

Lesson Plan: Recycle, Grades 1 Science and Technology, and Social Studies

Activity

Sort It Out – Recyclable materials and the Blue Box program.

Introduction

Look around your home and classroom, it is filled with a lot of different items! Who is responsible for these items and how are they managed when we no longer need or want them? In this lesson, students will explore what items can be recycled through the Blue Box program and identify who is responsible for managing these items. Students will make connections between their actions, waste management and the environment, and create their own waste action plan.

Curriculum Connections

Science and Technology, 2022 (revised) and Social Studies, 2018 (revised)

Grade 1

Science and Technology, 2022 (revised)

- Strand B: Life Systems
- Strand D: Structures and Mechanisms

Social Studies, 2018 (revised)

- Strand A: Heritage and Identity: Our Changing Roles and Responsibilities
- Strand B: People and Environments: The Local Community

Learning Objectives

- 1. Explain waste diversion and recycling
- 2. Identify the blue box and acceptable blue box materials
- 3. Identify waste services and service-related occupations in their community
- 4. Identify some of the services provided by the Region of Durham
- 5. Complete blue box sorting worksheets
- 6. Create a plan that outlines three specific ways in which they can reduce their waste

Resources Provided

- Worksheet 1: Sort It Out: Circle the items that do not belong in the blue box
- Worksheet 2: Sort It Out: Cut out the items at bottom of the page and paste them into the correct blue box
- Worksheet 3: Sort It Out: Design the side of the recycling truck showing items that can be recycled in the blue box

The Regional Municipality of Durham - Waste Management Services

Activity Instructions

1. Introduce the class to the Region of Durham.

The **Region of Durham** includes eight area municipalities: Ajax, Brock, Clarington, Oshawa, Pickering, Scugog, Uxbridge, and Whitby. If you live in any of these communities, you live in the Region of Durham! Durham Region staff are responsible for many services in our community such as providing clean drinking water, police and ambulance services, public transit, and waste management.

2. Explain what waste management means to the class.

Waste Management means taking care of our waste which includes the garbage, recyclable, and compostable materials that we create at home. Our waste doesn't just disappear once it leaves our homes. There are a lot of people working to make sure that our waste is managed responsibly to keep our community and the environment clean and safe. After all, no one likes litter in their community.

- 3. Have students look around them and consider how many different items there are in their classrooms and in their homes. Where do all these items come from? Point out a paper item, a metal item, and a plastic item. Can they point out other items around the class made of the same materials?
- 4. Explain that all the items we see around us started from materials we get from the earth like forests, rocks, plants, and animals. We need to use these materials responsibly to make sure we are taking care of the earth and we don't use up all these materials.
- 5. What do we do with items that we no longer need or want? Think about the items that are no longer in good condition and items that would not typically be wanted by someone else once we are finished with them. Provide examples like banana peels, straws, plastic spoons, yogurt containers, and candy wrappers.
- 6. As a class, brainstorm what will happen if we keep throwing items away. What would happen if these items made it into streams, lakes, forests, and parks?
- 7. As a class, discuss waste diversion.

Waste diversion means keeping as many items as possible out of the garbage bag. The garbage should only be used when there are no better options.

8. Ask students to provide examples of what we can do to keep items out of the garbage. Have them think about items like clothes they have outgrown, toys they no longer play with, plastic drink bottles, and food scraps like banana peels and apple cores.

Examples include donating, sharing, handing items down to a family member or friend, finding a new way to reuse an item, recycling, and composting.

9. Introduce recycling to the class.

One way of keeping items out of the garbage is by recycling. **Recycling** is collecting items that would otherwise be garbage and turning them into new items. Recycling reduces the amount of materials we need to take from the earth to make new items.

In Durham Region, we separate our recyclable materials into two blue boxes, put the boxes out for collection, and then trucks come to collect that material and bring it to a building where it is sorted even more. Once it is sorted, it is sold to be made into new items!

