

# REDUCE WASTE & RECYCLE RIGHT

A Colouring & Activity Book





## Welcome Recyclers!

In this activity book we're going to learn about reducing waste. Find out how you can get involved, make a difference in our community, and have fun as you follow along! Our goal is not just to reduce, but to start on the path to Zero Waste!

### Sort · Schedule · Learn · Play



Scan the QR code to the right to download the

## Nanaimo Recycles App



iPhone



Android

Scan QR code for activity book answer key



### Publisher

City of Nanaimo © 2022  
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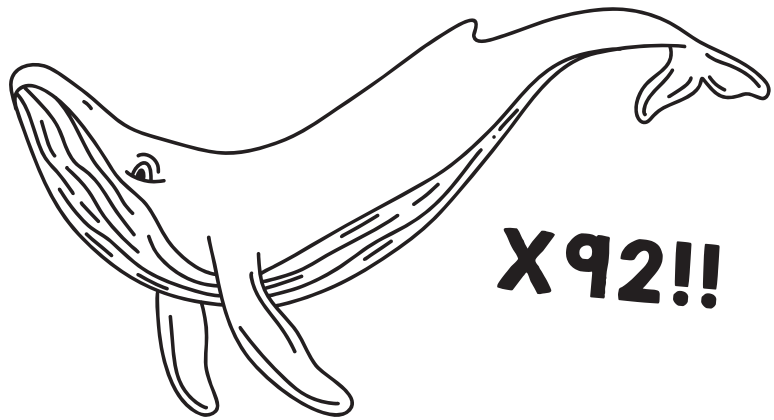
# Reducing Waste in Nanaimo

## How much waste is produced in Nanaimo?

In 2021, 29,491 homes produced:

3,686,850kg of recycling  
6,491,560kg of garbage  
8,242,180kg of organics  
= 18,420,590kg!!

That's equivalent to 92 Blue Whales (the biggest animal on earth!)



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## Where does our waste go?



**Black cart:** garbage gets sent to the landfill, where it is buried.

**Green cart:** organics get sent to Convertus Group where they are turned into nutrient rich compost.

**Blue cart:** recycling gets sent to Chemainus where it is sorted, baled, and sent to be processed into new packaging and products.

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## Why should we produce less waste?

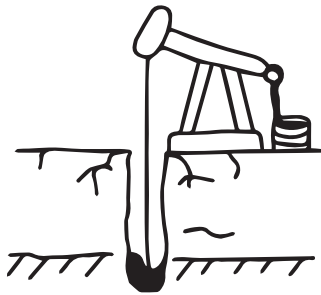
Humans produce WAY TOO MUCH WASTE! We make products, consume them, and then throw them away. This process is part of a LINEAR ECONOMY system and it is not only wasteful, but harmful to the environment.

Is there a different way to do things?  
Yes! A CIRCULAR ECONOMY is the solution!

In a circular economy the goal is to produce zero waste. The Circular Economy conserves natural resources, saves energy, prevents pollution, and reduces the need for landfills! But how...?

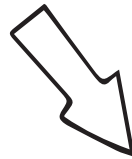


# How does a Linear Economy work?



## Resource Extraction

Natural resources such as wood, metals, minerals, and fossil fuels like oil and gas are extracted or collected from the environment. These processes cause environmental deterioration, pollution, and contribute to climate change. Many natural resources are not renewable, think fossil fuels or metals, meaning they cannot be replaced once they have been used. If we continue to extract these types of materials the way we are currently, we will run out.



## Manufacture Product

The process of manufacturing products uses energy and creates pollution. Different products create different kinds of pollutants which contribute to climate change. This means the more products that we make, the more pollution we produce.



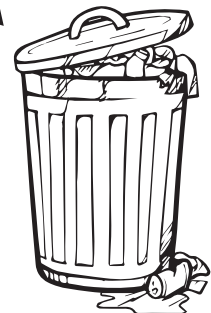
## Use Product

Many products that we use regularly aren't actually used for very long. For example, plastic bags are, on average, only used, for about 12 minutes before being thrown away, yet they take about 1000 years to break down!



## Dispose of Product

When we are finished with a product we often throw it in the garbage even if it could still be used, repaired, or even recycled. Most garbage is taken to landfills where it is buried in the ground and produces harmful green house gases, like methane which contributes to climate change, and toxic liquids called leachate that can pollute the soil and waterways.



# How does a Circular Economy work?

In a circular economy waste is reduced, or even eliminated! Products are made to last for a long time, able to be repaired, and designed to be taken apart at the end of their life so that their parts can be reused or transformed into something new.

