



Energy Transportation Math

1. A barrel of petroleum is 42 gallons. If a tanker barge can hold 27,500 barrels, how many gallons is it carrying?
2. The average personal car is driven 12,000 miles each year. If the car averages 25 miles per gallon, how many gallons of gasoline does it use each year?
3. After being refined, a barrel of petroleum yields about 18 gallons of gasoline. How many gallons of gasoline come from one tanker barge? How many cars can be fueled for one year with the gasoline refined from one tanker barge of petroleum?
4. If one large tanker truck can carry 8,000 gallons of gasoline, how many tanker trucks would it take to transport the same load as one barge (27,500 barrels)?
5. A tanker car on a train can hold an average of 30,000 gallons of petroleum products. How many tanker cars would be needed to replace one tanker barge?
6. The average price in the U.S. for a ton of coal is \$32.05. If a large power plant consumes 15,000 tons of coal daily, how much does the coal cost each day? How much is the power plant paying for coal in one year?
7. The West Elk Mine is capable of loading 5,500 tons of coal onto a train in one hour. If each car can hold 108 tons of coal and the train has 105 cars, how long will it take to load the train?



Energy and Our Rivers Evaluation Form

State: _____ Grade Level: _____ Number of Students: _____

- 1. Did you conduct the entire unit? Yes No

- 2. Were the instructions clear and easy to follow? Yes No

- 3. Did the activities meet your academic objectives? Yes No

- 4. Were the activities age appropriate? Yes No

- 5. Were the allotted times sufficient to conduct the activities? Yes No

- 6. Were the activities easy to use? Yes No

- 7. Was the preparation required acceptable for the activities? Yes No

- 8. Were the students interested and motivated? Yes No

- 9. Was the energy knowledge content age appropriate? Yes No

- 10. Would you teach this unit again? Yes No

Please explain any 'no' statement below

How would you rate the unit overall? excellent good fair poor

How would your students rate the unit overall? excellent good fair poor

What would make the unit more useful to you?

Other Comments:

Please fax or mail to: **The NEED Project**

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