- 10. Point out the recycling bins in your classroom. While these boxes can sometimes be a different colour from the ones at home, we sort our materials the same way.
- 11. Explain why we have two bins one for paper and cardboard, and one for containers. It is important to note that all containers should be empty before placing them into the bin for recycling. Paper products that have food or liquid on them (including muffin wrappers, greasy pizza boxes, paper towel, and tissues) should not be placed in the papers bin. Dirty paper can be composted!
- 12. Provide the class with examples of materials that go into the papers bin and the containers bin.

Examples of acceptable paper and cardboard items include:

- Boxboard like cereal, cracker, and granola bar boxes
- Cardboard like toilet paper rolls and paper towel rolls
- Construction paper
- White and lined paper
- Paper scraps
- Crumpled or ripped paper
- Newspaper
- o Envelopes

Examples of acceptable container items include:

- o Glass bottles and jars
- Juice boxes (without straws)
- Plastic bottles
- Plastic fruit and vegetable containers
- o Plastic takeout food containers
- Aluminum drink cans like pop cans
- Plastic bakery and cookie trays
- Single-use yogurt and pudding cups
- Steel food cans like soup cans

Examples of common unacceptable items include:

- Plastic straws
- Plastic utensils like plastic spoons and forks
- Plastic bags like grocery or milk bags
- Single-use coffee cups
- Candy wrappers

The Regional Municipality of Durham - Waste Management Services

- 13. As a class, plan three actions that you will take to reduce the amount of garbage you create within the classroom or at home. This provides a great opportunity to come back to these actions throughout the school year and remind students to reduce the amount of garbage by sorting their waste correctly.
- 14. Have students complete the provided Sort It Out worksheets (Worksheet 1 and 2) and provide the correct answers at the end of the class.

Extension Activity

1. Design the side of the recycling truck showing items that can be recycled in the blue box using Worksheet 3.

Summary

It is up to all of us to manage our waste responsibly to protect the environment and our community. While the easiest, cheapest, and safest way to manage waste is by not creating it in the first place, recycling can help take care of what is left. Recycling reduces the amount of new natural resources required to make new materials and helps divert waste away from the garbage. By sorting our waste properly, we can help make sure the items get to the right place to be made into something new!

Expanded Curriculum Connections

Grade 1, Science and Technology, 2022 (revised)

- B. Heritage and Identity: Our Changing Roles and Responsibilities
- B2. Exploring and Understanding Concepts
 - B1.2 identify actions that can be taken to contribute to a healthy environment
- D. Structures and Mechanisms
- D1. Relating Science and Technology to Our Changing World
 - D1.1 identify the kinds of waste materials produced by humans, and plan and carry out a course of action for minimizing waste in the classroom or at home, explaining why each action is important
 - D1.2 assess everyday objects, including structures, that have similar purposes, in terms of the
 materials they are made from, the source of these materials, and what happens to these
 objects when they are worn out or no longer needed

Grade 1, Social Studies

A. Heritage and Identity: Our Changing Roles and Responsibilities

A3. Understanding Context: Roles, Relationships, and Respect

- A3.4 identify some elements of respectful behaviour that they can practice in their everyday life
- A3.5 demonstrate an understanding that it is important to treat other people and the environment with respect

The Regional Municipality of Durham - Waste Management Services

B. People and Environments: The Local Community

B1. Application: Interrelationships within the Community

- B1.1 describe some of the ways in which people make use of natural and built features of, and human services in, the local community to meet their needs, and what might happen if these features/services did not exist
- B1.2 identify some services and service-related occupations in their community
- B1.3 create a plan that outlines some specific ways in which they can responsibly interact with the built and/or natural environment in the local community

B2. Inquiry: Interrelationships and Their Impact

- B2.1 formulate questions to guide investigations into some aspects of the interrelationship between people and the natural and built features of their community, with a focus on some of the short- and long-term effects of this interrelationship
- B2.2 gather and organize information on the interrelationship between people and the natural and built features of their community, and on the effects of this interrelationship, using sources that they have located themselves or that have been provided to them

B3. Understanding Context: The Elements of the Local Community

• B3.7 identify some of the services in the community for which the government is responsible