



## **ACTIVITY 4.A**

### ***Waste accounting***

(Adapted from *Too Good to Throw Away!* from the Tucson Recycles program)

## *for* **Module 4:** **Let's Get to Work: Water, Energy, and Waste**

**General description:** Using arithmetic calculations, the students will assess the amount of waste generated by their school and make an approximation to determine the amount of waste in the entire city using the data culled from the schools' operations.

**Materials:**

Worksheets for the activity (one per group)

Plastic bags or boxes to accumulate wastes that the classroom generates in one day

Pencils

Balance (optional)

**Duration:**

Preparation of materials (5 min)

Activity: (60 to 90 min)

**Location:** The classroom is recommended.

**Pedagogical method:** Mathematics.

**Instructions:**

Teams of 6 students are formed. At the beginning of the day, students are instructed to compile all the trash they generate both at home and inside the classroom and put it into bags, separated in the following categories: cardboard and paper, glass, plastic bottles, cans, organic wastes (food), disposable plates and cups (dry ice or Styrofoam), etc...

Ninety minutes before the end of the day, the teams are asked to take the trash from the cans and boxes and separate them into categories (in case it hasn't already been separated). Each team is assigned one category, like cardboard and paper, and the team tallies up the amount of waste in that category. A representative from each team writes down the amount on the chalkboard so that the whole class is informed about the quantity of waste per category and so each student can fill out the activity worksheet.



The teacher initiates a group discussion by asking the following questions:

**Do you think that our classroom produces a lot of waste, or just a little?**

Now invite them to participate in the reflection about what we can do to reduce the amount of trash that our school and the other schools in our city produce.

Write ideas that come to mind up on the board.

When you make a list of ideas, direct the class to a consensus about the measures that they can put into action for making a difference. Have them identify priorities.

**Can you imagine how much waste is generated at school every day?**

Have the students complete the activity's worksheet for homework, using the waste accounting from the classroom to do a calculation of the wastes produced in the school. Find out for them how many primary groups there are in the school, and the average number of students per group.

### **Reflection**

What measures can be implemented today to reduce the amount of waste in the school?

Ask the students to talk about this activity with their friends and family members.