**Carbon Footprints & Transportation Worksheet**

Instructions: Read the article and research the internet to answer the questions below.

**Section 1: Basics of Greenhouse Gases**

1. Which greenhouse gas (GHG) emission is most abundant in the U.S.?
2. Which human activities produce carbon dioxide (CO2) greenhouse gas emissions?
3. What are the top two CO2 emissions sources in the U.S.?
4. Why aren’t scientists concerned with water vapor in the atmosphere being a cause of climate change?

**Section 2: Calculate your Carbon Footprint**

Instructions: Use the information below and research the internet to answer the following questions.

* The average gallon of gas contains about 5 pounds (lbs.) of carbon.
* One five-pound bag of charcoal briquettes contains approximately 100 briquettes.
1. If you drive or ride in a vehicle that averages 25 miles per gallon (mpg), how many briquettes per mile would you be emitting?

1. The average person drives 39 miles each day. How many briquettes of CO2 do they emit each day?

1. How many miles per gallon does your family vehicle or school bus average?

1. How many briquettes per mile are emitted while traveling in your vehicle? (same process as #5)
2. How many miles do you travel to school? (research on the internet, if needed)
3. Calculate how many carbon briquettes you emit as you travel to school (same process as #6).

**Section 3: Carbon Footprint Reflections**

1. Do you think people would change their behavior if carbon dioxide were emitted in a visible way, such as charcoal briquettes, rather than as an invisible gas? Why or why not?
2. What might be some options for reducing the amount of carbon dioxide emitted from the transportation system?