Chapter 2 Recycle, Reduce, Reuse

Community Project – Recycle, Reduce, and Reuse

Lab # 2 Answers

Note to Teacher: Answers appear in italics.

Questions & Conclusions

1.) The Independent Variable in this project is:

The length of time of the community project. If you start in late August and finish in late April, it should be eight months.

2.) The Dependent Variables are:

The quantities of the various materials that you recycled. You should have a recorded amount of recycled material every month in grams or pounds.

Aluminum Cans
Plastics Bottles
Cardboard
White Paper
Newspaper

3.) What is the Control Variable?

The control variable is the starting amount.

4.) How does recycling impact your school, your community, and the Earth in general? Be specific.

The answers here will vary. They should have a global perspective.

5.) What is the relationship of the number of aluminum cans collected to the number of students in your school? How is this impacting your school and your community?

The answers here will vary again. What should be a common answer is that the greater the student participation, the greater the quantity of materials recycled. What would be ideal is for the student to come up with a ratio per student. Let’s say you collected a total of 10,000 aluminum cans in the eight month period and you have 1,000 students at your high school. You recycled 10 cans per student per year. The impact that you are having is reducing the school’s overall waste per year. That should lead to a decline of the monthly bill the school pays to the city for collecting trash. Materials are being recycled. That leaves a positive impact on the Earth.

6.) What is the relationship of the number of plastic bottles collected to the number of students in your school? What is this saying about our human daily activities? Be
specific.

The answers here will vary again. What should be a common answer is that the greater the student participation, the greater the quantity of materials recycled. What would be ideal is for the student to come up with a ratio per student. Let's say you collected a total of 20,000 plastic bottles in the eight month period and you have 1,000 students at your high school. You recycled 20 plastic bottles per student per year.

The impact that you are having is reducing the school's overall waste per year. That should lead to a decline of the monthly bill the school pays to the city for collecting trash. Materials are being recycled. That leaves a positive impact on the Earth.

7.) Post your final results of your project here. Did they meet your expected results? How are they different than your hypothetical expectations?

The answers will vary. You should expect for your students to be very precise and accurate with their records.