Transportation

Saving the Planet with SOYBEANS!

The U.S. Dept. of Energy and the U.S. Dept. of Agriculture determined in a 1998 study that using biodiesel reduces the net carbon dioxide $(\mathrm{CO_2})$ emissions by 78 percent compared to petroleum diesel. This is due to biodiesel's closed carbon cycle. Growing plants, which are later processed into fuel, recycle the $\mathrm{CO_2}$ released into the atmosphere when biodiesel is burned. Substituting just one gallon of gasoline or diesel with biodiesel can save up to 20 pounds of $\mathrm{CO_2}$ emissions into the atmosphere!



WORKSHEET QUESTIONS

If you filled up your car's gas tank with 15 gallons of biodiesel fuel once a week instead of regular gasoline, how many pounds of CO₂ emissions would be saved in one year just from you?

What if 15 people in your neighborhood did the same thing? How many pounds of CO_2 emissions would be saved in a year?

If one bushel of soybeans yields 1.5 gallons of biodiesel, how many bushels of soybeans would it take to fill up your 15-gallon gas tank each week? Each year?

IL Math Learning Standards: Middle/Junior High School 6.A.3, 6.B.3a, 6.C.3a, 6.D.3, 7.A.3b, 8.A.3b, 8.C.3, 8.D.3a, 8.D.3b

