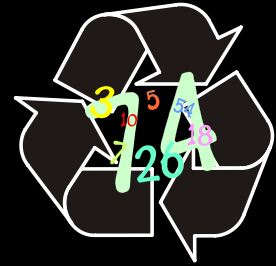




ENVIRONMENTAL MATH PROBLEMS GRADES 5-8



Moderate (fifth grade)

1. Monica pays \$9.50 per month for trash service. She is allowed to have two barrels of trash per week. Monica decides to start recycling and only sets out one barrel of trash each week. By having only one barrel of trash each week, the cost of her trash service decreases by 30 percent. How much does Monica pay for trash service now?
2. Stan, Frank, and Tony are on the baseball team. They need to raise \$150 for new uniforms. They have an aluminum can collection at their school. Each week they make \$25 at the recycling center from the cans they collect. How long will it take them to raise enough money for their new uniforms?

Moderate (sixth grade)

1. Approximately 30 percent of our garbage is paper or paper products. If the average person throws away 1,460 pounds of trash a year, how many pounds of this trash is paper or paper products?
2. Americans throw away 2.5 million plastic bottles every hour. How many plastic bottles are thrown away in one day in America?

Moderate (seventh grade)

1. Considering that one tree produces 117 pounds of paper, if your school sends 5,850 pounds of paper to the recycling center, how many trees would be saved by recycling?
2. Twice a month, Carol takes 24 pounds of aluminum cans to the recycling center. The recycling center pays 28 cents a pound. How much money will Carol earn in a year?

Moderate (eighth grade)

1. Approximately 11 percent of municipal solid waste is yard waste (grass clippings, branches, leaves). If the average household throws away 5,520 pounds of solid waste each year, how much trash would it throw away each year in composting yard waste?
2. The average American uses 580 pounds of paper each year. If you recycle 4.5 pounds of newspapers each week, 11 pounds of magazines each year, and 23 pounds of paper each month, how many pounds of paper will you send to the landfill in one year after recycling?