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## Material Input

Rather than extracting new natural resources from the environment, materials are taken from products that have reached the end of their life. This process conserves resources, protects the environment, and reduces waste.

## Design/Make

Products are made to last for a long time, able to be repaired, and designed to be taken apart at the end of their life so that their parts can be reused or transformed into something new.

## Reclaim Material

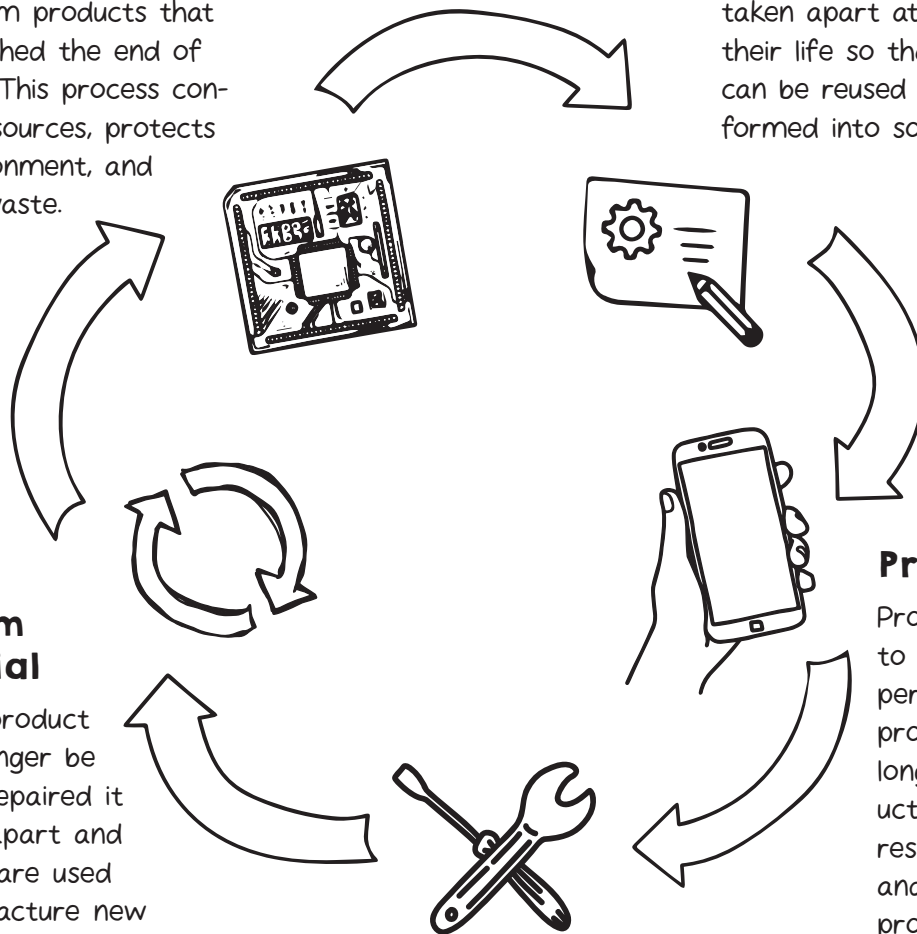
When a product can no longer be used or repaired it is taken apart and its parts are used to manufacture new products, eliminating the need to extract natural resources from the environment.

## Product Use

Products are designed to be used for a longer period of time. When products can be used longer fewer new products are made, fewer resources are extracted, and less waste is produced.

## Repair Product

Products are designed to be repaired rather than replaced. Using products for as long as possible means fewer products are made and then thrown away, reducing damage to the environment, pollution, and waste.



# Linear or circular? Let's think about it...

Think of a product you use at home. Use the following charts to find out if the product is part of the Linear Economy or the Circular Economy. You can use the empty boxes to draw or the lines to write in your answers or you can use both. Try starting with something simple like a piece of paper or a pencil and then try a more complex product with many parts like a smartphone. You may find that you have some questions as you work through the activity so don't hesitate to ask for help from a teacher or a caregiver!

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**Product:** \_\_\_\_\_

**Resource  
Extraction**

What resources are needed to make your product?

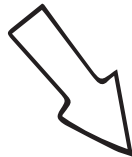
\_\_\_\_\_  
\_\_\_\_\_



**Manufacture  
Product**

How is it made?

\_\_\_\_\_  
\_\_\_\_\_



How long do you use it for?

\_\_\_\_\_  
\_\_\_\_\_

**Use Product**

What happens to it when you are finished with it?

