**CANDLE LAB FACILITATION AND RUBRIC**

**Facilitation:**

This activity was created to investigate how different candles may burn and how this is somewhat parallel how different fuels burn. It is meant to give students a better understanding of why the use of biofuels is being considered and why petroleum is so popular. Directions for the Candle Lab are printed on the activity sheet. Make sure to provide students with all the materials necessary to complete the lab. Some guiding questions include:

* What problem do you want to investigate? Can that problem be investigated using these materials?
* Is your hypothesis appropriate for the problem you want to investigate?
* Is your data going to help you prove or disprove your hypothesis?
* Is your data organized well? Can someone who is not in this class easily read your charts?
* Is your analysis relevant to the data?
* Does your data and analysis support your conclusion?

Following the activity, take time to debrief as a class.

* What do candles have to do with biofuels?
* What are these candles made of? Can they represent biofuels or other fuels in any way?
* Which candle is more “efficient”? Why?
* How can we relate the efficiency of candles to the efficiency of different fuel sources?

**Rubric:**

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| --- | --- | --- | --- | --- |
| Problem | No problem was chosen  0 points |  | A problem was chosen  3 points | Total: |
| Hypothesis | No hypothesis was given  0 points |  | A hypothesis was chosen  3 points | Total: |
| Data | No data was recorded  0 points | Data was recorded, but hard to follow  2.5 points | Data was recorded and easy to follow  5 points | Total: |
| Analysis | No analysis was made  0 points | Analysis was either partially done or done incorrectly with many errors  3.5 points | Analysis was completed with little or no errors  7 points | Total: |
| Conclusion | No conclusion was present  0 points | A conclusion was present but connections with the data and analysis were missing  3.5 points | A clear conclusion is present and connects to the data and analysis  7 points | Total: |

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Score: