to place the sink where the students will pretend to empty the bottle of soap to place in the recycling

*Takedown*
- At the end of the day, bag all of the waste products, fold the table, stack the bins
- Place all small items inside the container provided

**Safety**

- Please tell the students not to open up any bottles.
- All Students should be wearing gloves

*Specifically remind them:*

- Not to touch any of the HHW products when they are at home. Let them know that it is the job of adults to dispose of these products properly. Encourage them to share what they have learned about HHW with their parents.
- We can all do our part to help reduce the volume of hazardous materials in our homes and ensure that that it is disposed of properly

**Vocabulary:**

- **Renovation materials** – items such as tiles, wood with nails, and drywall that are not collected at the curb.

- **Household Hazardous Waste (HHW)** - waste containing chemicals that are dangerous to human health and/or the environment.

- **Flammable** - can be easily set on fire.

- **Corrosive** - able to eat into; wear away; or dissolve a variety of materials such as metals.

- **Reactive** - able to react in a harmful way (e.g. can produce a toxic gas or an explosion) when mixed with another substance.

- **Toxic** - poisonous/harmful to humans and other living things.

**Accessibility**

All students can participate.

**What will I be doing? (Procedure):**

Remember that doing an experiment and discovering the answer is more powerful than watching and listening to someone, so try to involve as many children as possible.
Part 1:

- **Say:** “Welcome to the Community Recycling Centre! When it comes to recycling and throwing out your waste, there are a lot of things to know and different things you must do. But if we do them right, we save energy and that’s the goal, right?”

- **Question:** “Does anyone know what the Community Recycling Centre is?”
- **Answer:** “It’s a place where you can bring all of your waste, especially the items that garbage collectors won’t collect at the curb. Because there are many things we can’t place at our curbside for the waste collectors to take.” (Show the kids the items: tiles, small tire, wood, metal, electronics etc).

- **Question:** How about these items? (Show bleach, motor oil, full paint can,)
- **Answer:** Liquids can never be placed at the curb and they must be brought to the HHW (Household Hazardous Waste) building at the Recycling Centre. (Point to the building)

- **Say:** “What about if you have an item that you don’t want anymore but it’s still in good condition and other people could use? Like a radio or a nice shirt? You wouldn’t want to throw that away into the garbage. That’s too good to waste! At each CRC, there is a place called the Goodwill where you can bring these items instead of throwing them in the garbage. It’s like a store and people come and purchase the items that are donated to it. In fact, ALL of the materials used to make this activity came from items at different CRCs and Goodwills in Peel!”

- **Say:** “Why don’t we try sorting through these items here and let’s see if you can put them all in the right place.”

- **Say:** “In a moment, I will split you into 4 groups. Each group will have a wagon with objects in it. You will walk along the course with your group, and you will need to decide where each item belongs. Your choices are the curbside at your home for the waste collectors or the different bins at the CRC, the HHW, or the Goodwill.” Point out where the CRC, Goodwill, garbage can and recycling bin are and explain to the kids that they must bring the items to where they think they should go.

- **Say:** “Before we begin I will give you a tip. If a bottle or a container ever has liquid inside of it, it can never go into the garbage or recycling. It should be brought to the CRC. Also, large items like car parts and building materials such as tiles, large amounts of wood and electronics are not collected by the garbage trucks so they must be brought to the CRC. Regular garbage, recycling, organics and yard waste are the only things collected at the curb.” (You have to show each item to the younger grades when talking about them)

- Split the kids into groups and let them go along the course, putting items where they think they belong.

Part 2:

As the students move along they will come to the HHW and the Goodwill. One high school volunteer will take over at this location (the HHW).

- **Say:** “Okay everyone let’s move onto the next part. Remember we were talking about not putting dangerous liquids in the garbage or recycling? Well let’s talk more about that. Does anyone know what HHW stands for?”
- **Answer:** “Household Hazardous Waste (HHW) is any product that has the potential to harm people, animals, or the environment. Almost everyone has items in their home that are hazardous.”
Question: “Do you know how to find out if something is hazardous?” (wait for answers)

Answer: “If you see any of these symbols (point to the symbol chart - poisonous, corrosive, flammable and explosive) then the product is hazardous and it can be dangerous for the environment and for you if it’s not handled properly.”

