

STUDENT WORKSHEET

Safety Smart® Science with Bill Nye the Science Guy®:
Renewable Energy

Reduce Your Use

There are many websites that calculate the amount of carbon you place into the air from burning fossil fuels. This makes for an excellent math lesson as kids can graph their usage and compare their numbers to one another and to current world averages.

Basic:

<http://www.cooltheworld.com/kidscarboncalculator.php> (excellent and simple to use)

<http://www.earthday.org/footprint-calculator>

(very cool graphics, students make an avatar, look carefully at the end to see the total amount of carbon produced)

Advanced:

http://www.epa.gov/climatechange/emissions/ind_calculator2.html#c=theBasics&p=reduceOnTheRoad&m=calc_currentEmissions

(this is more college-like and is very detailed)

<http://www.nature.org/greenliving/carboncalculator/index.htm> (decent website, easy to navigate)

Sample questions to ask students to generate data and discussion:

Record the total tons of CO₂ you emit each year here _____

Why does changing the types of lights you use save energy?

Why does checking tire pressure on your car save energy?

What does eating meat have to do with greenhouse gasses?

What can composting do to save on fossil fuels?

Now ask other students to help fill out the histogram on the next page by placing an X on the column where their emissions fall.

What is the average of all students? _____

What is the national average as posted on the website? _____

