

## Trash or Treasure?

**Summary:** Students will define garbage, take an inventory of garbage produced by their household in one week's time and identify ways to reduce the volume of their garbage production. They will create a "treasure" from an item destined for the dump.

**Grade Level:** 9-12 (Level 3 Spanish class)

**Goal:** The student will recognize their garbage production and will identify ways to reduce production of garbage and ways to reuse items that were destined for the dump.

**Key Concepts:** Definition and types of garbage  
Reduce, Reuse and Recycle

**Objectives:** Upon completion of this lesson, students will:

1. Be aware of their family's level of garbage production
2. Identify ways to reduce the amount of items used that are destined to become garbage
3. Determine ways to reuse "garbage items" and make something useful or beautiful.
4. Identify items that are recyclable and have a plan to recycle all possible items.

**Teaching Location:** The majority of the lesson will take place in the classroom with an extension activity taking place in the student's home during a one week time period.

**Lesson Time:** The lesson will take place over the course of a week and a half.

**Components:** Define waste and types of waste. (part of one class period)  
Garbage Inventory: introduced in class on the first day of lesson and Completed for one week in the home of the student.  
Analyze garbage production  
Determine ways to reduce production (small group discussion)  
Determine ways to reuse items- complete a Reuse project  
Identify recyclable items and plan for compliance

**Subject Areas for Infusion:**

Environmental Education  
Spanish class

**Standards:**

Environmental Education  
B.8.20  
C.8.2  
D.12.2

Foreign Language

Transitioning(Reflective-Interactive)

A.1. Conversations: Students will discuss and defend an opinion on selected topics from the local to the international level.

A.2. Questions: Students will ask and answer a variety of questions that require follow-up questions and responses for more information.

F.1. Speaking and writing: students will use topics and skills from other school subjects to discuss and/or write I the language studied.

### **Background information:**

Garbage is everything that we see as no longer having a use and that we throw into the trash can. The garbage that we generate daily consists mainly of:

Cardboard and paper

Cans

Glass bottles

Plastic containers

Raw and cooked food waste

Garden waste

Construction debris

Chemical waste from industry and laboratories

The waste that we generate can be classified into two categories:

Non-toxic solid waste

Toxic chemical waste

In our society the sectors that generate waste/garbage are communities, families, government and industry.

### **Materials:**

\*tally sheet for garbage inventory

\*art supplies if needed for Reuse Project

The entire lesson will be conducted in the target language. (Spanish)

**Lesson 1-** Discuss the definition of waste/trash and the types of waste. Discuss why waste is an environmental issue in our area and the issues it poses on the island of Puerto Rico. Where does it go and how do we deal with it? Distribute the home garbage tally sheet and describe assignment. Include instructions for the parents and family members to encourage full family participation.

**Lesson 2** (one week later)-Students will discuss the results of their tally inventory. Discuss ways to reduce items destined for the dump.(reduced packing, buying in bulk etc.). Discuss items that could be reused as they exist or repurposed through a creative process. Students need to find an item destined for the garbage to reuse and bring it in to class the next day. (I have a few books with ideas they can use.)

**Lesson 3:** Students will use a class period to work on projects. They will present their treasure at end of the class period.

**Lesson 4:** Students will discuss ways to recycle and will discuss the recycling practices in their area and look for ways to improve.

**Assessment:** Students will write a summary of their garbage habits and ways to change to help lessen the impact on the environment. Their Reuse projects will also be displayed along with their summaries in a showcase.

This lesson is part a much larger unit and part of the assessment is included in the overall assessment at the end. The student should be able to list ways to reduce impact of garbage on the environment.

**References/Resources:**

Nada Se Tira...Todo Se Recicla Liliana Medeiros and Silvia Gamero, Editorial LUMEN 1997  
Como Ser Experto en Reciclaje Sue Duckworth, Editorial LUMEN 1996  
Integración de la Educación Ambiental K- 6to Guía Curricular para los Maestros de Puerto Rico, 2003