\_\_\_\_\_  
\_\_\_\_\_

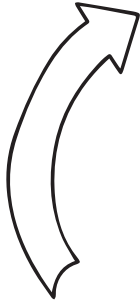


**Dispose of  
Product**



## Material Input

What resources are needed to make this product?  
Where do those resources come from?



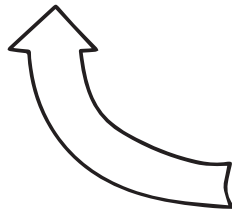
## Design/Make

How is this product made?  
Could less material or an environmentally friendly material be used to make this product?



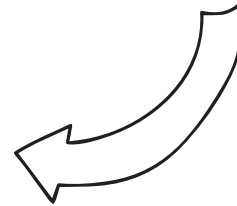
## Reclaim Material

Can this product be taken apart and its parts used to make new products?



## Product Use

How long will you use this product for? Is this product something you want or need? Could you borrow or rent this product instead of purchasing it?



## Repair Product

Can this product be repaired or reused?  
Can you fix it yourself or does it have to go to a specialist to repair?



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## How to avoid Linear Economy products

1. Is your chosen product part of the Linear economy or the Circular economy?
2. If its a linear product could you replace it with a less wasteful product?
3. Could something be done to make it part of the Circular Economy?

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# How can we conserve resources and produce less waste?

## What is the Zero Waste Pyramid?

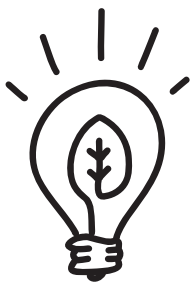
The zero waste pyramid adds on the 3Rs - Reduce, Reuse, Recycle - to prevent waste and show the best use of resources. The landfill is the last resort! We use this pyramid in order to:

- \* Minimize the need for raw resource extraction.
- \* Keep materials that have already been produced within the loop, diverting waste from the landfill.
- \* Limit impacts on the environment.



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## Here are some steps we can take to make a difference



### Re-think/Redesign

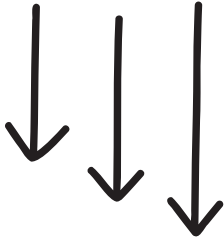
Reducing waste starts with the products that we buy. What if we considered all aspects of a product's life from the resources used to make it, its life span, and what happens once it has reached the end of its life?



### Reduce/Refuse

You can make less waste by asking yourself a few questions before you buy something new. Do I need or want this? Can this be repaired or recycled? What happens to it when I'm done with it? Avoid accepting or using single-use products like plastic shopping bags, plastic cutlery, to-go cups, etc.





## Reuse

Many items that we throw away or even recycle could be reused or repurposed. Use your imagination! An empty jam jar could hold your pencils; you can make crafts out of used paper products.

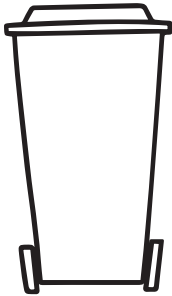
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## Repair

When something you own breaks or is damaged, try to have it repaired instead of throwing it away. You could take it to someone to fix it or you may even be able to learn a new skill and fix it yourself!

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## Recycle

Place used paper and plastic packaging into your blue cart so it can be made into something new! Be sure to only put accepted items in your blue cart.

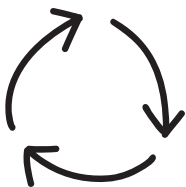
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## Compost

Organic materials like food scraps, soiled paper and coffee can be composted in a backyard compost or added to your green cart. Not all organics can be composted so make sure you know what goes where before by using the Nanaimo Recycles app or the City of Nanaimo website.

