

“WATCHYA GONNA DO WITH ALL THAT JUNK?”

- I. Problem
- II. Materials & Procedure
- III. Data
 - A. Itemize Solid Waste:

Category	# Items	Mass in lbs	% Able to Be Recycled
Paper			
Plastic			
Metal			
Glass			
Other			

- IV. Data Analysis
 - A. Calculations
 1. Solid Waste # items for 7 days per category
 2. Solid Waste # items for 1 year per category
 3. Solid Waste mass for 7 days per category
 4. Solid Waste mass for 1 year per category
 5. By mass, what % comes from paper? Metal? Plastic? Other?
 6. By mass, what % can be recycled?
 - B. Graph
 1. #4, #6
 2. Interpret graphs
- V. Conclusion
 - A. Based on a quick glance of the class' trash, which types of waste are more prevalent?
 - B. Were there any differences between your data and the class'? Explain.
 - C. How would your parents' data differ from yours? Explain.
 - D. Did your consumption change knowing you were doing this assignment? If everyone had to do this, would this change their consuming habits? Explain.
 - E. What is depletion time and how does it relate to this lab?
 - F. Describe 3 products that have excessive material use. Include which products, how the packaging/material is excessive, and alternates to reducing the level of packaging.
 - G. You purchase each of the following from the local grocery store. For each of the following, describe the amount of resources involved:
 1. a plastic 1.0 liter bottle of soda
 2. a glass jar (for jelly or babyfood)
 3. a ream of paper
 - H. How much of a difference does this class make?
 1. 3.2 megajoules is required to create a 1 liter bottle, lid, and packaging. 1 liter bottle weighs 0.11lbs. 1 barrel contains 6000 megajoules. How many barrels are needed for our class' plastic consumption? Assume the total amount of plastic could be translated into plastic bottles.
 2. 1 ton of plastic manufacturing = 3 tons of carbon dioxide emissions. How much carbon dioxide was created for our class' plastic consumption?
 3. For every liter of plastic bottles, it requires 3 liters of water to manufacture the bottle/lid/packaging. How much water was used for our class' plastic consumption?
 4. In terms of paper, each ton (2000lbs) of recycled paper saves 17 trees, 380 gallons of oil, 3 cubic yards of landfill space, 4000 kilowatts of energy, and 7000 gallons of water. How much can the class save based off of our paper consumption (assume all paper can be recycled)?

