**Name:**

**Date:**

**Instructor’s Name:**

**Assignment: SCI203 Analysis of Energy Sources Lab**

**Title: The Effect of Energy Sources on Environmental Pollution and Human Health**

**Instructions:** In Part I of this form, record the data from the Unit 4 Lab: Analysis of Energy Sources. In Part II, follow the steps of the scientific method listed below to complete this lab report form. **When this form is complete, please submit it in the submission area of the classroom.**

**Part I:** Using the Electrical Power Plant comparison, fill in the data table. You will use this information to complete your lab report in Part II.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Energy Source | Annual Net Power Generation  (MWh) | CO2 Emissions  (tons) | Sulfur Dioxide, NOx, and Other Emissions (tons) | Methane emissions  (tons) | Solid Waste Output (tons) | Safety  (# deaths from air pollution and accidents) |
| Nuclear |  |  |  |  |  |  |
| Natural Gas |  |  |  |  |  |  |
| Coal |  |  |  |  |  |  |
| Solar |  |  |  |  |  |  |
| Biomass |  |  |  |  |  |  |
| Wind |  |  |  |  |  |  |
| Hydropower |  |  |  |  |  |  |

**Part II:** Write a lab report using the following scientific method sections:

**Title: The Effect of Energy Sources on Environmental Pollution and Human Health**

* **Purpose**
  + In 2-3 sentences, state the purpose of the Analysis of Energy Sources Lab.
* **Introduction**
  + In a detailed paragraph, summarize what is currently known about renewable and non-renewable energy sources. Use the background information provided in the Unit 4 Lab: Analysis of Energy Sources.
* **Hypothesis/Predicted Outcome**
  + In one sentence, state what you expect the results of the lab procedure will be.
* **Methods**
  + In a detailed paragraph, summarize the steps you performed for collecting the data in this lab exercise. The goal of the methods section is to include enough information that others can duplicate your process and obtain the same results.
* **Results/Outcome**
  + In a detailed paragraph, summarize your data.
* **Discussion/Analysis**
  + In a detailed paragraph, discuss whether you obtained the expected results and what you learned from the lab.