



# Lesson Plan: Reuse, Grade 8 Geography

## Activity

Settlement patterns and sustainability.

## Introduction

Durham Region is a fast-growing community made up of eight area municipalities, Ajax, Brock, Clarington, Oshawa, Pickering, Scugog, Uxbridge and Whitby. Located east of Toronto, in the Golden Horseshoe area of Ontario, it is a mix of rural, residential, and commercial land. North Durham is mostly rural, with a thriving agriculture sector, and is home to part of the Oak Ridges Moraine. To the south, lakeshore communities offer urban development and a diverse employment base. Rapid growth is an important factor that influences municipal solid waste management within the region. In this lesson, students will explore urban sprawl and sustainability as it pertains to waste management within Durham, with a focus on the third “R” - Reuse.

## Curriculum Connections

Geography, 2018 (revised)

### Grade 8

- Strand A: Global Settlement: patterns and Sustainability

## Learning Objectives

1. Describe where Reuse falls on the Region Waste Management Hierarchy
2. Explore settlement patterns in your community
3. Identify characteristics of sustainable communities
4. Design a poster connecting to Reuse

## Resources Provided (located in the resource folder)

### Infographic:

- Region Waste Management Hierarchy

### Video:

- Durham’s Integrated Waste Management Systems

## Activity Instructions

### Prior to Activity

1. Today, more people live in urban areas than rural areas globally. This trend has been influenced by several push and pull factors. As a class discuss possible pull factors that support migration to Durham Region.

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A **push factor** is something that pushes people away from their communities such as unemployment or political unrest. A **pull factor** is something that attracts someone to a new area. This can include a greater abundance of resources, job opportunities or entertainment services.

2. Introduce the class to urban sprawl.

**Urban sprawl** is the rapid development of land. Urban sprawl is used to accommodate growing populations settling in and around metropolitan cities. Many regions around the City of Toronto, including Durham Region, have experienced urban sprawl.

3. As a class, generate a list of potential social, environmental, and economic impacts that may occur due to urban sprawl within their community.
4. Ask students to identify and describe some practices that have been adopted to help make waste management more sustainable within their community. This may include curbside programs, individual efforts, non-profit organizations, etc.

As the population in Durham continues to grow, waste generated within the community will also increase. We generate all kinds of residential waste (household waste) in our homes including food scraps, recyclables, and garbage. The Region has developed an Integrated Waste Management System (IWMS) to manage this residential waste. An IWMS is a strategic approach to managing waste by combining waste handling and waste reduction strategies that include rethink, reduce, reuse, recycle (including compost) and recover. This aims to reduce or eliminate waste at the source and divert as much waste as possible away from the garbage.

5. As a class, watch the Durham's Integrated Waste Management System video.
6. Ask students to share examples with the class of a time they have disposed of an item that was still in working condition or when they have purchased an item that was only meant to be used once.
7. Explain that **donating, sharing, repurposing, upcycling, and refurbishing** are all ways to get more use out of an item, which is known as **Reuse**. Keeping reuse in mind when purchasing items can have a significant impact on the amount of waste we produce.

### Day of Activity

1. Split the class into five groups.
2. Assign each group a location in the community. For instance, a school, library, bathroom, office, coffee shop, etc. Students will have four minutes to come up with common items found in their assigned location and come up with as many ways a possible to Reuse these items. Encourage students to be creative and to think beyond conventional ways to reuse an item.
3. Rotate groups through each location. Once each group has brainstormed Reuse ideas for all five locations, share the ideas with the class.

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4. Upon completion of the activity, have each student design a poster describing Reuse. On the poster choose any item and offer at least three different ways it can be repurposed or upcycled.

## Summary

Considering the possibility of reuse at all stages of consumption is important. Before purchasing an item, consider if you already have something else that you can reuse or repurpose to suit your need. If you don't, select a durable item that will last you a long time. When the item no longer serves its intended purpose, consider repurposing or upcycling it, or, handing it off to a friend. Each of us play an important role in keeping our communities and the environment clean. Consuming consciously is the first step to managing out household waste.

## Expanded Curriculum Connections

Grade 8, Geography, 2018 (revised)

### A. Global Settlement: Patterns and Sustainability

- A1. Application: Interrelationships between Settlement and the Environment
- A1.3 describe possible features of a sustainable community in the future and analyze some challenges associated with creating such a community

### A2. Inquiry: Human Settlements and Sustainability

- A2.5 evaluate evidence and draw conclusions about issues related to the interrelationship between human settlement and sustainability
- A2.6 communicate the results of their inquiries using appropriate vocabulary (e.g., settlement patterns, population distribution, population density, land use, sustainable development, land reclamation, migration) and formats appropriate for specific audiences

### A3. Understanding Geographic Context: Settlement Patterns and Trends

- A3.4 identify and describe significant current trends in human settlement
- A3.5 describe various ways in which human settlement has affected the environment
- A3.6 describe some practices that individuals and communities have adopted to help make human settlements more sustainable

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