

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. Estimate your savings (if any) per mile if you switched from your current car to a 2016 Tesla model S. Use the current prices of gasoline and electricity in Texas for your calculations. How many miles would you need to drive to make up the difference in price between the two vehicles?

40 points

2. Estimate daily energy consumption (in kWh) of a small house in Houston. You will need to look up power ratings of typical appliances, estimate which appliances are present and how long are they typically running per day. Ignore air-conditioning for the time being.

40 points

3. What countries were the three biggest consumers of oil (in absolute terms) in 1970 and 2015? How about per capita? Cite your sources. *30 points*

4. What is YOUR most current one-sentence definition of sustainability?

10 points

5. Using data from the BP Statistical Review of World Energy, sketch a rough plot of China and US's oil consumption changes between 1970 and 2015. When do you think they will cross over?

30 points

GROUP PROJECT PROPOSAL

Turn this in separately.

50 points