

Carbon Footprint



➡ Given

- The average gallon of gas contains about 5 lbs. of carbon.
- One five-pound bag of charcoal briquettes contains approximately 100 briquettes.
- $5 \text{ lbs. of carbon} / 100 \text{ briquettes} = 0.05 \text{ lbs. carbon per briquette}$

★ Sample Problems

1. If you drive or ride in a vehicle that averages 25 mpg, how many briquettes per mile would you be emitting?

2. If each briquette contains 0.05 lbs. of carbon, how many lbs. of carbon are emitted each mile?

❓ Questions

1. How many miles per gallon does your car (or your family car) average?

2. How many briquettes per mile would be emitted while traveling in your vehicle?

3. If each briquette contains 0.05 lbs. of carbon, how many lbs. of carbon are you emitting per mile?
 - 4a. How many miles do you travel to school?
 - 4b. Calculate how much carbon dioxide you are emitting as you travel to school.

- 5a. How many miles do you travel on the average day? Think about everywhere you go.
- 5b. Calculate how much carbon dioxide you are emitting as you travel on an average day.

** Conclusions

1. Do you think people would change their behavior if carbon dioxide was emitted in a visible way, such as charcoal briquettes, rather than as a gas? Why or why not?
2. What are challenges in decreasing carbon dioxide emitted from our vehicles?
3. What might be some options for reducing the amount of carbon dioxide emitted from the transportation sector?