The correct disposal method for each item is stated below, please read them out to the students:

**HHW Depot** – All HHW items with the exception of the empty aerosol can, paint can and shampoo and detergent bottles should be taken to a HHW Depot for safe disposal.

**Garbage Can** – HHW items should never be put into the garbage. When these items are sent to the landfill, they can seep into the soil and contaminate (poison) our groundwater.

**Blue Box** – Empty paint and aerosol cans are the only HHW items that can be safely recycled. Please put these items into your blue box.

**Sink** – Soap and shampoo can be poured down the sink. Empty soap and detergent bottles can then be recycled. All other HHW items such as bleach and cleaners should NOT be poured down the drain because they can damage our pipes and poison our water.

Question: “So … If we want to throw away an item that has a hazardous symbol what do we do, do we dump it down the drain or throw it in the garbage?”

Answer: “No, because as we just learned, it is not safe to put HHW down the drain or in the garbage.”

Another Highschool volunteer will take over at the Goodwill.

Here the elementary students should have some items to drop off at the Goodwill (clothing, electronics, etc). Remind the students that re-using items by bringing them to the Goodwill is the best way to reduce waste because it keeps items out of the garbage and allows someone else to use them.

Host Volunteer will recall with the students what you have taught them in this activity and will go over if they had they put items into the correct bins (see answers below). *Make sure that you tell the students that ALL of the materials (right down to the paint!) used to build this activity came from items at the CRCs and Goodwill stores. All of these items were saved from going to the landfill!*

**Answers:**

HHW/CRC items - products (bleach, motor oil, full paint can, batteries, tiles, small tire)

Goodwill items - (radio, DVD player, small computer monitor, t-shirt and pants, kids toys)

Garbage bin items - (chip bag, candle stick, garden hose)

Recycling bin items – (Empty aerosol can, empty paint can)

Remind the kids that reducing the amount of waste we generate and reusing items instead of discarding them helps save natural resources, conserves energy and creates less garbage.

**Background Information:**

What items are not collected at the curb and must be brought to the CRC?

- Tiles
Orange Colour Group- Intermediate
- Tires
- Propane tank

What is Household Hazardous Waste?

Household Hazardous Waste (HHW) is any product that has the potential to harm people, animals or the environment. Hazardous products have four classifications:
- Flammable
- Corrosive
- Reactive
- Toxic

Almost every household uses (and discards) items that contain hazardous waste, such as:
- Paint
- Batteries
- Cleaners and solvents
- Garden fertilizers and pesticides
- Durable goods, such as refrigerators and televisions
- Motor oil
- Prescription drugs

How Do I Know Which Products Are Hazardous?

Products in the household that can be hazardous have at least one of the following warning symbols displayed on them:

Dangers of Hazardous Waste

Flammable substances are those that easily set on
lighter (e.g. gasoline and turpentine).

Corrosive substances eat away at other substances (e.g. car batteries and drain cleaners).

Explosive substances explode or produce vapours when they react with other substances.

Poisonous/toxic substances are dangerous to humans or animals, even in small concentrations (e.g. carpet cleaners, oven cleaners, bleach, window and glass cleaners).
You should not treat hazardous wastes like other kinds of garbage. For example, buried wastes can filter down through the soil and contaminate groundwater. Plumbing systems can be damaged when corrosive chemicals are poured down the drain. Burning hazardous wastes simply distributes them over a larger area and releases them into the air. Pouring hazardous liquids on the ground can poison soil, plants and water.

HHW require special attention during handling, storage, collection, transportation, treatment and disposal. HHW should not be mixed in with your regular garbage and should never be poured down the drain, emptied into your toilet, laundry tub or storm sewer.

**Disposal**

If you do find these hazardous products around your home, there are proper ways to dispose of them. The best solution to managing HHW is not to generate the waste in the first place. You can do this by buying only what you need and using up the product entirely or giving the unused portion away to someone who can. Rather than purchasing toxic products, you can try using safer non-toxic alternatives. Finally, you should always take your household hazardous waste to one of four HHW depots in Peel Region. And remember to always store hazardous wastes out of the reach of small children and pets.

**What Can I Do?**

- Purchase less hazardous products -- use environmentally “friendly” products instead
- Properly dispose of HHW products