

1. What is the difference between Reuse and Recycling?

Reuse lengthens the life of an item. It is accomplished through many different methods, a perfect example of this is developing products that are reusable and long-lived. Recycling is the reprocessing of an item into a new raw material for use in a new product.

What is the rate of recycling in your state?

Current national rate is 15-16 %-that's mostly due to incorrect items being placed in bins.

Why do we recycle less than we landfill?

Landfills contain garbage and serve to prevent contamination between the waste and the surrounding environment, especially groundwater.

What is composting?

Composting is an aerobic method (meaning that it requires the presence of air) of decomposing organic solid wastes.

2. Differentiate between waste dumping and landfilling. Which one would you recommend for your community and why?

Waste dumps are hostile environments with low nutrients, high or low pH, toxic heavy metals, high temperatures, and water scarcity, which are unfavorable for plants. A landfill is a carefully designed structure built into or on top of the ground, in which trash is separated from the area around it.

My choice would be landfilling due to the fact it is better for the environment due to dumping having the toxic metals.

3. What is waste-to-energy? Give examples of such practice in the United States.

Producing electricity is only one reason to burn MSW. Burning waste also reduces the amount of material that would probably be buried in landfills. Burning MSW reduces the volume of waste by about 87%. The first and only waste-to-energy plant to be built in the U.S. since 1995 began operating last summer in Palm Beach County, Fla. The \$672 million state-of-the-art plant expects to reduce waste going to the landfill by 90 percent, generate 100 MW of electricity, and recover 27,000 tons of metals after the waste is combusted each year.

4. Using the average rate of waste generation per person/day in the US, estimate the rate of waste generation if a city has a population of 250,000 people. How much waste (lbs) will be recycled if their current recycling rate is 7%?

The average generated waste rate per person/day in the US is about 4.5 pounds. The average per person would be 1.6 pounds. That would leave the recycling rate of 7% and that equals 0.11 pounds to be recycled.