

## NEXT-TIME QUESTION

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- b) about as much as the car.
- c) much more than the car.



thanx to Art Hobson

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Answer: c

Typical cars in the U.S. get about 25 miles per gallon and are driven about 15,000 miles per year. So a typical car consumes about  $(15,000 \text{ mi/yr}) / (25 \text{ mi/gal}) = 600 \text{ gal/yr}$ . Multiply by 5 lb C/gal to get 3000 lb C/yr, or 1.5 tons C/yr. An oxygen atom weighs more than a carbon atom so the mass of a  $\text{CO}_2$  is more than 3 times greater. So a typical car emits about 5 tons of  $\text{CO}_2$  per year—more than 3 times the weight of the car!

Per capita emission of  $\text{CO}_2$  in the U.S. is about 22 tons per year — about twice as much as other industrialized nations such as Germany, Great Britain, and Japan. About one-third of this 22 tons comes from transportation, much of it from automobiles. Try estimating how much comes from your own use of an automobile.



If you want your car to emit only its own weight of  $\text{CO}_2$  in a year, make it a hybrid and drive it less than 10,000 miles.



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