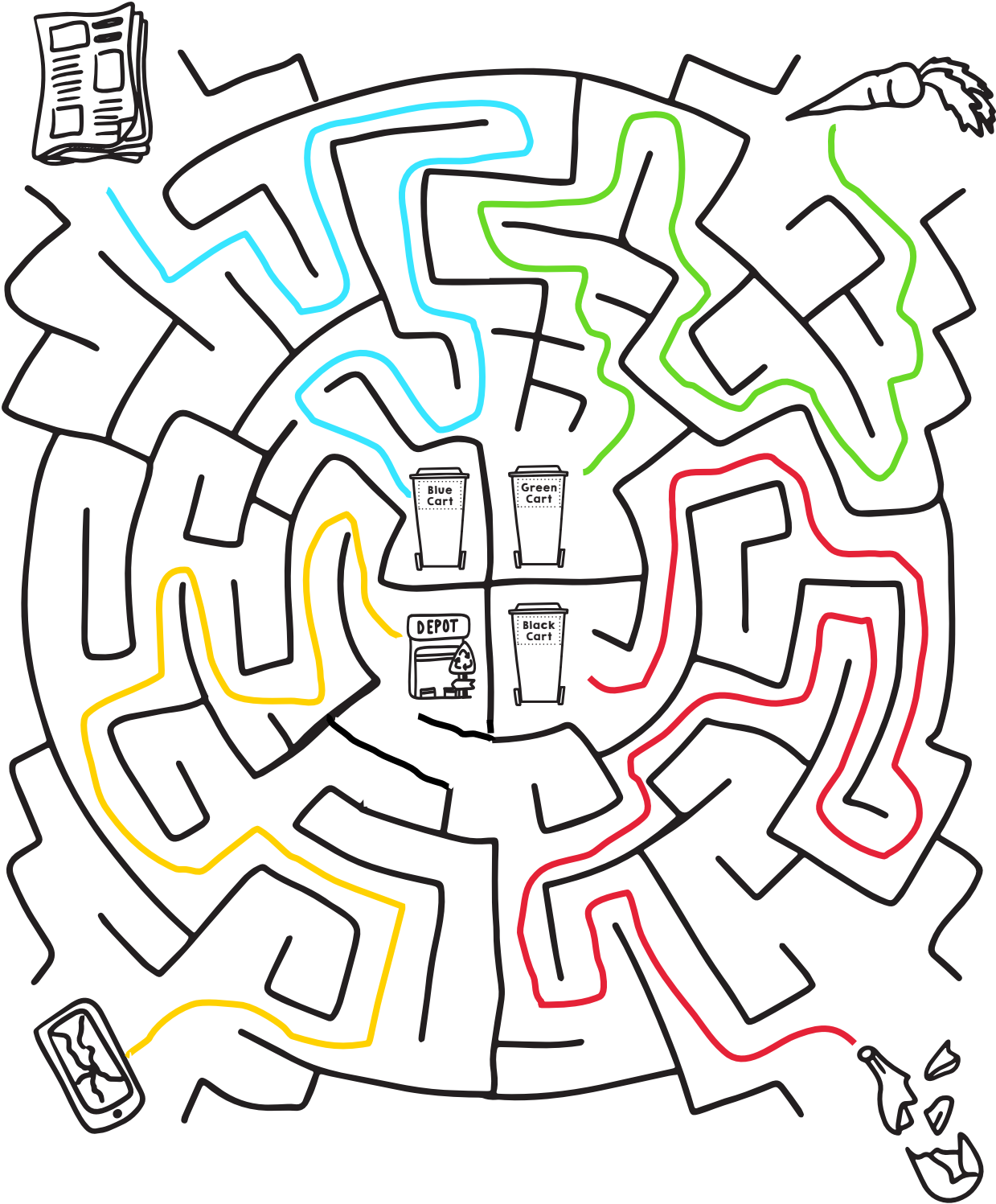
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## Donate

You can regift, lend, trade, or donate used items to keep them out of the landfill and reduce the need for new products to be made!

# Help Ruben Recycle Right!

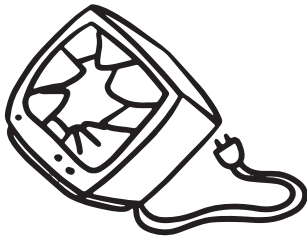


\* Scan QR code on inside front cover for solution

# Contaminants and Recyclables!

Recycling prevents the need for new material when making packaging or products. Recycling conserves natural resources, saves energy, prevents pollution, and reduces the need for landfills. Too many things find their way into the blue bin that don't belong.

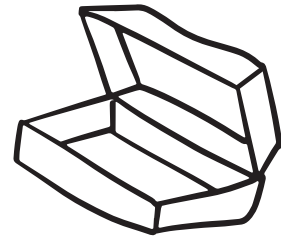
**Colour and cut out items below, then sort them into the proper bins on the next page.**



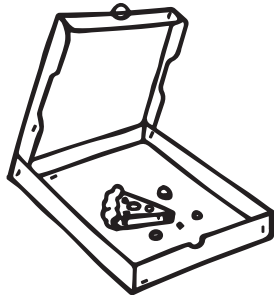
Electronics



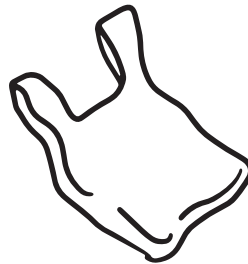
Face Tissue



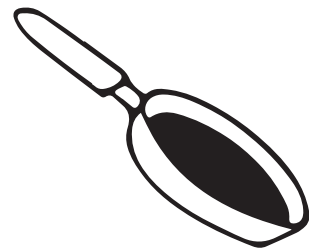
Styrofoam



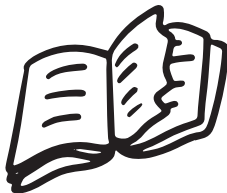
Dirty Pizza Box



Plastic Bags



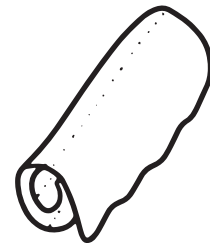
Scrap Metal



Books



Tea Bags



Paper Towel



## Check Out the app!

Once you complete this activity test your knowledge by playing the 'What Goes Where' game in the Nanaimo Recycles app!



Broken Glass



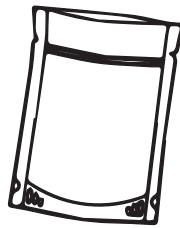
Clean Cardboard



Food Scraps



To-Go Cups & Lids



Stand up Plastic Pouch



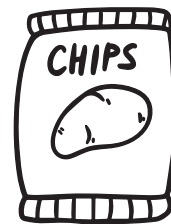
Metal Cans



Clean Glass



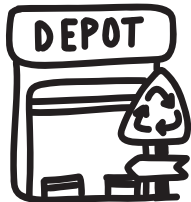
Candy Wrappers



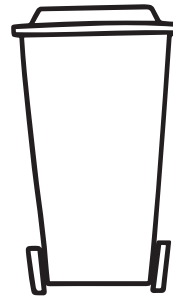
Chip Bags

# Sort Your Waste!

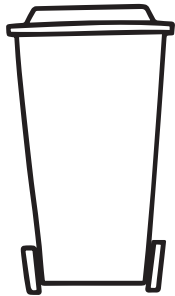
Use the Nanaimo Recycles app or the Waste Wizard on the City of Nanaimo website to check and see if you sorted the items correctly.



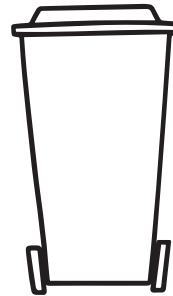
**Depot**  
(Non-Curbside Recycling)



**Green Cart**  
(Organic Items)



**Black Cart**  
(Garbage)



**Blue Cart**  
(Recyclable Items)







# Activity Bingo

Regift an item	Download Nanaimo Recycles (NR) app	Sort your waste into the correct bins	Ask the Circular Economy questions before buying a new product	Create a craft or art project from used or disposable items
Take soft plastics to a recycling depot	Use a reusable shopping bag	Repair an item rather than throwing it away	Take out your recycling	Compost your food scraps
Rinse used food containers before recycling	Gift an experience	FREE SPACE	Donate gently used clothes or toys	For your next grocery shop buy nothing wrapped in plastic
Replace a disposable item in your household with a reusable one	Borrow a book from the library	Share a tip to reduce waste with a friend	Pack a zero waste lunch	Learn how to store food properly so it lasts longer
Borrow before buying a new product	Take glass to a recycling depot	Play the sorting game on the NR app	Learn a new skill to reduce waste like sewing or preserving food	Shop at a a small business or farmers' market



## Practice reducing waste and recycling right!

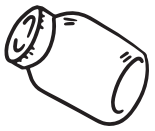
Complete the bingo card to practice your recycling skills. Ask a parent or caregiver to share the activities you complete and tag us on social media @cityofnanaimo and you could be featured on our page!

#nanaimorecycles

# Nanaimo Recycling Guide



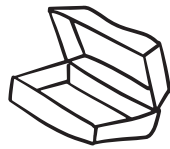
## Not Accepted



Glass



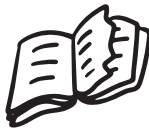
Bagged Recycling



Foam Packaging



Scrap Metal



Books



Electronics



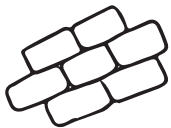
Dirty Containers



Clothing



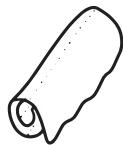
Facial Tissue



Construction Materials



Food Waste



Paper Towel



## Accepted Materials



Plastic Containers



Clean To-Go Containers



Paper Egg Cartons



Newspaper & Magazines



Empty Aerosol Containers



Cardboard



Beverage Containers



Metal Cans



Clean Foil

## Remember!

- \* Empty & rinse containers
- \* Don't bag or nest recyclables
- \* Flatten cardboard
- \* Space carts one meter apart on all sides
- \* Bins on the curb by 8am on pick-up day

