

Name: _____
Last First

Student ID Number: _____

Read directions very carefully. Write your answer legibly in the designated spaces. *Total number of points is 200.*

1. What is today's price of crude oil? What is today's average price of gasoline at the pump in Houston? [Cite your sources for both questions]. Obviously, a gallon of refined gasoline costs more than a gallon of crude oil. What is the difference and where does it come from? Try to break this down in as much detail as you can: e.g. 2 ¢/gal for transportation, 10 ¢/gal for federal taxes, etc. *40 points*

2. The Parish Power Plant outside of Houston consumes 36,000 tons of low sulfur Powder River Basin coal daily. Assuming that this coal has an energy content of 8,700 Btu/lb, and keeping in mind the typical efficiencies of coal-fired power plants, estimate how many typical houses in the Houston area can be powered by the electricity produced in Parish Power Plant. Don't look it up—make your own estimate. HINT: You will need to do quite a bit of unit conversion to answer this! *40 points*

3. Who are the three biggest consumers of electricity in Texas? Do not include collective consumers (such as e.g. the city of Dallas)—these should be industrial outfits. *30 points*

4. Which three states in the US have the toughest and which three have the most lenient emission requirements for passenger vehicles (i.e. cars like yours)? What pollutants are they testing for? What are the acceptable limits? *40 points*

GROUP PROJECT PROGRESS REPORTS

Turn this in separately.

50 points