

ACTIVITY 2

Reproducible Master

RICE SUSTAINS

Part 1: The production of rice in the U.S. provides Americans with tasty nutrition, but it also helps the environment and wildlife through sustainable farming practices. Try this True/False quiz to learn about some of the different ways U.S. rice helps sustain both you and the environment!

- 1. American rice growers' use of the latest technology helps both conservation and wildlife protection efforts.
- 2. Periods of drought are good for rice farming, since rice requires dry growing conditions.
- 3. U.S. rice farmers use more water than rice farmers in other countries.
- 4. Most rice farmers till the land every year to help return oxygen to the soil for better rice harvests.
- 5. When you eat U.S.-grown rice, you reduce your carbon footprint — the amount of carbon dioxide produced by human activities like transportation.



- 6. Rice fields support biodiversity of wildlife in a wetland ecosystem.
- 7. During the winter, flooded rice fields provide food and habitat for ducks and geese along their migratory pathways.
- 8. Eating U.S.-grown rice helps support people and wildlife.

Part 2: When you eat rice grown in the U.S., you reduce your carbon footprint because your food travels less miles to get to your plate. More food miles means more carbon dioxide (CO₂) emitted into the atmosphere by trucks and other forms of transportation that burn fossil fuels. Rice-growing nations like China, India, and Thailand are far from the United States. When rice from these countries is sold in the U.S., it must travel many more food miles than if it came from a rice-growing state in the U.S.

It's in the Numbers

Suppose that a grocery chain in Connecticut needs 10,000 pounds of rice. How much CO₂ emissions would be saved if they purchased this amount of rice from growers in a U.S. state, compared to rice growers in the countries listed on this sign? Pick a rice-growing state and add it to the sign below.

Distance to Connecticut from:



1. First, figure out what the CO₂ emissions would be if 10,000 pounds of rice were shipped to Connecticut from each of the three countries on the sign above. Use the following to do the math:

On average, transporting 1,000 pounds of rice over a distance of 1,000 miles generates 60 kilograms (kg) of carbon dioxide (CO₂).

CO ₂ emissions from China	➡	<input type="text"/>	kg
CO ₂ emissions from India	➡	<input type="text"/>	kg
CO ₂ emissions from Thailand	➡	<input type="text"/>	kg



2. Now, figure the distance from the state you chose to Connecticut using a map or an online resource such as www.distancefromto.net. Round your figure to the nearest thousand.

The state I chose _____

Distance in miles to Connecticut _____

3. Do the same math as you did for the foreign countries to calculate the CO₂ emissions produced if the 10,000 pounds of rice were shipped to Connecticut from the state you chose _____ kg

4. Now subtract the CO₂ emissions produced by transporting U.S.-grown rice from the emissions you calculated. Use the back of this sheet to do the math, and write your answers in the spaces below.

5. How much more CO₂ is produced by transporting the 10,000 pounds of rice from each of these countries to Connecticut versus transporting it from the state you chose?

China _____ kg

India _____ kg

Thailand _____ kg



You've just figured the carbon footprint savings when Americans eat U.S.-grown rice!