

# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

## **Recycling: From Bin to Product**

**SUBJECT AREA:** Science - Earth Science, Environmental Science.

**GRADE LEVEL:** Third through fifth.

**DURATION:** 45 minutes; staff will need 15 minutes to set up the demonstration.

AUDIENCE SIZE: 25 to 30 students at one time.

**OVERVIEW:** How much trash do we produce? How much of it could be recycled? In this program, students will first learn about waste and how some products can be recycled and made into other products. After learning about recycling, students will participate in a challenge to sort products that can be recycled and those that cannot. From there, students will be tasked with a challenge to guess the amount of classroom trash they produce in a week and test their guesses. As students predict, measure, record, count and compare, they will begin to recognize the extent of waste they and their classmates produce. They will also be equipped with knowledge on how to reduce or recycle items they had originally measured as waste.

#### **OBJECTIVES:**

The student will:

- Understand that measurement is an important part of describing and comparing data.
- Become aware of the amounts of waste they produce within their classrooms.
- Identify methods to minimize waste produced in their daily lives.
- Determine which items are considered recyclable and which items are not.
- Recognize that certain products can be manufactured into other products.



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#### **SUNSHINE STATE STANDARDS:**

**SC.3.N.1.3** – Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.

**SC.3.N.1.7** – Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.

SC.3.P.8.2 - Measure and compare the mass and volume of solids and liquids.

SC.3.P.8.3 - Compare materials and objects according to properties.

**SC.3.N.3.2** - Recognize that scientists use models to help understand and explain how things work.

MA.K12.MTR.4.1 – Engage in discussions that reflect on the mathematical thinking of self and others.

MA.K12.MTR.7.1 - Apply mathematics to real-world contexts.

**ELA.K12.EE.1.1** – Cite evidence and justify reasoning.