**Imagining Visible CO2 Gas**

Description:

How much CO2 is produced during combustion of fossil fuel? CO2 is a colorless gas transparent to light so it feels like it must be unimportant and harmless. This visual demonstration provides an analog to give participants a sense of the amount of

carbon going into the atmosphere.

Materials and Supplies:

* 5 lb bag of charcoal briquettes
* Large white garbage bag (to spread briquettes on)
* Wet wipes for clean up



Briquettes help people imagine the carbon in CO2 emissions.

Set up:

Pour the charcoal out on a white plastic bag as a visual aide. If time is limited, you may prefer to prepare a Ziploc baggie with 70-80 briquettes, indicating the amount of coal used for half an hour of driving.

Presentation:

One gallon of gasoline has about 5.2 lbs (2.3 kg) of carbon.

Charcoal briquettes are almost entirely carbon.

A 5 lbs bag of charcoal holds about 100 briquettes

At 26 miles/gallon, that's 0.2 lbs of C (about 4-5 charcoal briquettes)/mile

Ask “How long did everyone drive to get here today?” If you chose to prepare a baggie with coal, relate the baggie to how far the students drove (ie: if they drove half an hour, tell them they would have used two bags worth of coal). Alternatively, participants can pile the briquettes to equal the amount of carbon they release to the atmosphere during a normal drive.

Conclusion “A standard US car throws a charcoal briquette (or more) of carbon from its tail pipe

about every 1/4 mile. If you could see the carbon that was being released when everyone threw

the equivalent of a briquette out of their car every 1/4 mile would this make a difference in how

people act?”