

Hack Your Impact

How are you affecting climate change?

Directions: Gather your parents' utility bill(s) from the past month to use in this exercise. Calculate your CO₂ emissions for each category, then add up those totals to determine your annual impact.

Planes

Conversion factors: 1 mile traveled in coach = .3 kg CO ₂	1 mile traveled in first class = .6 kg CO ₂
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In the past twelve months, how many miles did you travel in a plane?

Coach: _____ miles X .3 kg CO₂ = _____ kg CO₂

First class: _____ miles X .6 kg CO₂ = _____ kg CO₂

*The average person in the U.S. emits about 1,000 kg CO₂ per year from flying

Total: <input type="text"/> kg CO ₂
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Cars

Conversion factors: 1 gallon = 11.3 kg CO ₂
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Estimate number of miles driven per month: _____ miles/month

Number of miles per gallon your/your family's car gets: _____ miles/gallon

_____ miles/month ÷ _____ miles/gallon: _____ gallons/month

_____ gallons/month X 12: _____ gallons/year

_____ gallons/year X 11.3 kg CO₂ = _____ kg CO₂/year

_____ kg CO₂/year ÷ _____ people in the car = _____ kg CO₂/year
(your individual total)

*The average person in the U.S. emits 5,000 kg CO₂ per year from driving

Total: <input type="text"/> kg CO ₂
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Food

Conversion factors: Meat consumer = 3000 kg CO ₂ Vegetarian = 1500 kg CO ₂ Vegan = 1000 kg CO ₂

Total: <input type="text"/> kg CO ₂
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*This total includes the fact that 45 percent of food in the U.S. is wasted

Natural Gas

Note: You'll need your parents' monthly utility bill information for this exercise. Your answer will be an approximation because gas usage tends to be higher in winter months than in summer months.

Conversion factors: 1 therm = 11 kg CO₂

____ therms/month X 12 = ____ therms/year

____ therms/year X 11 kg CO₂ = ____ kg CO₂/year

____ kg CO₂/year ÷ ____ people in your household = ____ kg CO₂/year
(your individual total)

Total: kg CO₂

*The average person in the U.S. emits about 1,800 kg CO₂-equivalent per year from natural gas

Electricity

Note: You'll need your parents' monthly utility bill information for this exercise. Your answer will be an approximation because electricity usage tends to be higher in winter months than in summer months.

Conversion factors: 1 kWh = .8 kg CO₂

____ kWh/month X 12 = ____ kWh/year

____ kWh/year X .8 kg CO₂ = ____ kg CO₂

____ kg CO₂ ÷ ____ people in your household = ____ kg CO₂/year (your individual total)

Total: kg CO₂

*The average person in the U.S. emits about 3,500 kg CO₂-equivalent per year from electricity

New Material Items

Conversion factors: 1 dollar = .5 kg CO₂

Amount of money you've spend in a month on new clothes, books, cosmetics, electronics, shoes, etc: \$ ____

\$ ____ X 12 = \$ ____ per year

\$ ____ X .5 kg CO₂ = ____ kg CO₂/year

Total: kg CO₂

*The average person in the U.S. emits about 2,000 kg CO₂-equivalent per year from buying new stuff

Your Annual Carbon Footprint: kg CO₂