

Energy Consumption Rates across the USA and the World Name _____

Feel free to use the back of these sheets for additional space for answering questions.

1. Go to the link: [Google Earth Community: World Oil Consumption](#).
 - a) How does the height of each prism on the map represent the oil consumption of each country, according to the text in the post?

 - b) What country consumes oil at the highest rate, according to the map?

 - c) What country consumes oil at the second highest rate, according to the map?

2. Go to the link: [Google Earth Community: World Oil Consumption Per Capita](#).
 - a) How does the height of each prism on the map represent the per capita rate of oil consumption of each country, according to the text in the post?

 - b) What country consumes oil at the highest rate per capita, according to the map? If you set the view to look straight down at a country at an appropriate zoom level, you will see its ranking.

 - c) What country consumes oil at the second highest rate per capita?

 - d) Go to the link: [Google Earth Community: World Oil Consumption Per Capita \(without prisms\)](#). What is the ranking of the following countries in terms of oil consumption per capita?

United States _____ China _____ Canada _____ Luxembourg _____

3. Go to the link: [Google Earth Community: US Oil Consumption per Capita by State \(with prisms\)](#).

a) How does the height of each prism on the map represent the per capita oil consumption of each state, according to the text in the post?

b) Go to the link:

[*Google Earth Community: US Oil Consumption per Capita by State \(without prisms\).*](#)

What states consume oil at the highest rates per capita, according to map? If you set the view to look straight down at a state, you will see its ranking.

First _____

Second _____

Third _____

Fourth _____

c) What do you believe may be the explanation for the order of these rankings?

d) What advantages and disadvantages are there to using prisms versus not using them to represent data on maps?

4) Right-click the link to [*Selected States Energy Table*](#), and save the html file. This data pertains to all other energy sources in addition to oil. Open the file in Excel. Set up columns for computing annual energy use per million people for residential, commercial, industrial, and transportation use for each state.

- a) Calculate the annual residential energy use per million people for Alaska in the appropriate cell. What is it?
 - b) Calculate the energy use values for all four categories in all seven states. Create a bar graph with states as the x axis and billions of Btus as the y axis. Which category varies the most between states? How does the ranking order for this category compare with the ranking order for per capita oil use in question 3?
 - c) Which category varies the second most between states? How can we account for the variation?
- 5) Go to the link [Energy Information Administration: U.S. Overview](#).
- a) Using the Google Earth map from question 3 b to guide your search, find out what state is fourth in terms of per capita rate of total energy consumption. It is one of the states that uses 270,001 to 420,000 barrels of oil per capita annually, according to that map. How can the high per capita rate of energy use of that state be explained?
 - b) Using the information from [StateMaster: Oil Consumption by State](#) and the link [Re: US Oil Consumption per Capita by State](#), where would you place Connecticut in the rankings on the StateMaster page, assuming the data for all the other states are correct?
 - c) How would you explain the results of a comparison of New York's rate of consumption to that of Connecticut?

6) Visit the links *Wikipedia: [Energy use in the United States](#)* and *[Comment Regarding World Oil Consumption](#)*. In the Wikipedia article, read the *Current consumption* section.

What insights have you gained from today's activity regarding energy consumption?