

The Necessity of Waste Reduction and Recycling to Reduce Dependence on Landfills and to Maintain Environmental Quality

In accordance with the mandate from [20 ILCS 1105/3](#), the Illinois Environmental Protection Agency created this educational package for third-fifth grades. The package includes lesson plans, activities, worksheets, and resources.

Key Concepts

1. What is Consumption?

Define consumption in simple terms (using things like food, toys, and products).

Discuss how we use resources when we consume (trees for paper, energy for toys).

2. Understanding Waste:

Explore different types of waste (organic, recyclable, and non-recyclable).

Introduce the idea of the waste stream (what happens to trash after it's thrown away).

3. What is a Landfill?

Define a landfill as a place where trash that can't be reused or recycled goes.

Show a basic flow of waste: home → trash bin → landfill.

Lesson Plan

Lesson 1: Introduction to Waste and Landfills

- **Grade Level:** 3-5
- **Duration:** 60 minutes
- **Materials Needed:**
 - Whiteboard and markers
 - Video on landfill impact (age-appropriate) or virtual tour to local landfill or recycling center.
 - Coloring book: *The Petals of Flower Hill*
<https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/education/documents/petalsflowerhill.pdf>

Activities:

- Discussion: What is waste? Where does it go?
- Video viewing: Discuss key takeaways.
- Group activity: Build a mini-landfill in the classroom using a clear box with layers (representing dirt, trash, and more dirt). This can help students visualize what happens to

trash. Students can bring in an item they no longer need and discuss where it goes (recycling, landfill, or reuse).

Lesson 2: What is Recycling?

- **Grade Level:** 3-5
- **Duration:** 60 minutes
- **Materials Needed:**
 - Recycling Guide: <https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/waste-management/documents/recyclingguidelineshr-illinois.pdf>
 - Video: <https://multimedia.illinois.gov/epa/EPA-Recycling-Mar-2022.html>
 - Examples of recyclable materials (plastic bottles, paper, etc.)

Activities:

- Presentation on recycling and its benefits.
- Hands-on activity: Sorting game with recyclable vs. non-recyclable materials.
- Class discussion: How can we recycle more effectively?

Lesson 3: Waste Reduction Strategies

- **Grade Level:** 4-5
- **Duration:** 60 minutes
- **Materials Needed:**
 - Waste Reduction Guide: <https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/waste-management/documents/reduce.pdf>
 - Craft supplies for reuse projects

Activities:

- Discussion on the 3 Rs: Reduce, Reuse, Recycle.
- Group project: Create something new from old materials (craft or practical item; turning a plastic bottle into a planter).
- Reflection: Write a short paragraph on how they can reduce waste at home.

Worksheets and Handouts

This document will be updated as worksheets become available.

Worksheet 1: Recycling Symbols

- Draw a line from the recycling symbol to the materials that can be placed in the recycling bin.
- Identify items in their home can be recycled.

Worksheet 2: Waste Reduction Checklist

- Create a personal checklist of waste reduction practices they can implement at home (e.g., using a reusable water bottle).

Handout: Landfill Facts

- Fun facts about landfills and their environmental impact (e.g., decomposition times for different materials).

Websites:

- **U.S. EPA Recycling Basics:** <https://www.epa.gov/recycle>
- **U.S. EPA Landfills:** <https://www.epa.gov/landfills>
- **National Geographic Kids - Reduce, Reuse, Recycle:** NatGeoKids.com